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Professor Northrop also is responsible for the expansion of our intellectual horizons, since it was through his works and our conversations with him that the Platonic wisdom that virtue was knowledge in the light of the whole acquired an entirely new and substantive meaning. If our

study at any point has misrepresented any of his ideas, for this only we ourselves are responsible.

To my wife, Jean, without whose aid and involvement in our odyssey this work would not have been completed we hereby make acknowledgment. Gratitude is also expressed herein for the help and encouragement given by members of the dissertation committee which includes Professors Joseph C. Pray, Walter F. Scheffer, H. Kent Schellenger and William H. Maehl. Finally to my parents in India, my brother Hemot-paul and my sister Malobika as well as my wife the extent of our "ultimate concern" for them and human beings everywhere is expressed in a borrowed piece of eloquence that we cannot surpass

> Each of us is here for a brief sojourn; for what purpose he knows not, though he sometimes thinks he feels it. But from the point of view of daily life, without going deeper, we exist for our fellow-men--in the first place for those on whose smiles and welfare all our happiness depends, and next for all those unknown to us personally with whose destinies we are bound up by the tie of sympathy. A hundred times every day I remind myself that my inner and outer life depend on the labours of other men, living and dead, and that I must exert myself in order to give in the same measure as I have received and am still receiving. --Albert Einstein

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THE POLITICS AND JURISPRUDENCE OF F. S. C. NORTHROP

CHAPTER I

INTRODUCTION: A SKETCH OF NORTHROP, HIS WORKS AND THEIR RELATION TO POLITICAL SCIENCE

This study is in part an answer to a challenge. The existence of the remarkable body of philosophical, scientific, political, social, anthropological, legal and aesthetic literature that constitutes the life work of Professor Filmer Stuart Cuckrow Northrop is by itself an example of a Promethean adventure in sheer curiosity that few mortals are willing to undertake. Although F. S. C. Northrop's works have received considerable attention on the part of scholars in various disciplines, systematic analyses of his ideas by students of politics have been few and far between. Since it is believed that Northrop presents an important and in many ways a "new" theory of politics, the major purpose of this study is to present a systematic exploration of those elements of his philosophy which deserve the careful attention

of scholars in the fields of political theory and political science.

A Biographical Sketch

A brief examination of Professor Northrop's activities clearly shows that his varied interests to some degree are reflected in his own academic training. He was born in Janesville, Wisconsin in 1893 and received his Bachelor of Arts degree from Beloit College in 1915 with a major in history. Intellectual curiosity rather than routine digestion of information was the key feature of Northrop's undergraduate work. In speaking of this era Professor Northrop has stated

> Robert Kimball Richardson had to be first on my dedicatory list. It was he who directed my undergraduate major in history at Beloit College. In most other subjects, except chemistry, botany, and the art of writing under Professor George Clancy, I was an indifferent student; so much so that I won my Phi Beta Kappa key there late "in life" rather than even coming near it in college.[1]

Between 1915 and 1917 he did social work in New York City until his entrance into the Yale Graduate School. His studies were interrupted by service in the U. S. Army but he

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[1]F. S. C. Northrop, Man, Nature and God: A Quest for Life's Meaning (New York: Pocket Books, Inc.), p. 9. Hereafter referred to as Man, Nature and God.

returned to receive his M. A. degree in philosophy and economics from Yale. The early concern for his fellow man that Northrop demonstrated in his social work once again led him into social service, this time to Y. M. C. A. work in Hong Kong and in Canton for two years.

During his studies at Yale Northrop further developed his interests in the "first principles" of any system of knowledge or any discipline. Just as at Beloit College he realized that there "is no fully understood history without philosophy"[2] so also at Yale he began to see that social theories rest on certain fundamental pre-suppositions about "facts." This intellectual trait was further demonstrated in his graduate work at Harvard where he received a second M. A. in 1922 and a Ph. D. in 1924. His doctoral dissertation was entitled The Problem of Organization in Biology and involved both careful research in bio-chemistry under Professor Lawrence J. Henderson and also philosophical clarity under Professor William Ernest Hocking who has remained a life long friend. Merely earning university degrees was apparently not the major motive in Northrop's life. The lure of particular teachers and subjects led him into further post-graduate

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[2] Ibid., p. 10.

education. He studied philosophy of science under Alfred North Whitehead at England's Imperial College of Science and Technology soon after the completion of his Harvard studies. A decade later Northrop, aided by a Guggenheim Fellowship, went to study mathematical theory at the University of Cambridge. Still later he studied and did research at other Universities including Goettingen and Freiberg.

Professor Northrop's teaching career was primarily at Yale. He was an Instructor of Philosophy at Yale in 1923. His promotion to full Professorship took place in 1932. He was chairman of the Department of Philosophy from 1938 to 1940. Then, in 1947 the Yale Law School bestowed upon Northrop a rare honor. This School has special chairs for distinguished academicians in related fields who have something to offer for a broader understanding of the problems of law. Harold Lasswell, for instance, long has been the political scientist in residence at Yale Law School. Since 1947 and until June 1962 when he reached his 68th year and the retirement age, Northrop had held the Sterling Professorship of Philosophy and Law. Among other temporary teaching positions, he has held visiting Professorships also at the University of Iowa, the University of Michigan, the University of Virginia, the University of Hawaii, the National University of Mexico

and the Australian University of Melbourne.

Northrop, all reports indicated, was an inspiring and exciting lecturer. It is this writer's experience that even at the age of 69, for instance, in a four day visit to the University of Kansas he kept audience after audience fascinated by the ease with which he moved from discipline to discipline. Several years ago in a featured article the "Yale Daily News" in praise of his teaching abilities stated that

> Professor Northrop is perhaps the only man on the Yale faculty who can clarify Whitehead's theory of the universe, offer a perceptive analysis of what is wrong with American foreign policy, and explain the symbolism of Mexican art.[3]

In his lifetime Professor Northrop has received considerable recognition of his standing as a scholar. A few examples will be sufficient for present purposes. Northrop was president of the Society of the History and Philosophy of Science in 1948 and of the Eastern division of the American Philosophical Association in 1952. In 1949 in appreciation of his understanding of the culture of Mexico, the Mexican government decorated him with the Order of the Aztec Eagle. His contributions to political science were partly

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[3]Quoted in news release of May 27, 1962 by Yale University News Bureau (New Haven, Connecticut), p. 5.

recognized by political scientists in 1953 when the American Political Science Association gave him the Wendell Wilkie Award for his book "The Taming of the Nations." In 1962 the American Council of Learned Societies honored him in their annual awards for distinguished accomplishment in humanistic scholarship. Several foundations, including the Guggenheim and Werner-Gren Foundations, have also generously supported his research work. Thus, the latter foundation for anthropological research sponsored several of his projects, including the international symposium headed by him at Burg Wartenstein, Gloggnitz in Austria in 1962 which was held to investigate the epistemological problems of cultural anthropology. Finally, the U. S. government in 1958 sent him as the United States representative to the 13 nation South-East Asian Round Table Conference on Traditional Cultures and Technological Progress held at Bangkok, Thailand.

Apart from his other activities, Professor Northrop also has been a truly prolific writer. The bibliography which appears at the end of this study contains a fairly complete list of his writings. It should be noted, however, that he continues to write and edit even since his retirement. For instance, a collection of analyses of methods in anthropology under his editorship is scheduled for publication

in the fall of 1964.

His early interest in the philosophical problems of science is demonstrated by the nature of his first book Science and First Principles.[4] In this work he clearly states the theme that persists in all of his later works that theoretical implications of any scientific discovery are just as important as its practical applications. In summarizing his objectives in writing this first published work Northrop states

> Science proceeds in two opposite directions from its many technical discoveries. It moved forward with the aid of exact mathematical formulation to new applications, and backward with the aid of careful logical analysis to first principles. The fruit of the first movement is applied science, that of the second theoretical science. When this movement toward theoretical science is carried through for all branches of science we come to first principles and have philosophy. This book is a product of the last movement. Stated bluntly, it aims to determine precisely what contemporary scientific discoveries in many different branches of science reveal, and what all this means for philosophy.[5]

As his philosophical inquiry began to evolve from his own first principles, Northrop also became more and more interested in the problems of social science, without giving

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[4]F. S. C. Northrop, Science and First Principles (New York: The Macmillan Company, 1932).

[5]Ibid., p. ix.

up his interest in the natural science. Both The Logic of the Sciences and the Humanities[6] and The Meeting of East and West[7] which were first published in 1946 are works which are the products of this stage of his intellectual development. After the appearance of The Logic of the Sciences and the Humanities Northrop's works further showed an increasing concern over both descriptive and normative problems in the study of politics. This did not mean, however, that he abandoned his broader concern with other disciplines but that the immediate focus of his academic attention became focused for a time on the "facts" of politics.

The Taming of the Nations[8] and European Union and United States and Foreign Policy[9] were relatively modest attempts at political analysis. Important and widely read as

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[6]F. S. C. Northrop, The Logic of the Sciences and the Humanities (New York: Meridian Books Inc., 1959). Hereafter referred to as The Logic of the Sciences.

[7]F. S. C. Northrop, The Meeting of East and West: An Inquiry Concerning World Understanding (New York: The Macmillan Company, 1960).

[8]F. S. C. Northrop, The Taming of the Nations: A Study of the Cultural Bases of International Policy (New York: The Macmillan Company, 1953).

[9]F. S. C. Northrop, European Union and United States Foreign Policy (New York: The Macmillan Company, 1954).

these two works have been they are vastly oversimplified statements of his political philosophy. Unless these two works are examined in the context of his other detailed statements of his politics they may provide the occasion for too naive an acceptance of his ideas or too hasty a rejection of his "intrusion" into political science. Thus, for an understanding of the first principles of Northrop's politics no one can afford to ignore The Complexity of Legal and Ethical Experience; Studies in the Method of Normative Subjects[10] and Philosophical Anthropology and Practical Politics.[11] These two bodies of socio-political theory in turn should be examined also as extensions of Northrop's broader conception of life and existence which appears as a synthesis and in summary form in Man, Nature and God.[12]

This present study will itself take note of the caveats that have been given and will examine Northrop's political ideas in their related forms. It will first outline

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[10]F. S. C. Northrop, The Complexity of Legal and Ethical Experience; Studies in the Method of Normative Subjects (Boston: Little, Brown and Company, 1959).

[11]F. S. C. Northrop, Philosophical Anthropology and Practical Politics (New York: The Macmillan Company, 1960). Hereafter referred to as Philosophical Anthropology.

[12]F. S. C. Northrop, Man, Nature and God, op. cit.

the bare essentials of Northrop's philosophy of science and society before turning to his political theory. Several factors necessitate this approach even though this study is done within the field of political science. The most important reason is that Northrop himself reminds us constantly that his own socio-political thought is a continuation of his reflections on science. Also he claims that this should not be surprising since man's socio-political experience has always been molded to a remarkable degree by his understanding of the world of science. Second, a major task will be that of systematically presenting and carefully elaborating on Northrop's comments on related disciplines insofar as they affect his politics. Third, within the field of politics a study of Northropian philosophy will be made and may prove to be fruitful for several important reasons.

Northrop's "Contributions" to Political Science

Several "fields" within political science could be influenced by Yale's Sterling Professor of Law and Philosophy. These include value theory, methodology, jurisprudence and international politics.

Value or Normative Political Theory. Professor Northrop boldly proclaims that in this age of science

metaphysical theories have not outlived their usefulness. The enduring questions of political philosophy do not themselves provide enduring answers. As man expands his dimensions of experience he formulates new answers to the perennial problems and his curiosity also leads him sometimes to ask new questions as well. Professor Northrop is one of the few social and political thinkers who simultaneously and with some competence accept the dynamic and changing world of science and yet maintain that man's metaphysically oriented political theories can be cognitively meaningful. Northrop's own normative theories about the ideal state, world order and "natural law" jurisprudence are speculative attempts at political theory at a time when in spite of an increasing interest in political theory very little speculative work is being done. As Professor Dwight Waldo notes

> . . . political theorists are not--with a few exceptions--philosophers; nor do they--with a few exceptions --attempt large creative or synthetic works of political theory. Certainly few political theorists write for philosophical publications, and though many are learned in philosophy, seldom does a work in political theory consciously and carefully rest upon an explicit philosophical base.[13]

Northrop is not only particularly strong in the area

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[13]Dwight Waldo, Political Science in the United States of America: a Trend report (Paris: UNESCO, 1956), p. 49.

that most political theorists, as Waldo notes, are particularly weak but he also attempts to construct a political philosophy of purpose which as many scholars note is a paramount necessity in our times. As Alfred Cobban of University College, London, in his analysis of "The Decline of Political Theory" put it

> And if political theory revives, if the idea of purpose is reintroduced into political thinking, we may take up again the tradition of Western political thought, and in doing so resume that "continuous transformation of morals into politics, which still remains politics," in which, according to Croce, lies "the real ethical progress of mankind."[14]

Methodology. Apart from his role as a theorist in the grand traditional style of speculative philosophers of politics, Northrop's works are also relevant for the student of "empirical" theory as well as other aspects of methodology. Unlike many other speculative political theorists Northrop is familiar with the basic premises and objectives of "operational theories" in the "behavioral aspects" of the social sciences. His own discussion of "epistemic correlations" is an attempt in operational theorizing.

Many "empiricists" in political science bemoan the

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[14]Alfred Cobban, "The Decline of Political Theory," Political Science Quarterly, Vol. LXVIII (September, 1953), p. 337.

dearth of operational concepts. David Easton, who has been one of the foremost of such "empiricists," states that

> If, for empirical research, we define a good concept as one that refers to an identifiable set of facts and that can be explained in terms of the operations needed to discover these facts, then a good part of the terminology used in political science falls far short of this standard.[15]

Northrop's analysis of the pre-suppositions of operational concepts and their potential contributions could very well prove to be an important attempt to bridge the gap to which Easton has referred. However, at the same time Northrop's discussion of the limits of operationalism could provide a badly needed perspective for which some political scientists have been searching. The recent symposium on the limits of behavioralism in political science sponsored by The American Academy of Political and Social Science[16] is one indication of such a search.

While the subject matter of methodology encompasses all the traditional fields of political science from local politics to the study of international organizations two

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[15]David Easton, The Political System; An Inquiry into the State of Political Science (New York: Alfred A. Knopf, 1960).

[16]The Limits of Behavioralism in Political Science; A symposium (Philadelphia: The American Academy of Political and Social Science, October, 1962).

other fields will be mentioned where Northrop's conceptualizations may be helpful.

Jurisprudence. Even though law schools also show a concern for the subject matter of jurisprudence, the latter has remained for both traditional students of politics as well as newer ones with persuasions similar to that of Lasswell, an important field for political scientists. Arnold Brecht takes note of this in the following set of passages.

> Among the proper ends of state and government, justice has been given a high, if not top, rank at all times. Two axioms have been generally accepted without question: first, that the government's own actions ought to be just; second, that governmental institutions, such as law courts, ought to ensure the preservation of justice. . . .
>
> Ideals of legal justice hence appeared on two levels according to whether they referred to the making of laws or to their application, with the term justice occurring in both, but in a different setting: the laws laid down by governments ought to be just laws; once laid down, they ought to be administered justly. The lawyers' minds have generally been fixed on the second aspect, the political scientists' on the first. But the basic question is the same for both: what is just, what is unjust?
>
> During the last hundred years, political philosophy and the philosophy of law have often been treated as though they were two distinct fields of thought. However, for the reasons just given they cannot be so separated.[17]

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[17]Arnold Brecht, Political Theory; The Foundations of Twentieth-Century Thought (New Jersey: Princeton University Press, 1959), pp. 136-137.

Since, as Brecht notes, it is impossible to separate legal and political philosophy, the jurisprudence of the Sterling Professor of Law affects not only the generally practical aspects of law but the political theorists' concern with schools of jurisprudence as well. Northrop's "natural law" jurisprudence, it is believed, escapes some of the subjectivism and mysticism of most natural law theories without succumbing to the lures of logical positivism, or non-cognitivism.

International Relations. Northrop's views on foreign policy and international relations are probably better known among political scientists than are some of the other perhaps more important aspects of his philosophy. Although Northrop's ideas on international relations would be difficult to evaluate without noting their relationship to his other views and we do not intend to survey these herein we can make certain tentative observations, on a basis of this study.

Northrop's emphasis on the ideological and cultural roots of foreign policies is somewhat unique amidst the general pre-suppositions of students of international politics. That is, two groups of pre-suppositions seem to be part of the general trend within the field. One can be characterized

as being composed of theories which are based on some concept of "power." The other more difficult to characterize group consists of a variety of "behavioral" approaches. As Dwight Waldo notes

> International relations study in the post-war decade is characterized by a movement away from "idealism" toward "realism"; by a closer relationship with other fields of study, such as economics, history and especially sociology; by a strong infusion of thought-ways and techniques from behavioral science; by a decided increase in attention to theoretical problems; and by an eclectic and expansionist spirit.[18]

Northrop's own eclectic background prevents him from being a special pleader for any one or single discipline. But even though he is, in his own particular way, an interdisciplinarian and an empiricist he is often critical of immature empiricism and the rudderless ecclecticism that is according to him characteristic of many theoretical approaches in the field. Also, his examination of the limitations of any "power-political" approach is not done from the point of view of a subjective idealist. Rather, his own mixture of speculation and empiricism should prove to be a contribution to the literature in this special field.

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[18]Dwight Waldo, Political Science in United States of America, op. cit., p. 56.

A Note on Northrop's Organization and Style

Professor Northrop is often a difficult writer to understand because of his particular style. He seldom sacrifices accuracy for literary grace. Consequently, unless one is a very careful reader of Northrop's prose and if one depends on an intuitive "stream of consciousness," one is bound to be misled. The problem is particularly complicated also by his peculiar vocabulary. Here the influence of Alfred North Whitehead on Northrop is evident both in the terms of specific vocabulary as well as broader and more substantive areas of thought. Like Whitehead, Northrop feels that ordinary language is often inadequate for fresh philosophical insights. Although he does not claim that only a new and mathematical language can provide accurate means of communication he uses ordinary language in a very tortuous and involved manner. The problem of understanding him is further complicated by his use of common-sense ordinary words to which he often assigns a radically different meaning. The word "intuition" is a good example. Intuition or "intuitive" knowledge is often associated with introspection or "hunches." But Professor Northrop in his use of intuition means immediate apprehension not only of ideas but of sense data as well. Whenever there are concepts which have sense data as

referrents Northrop uses the term "intuition" just as readily as in the case of the private images of our own consciousness. Northrop also assumes, like many other authors, that in approaching one of his works his readers are familiar with some of his previous works. Consequently his articles studied in isolation will often seem bewildering, unless one is familiar with the professor's assignment of new meanings to old words which is done in a scattered fashion in several of his works.

Finally, one should be prepared for Northrop's frequent repetitiousness. These repetitions may sometimes be irritating even to readers who are generally sympathetic to Northrop's philosophical position. For instance, Professor John Paul Duncan in reviewing The Complexity of Legal and Ethical Experience on the one hand is high in his praise of the importance of Northrop's philosophy for contemporary political and legal theory. He says:

> How can we "really" (philosophically) know what the law--statutes, decisions, etc.,--ought to be? Upon what basis does legal obligation really finally rest?
>
> Professor Northrop's answer to these basic issues of jurisprudence is an important one--one of the most challenging in recent legal philosophy. First, he believes that we can find valid answers, which is more than the pure value relativists seem to believe, and second, he suggests a system of thought by which

we can do this.[19]

Yet Professor Duncan comments on Northrop's style in the following manner:

> It is too bad that professors of philosophy, however, so often feel bound to make their very worthwhile and needed explanations so difficult. Professor Northrop, in particular, apparently bowing to the current American academic demand for more publications, explains his theory in this volume with needless and at times bewildering repetition, using as chapters reprints of his numerous previously printed articles on this subject, and adding a couple of new ones at the end. If he had done a thorough rewrite job, and even at the risk of slight error translated some of his philosophic jargon for the legal laymen, he would have performed a service sadly needed, for his theory is a sound one and his argument makes both life and the law have hope and sense.[20]

Although Professor Northrop cannot be completely excused for his "bewildering" repetitiousness this tendency can be partly explained. Professor Northrop, like many others who offer "new approaches" to various areas of knowledge, is concerned about being accurately understood if not praised. For this reason he feels impelled at times to state and restate his theses while approaching philosophical problems from the vantage point of political science, sociology,

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[19]John Paul Duncan, Review of The Complexity of Legal and Ethical Experience. Oklahoma Law Review, Vol. 13 (University of Oklahoma, 1960), p. 473.

[20]Ibid., pp. 474-475.

physics, anthropology and several other disciplines.

In order to see how far Professor Northrop's works have actually been understood a brief preliminary review of the critical commentary by scholars in several disciplines may also thus be helpful.

Commentaries on Northrop

There is as yet no major secondary work which attempts to explicate or clarify or much less critically evaluate the philosophy of F. S. C. Northrop. Yet there are many important, although often brief references to his ideas scattered throughout books and scholarly journals in a variety of disciplines in the natural and social sciences as well as in several areas of humanistic scholarship. Some of the reviewers are careful and discriminating even while pointing out "flaws" in his theories. But at times some critics are far too sweeping and uninformative in their evaluations. C. B. Marshall is a good example of the latter. In a review of Northrop's Philosophical Anthropology and Practical Politics, Marshall, abandoning the language of the academy, and with some humor and little care states

> . . . Philosophical Anthropology gets the jump invariably, runs rings around the adversary, and angles shots into the basket from all over the floor.

> Practical politics scarcely lays a hand on the ball. The final score is about 100 to zero. Northrop referees, leads cheers, and stars in all positions with his own special razzledazzle.[21]

Some of the soundest reviews of Northrop's works and ideas have been done by scholars who are not Americans. This is not particularly surprising, since Professor Northrop has something to say philosophically on almost every major culture in the world. Also some of his writings have been translated into several languages and his articles have appeared in foreign scholarly journals. The Meeting of the East and West, for instance, has already been translated into Japanese, German and Spanish. This work is fairly well known in academic circles in various parts of the world. Jose Gaos, the noted Mexican philosopher and literary critic, is high in his praise of Northrop's basic approach to cultural problems. In particular, he speaks approvingly of the latter's analysis of the culture of Mexico which appears in The Meeting of the East and West. Gaos is also hopeful that Northrop's work will eventually be more and more influential.[22]

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[21]C. B. Marshall, Review of Philosophical Anthropology and Practical Politics. New Republic (February 6, 1961), p. 26.

[22]Jose Gaos, "Un Metodo para Resolver los Grandes Problemas de Nuestro Tiempo" Cuadernos Americanos. Ano VIII Vol. XLV. Mayo-Junio, 1949, p. 111. The lengthy critique

Professor Gaos also notes that the very subject matter of Northrop's inquiry in the area of the relationship between the "sciences" and the "humanities" is itself almost infinitely complex. Consequently Gaos is more willing to be patient with and receptive to Northrop's complex analysis than is C. B. Marshall. Gaos, also, seems to feel that the exercise of patience and receptiveness in this case is well worth the effort, since Northrop has something to say which is fresh and significant in the study of philosophy.

Some American social philosophers also seem to share Gaos' admiration for Northrop's intellectual integrity and unique point of view. Speaking of The Taming of the Nations, which in many ways is a less ambitious and more elementary version of The Meeting of the East and West, Thomas V. Smith, who has been Maxwell Professor of Citizenship, Philosophy and Poetry at Syracuse University and editor of Ethics, states:

> . . . I am . . . impressed by his diagnosis, and am even more impressed by the responsibility he assumes for a constructive prognosis.
>
> I would personally rather be "wrong" with such an intrepid pioneer than to be "right" with the timid and fearful. Mr. Northrop's is no voice crying for miracles with Toynbee or lost in categories with

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appears in two parts. The first part is in Cuadernos Americanos Ano VIII, Vol. XLIV, Marzo-April, pages 107-134.

> Sorokin. Philosophy in a grand and resolute manner moves through all that Mr. Northrop writes, but it is never radically divorced from science or out of sight of facts.[23]

Professor Smith's last remark is important because it points out Northrop's persistent concern for scientific facts. Professor Northrop is not merely another socio-religious polemicist. Neither is he merely a special pleader for hypothetical worlds nearer to his own "subjective" heart's desire. His social and political theories are based on his philosophy of science, which in itself is a remarkable journey in human inquiry.

Professional commentators on Northrop's philosophy of science vary considerably in their estimates of the merits of his methodology. Thus some commentators are not impressed with the "newness" of the Sterling Professor's work. In one book review in which the authorship is not indicated, the reviewer claims

> It is obvious . . . that Professor Northrop's "new" physical theory of nature is, with slight modifications, the monistic-pluralistic theory of atomicity and motion that Leucippus and Democritus evolved twenty-five centuries ago.[24]

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[23] T. V. Smith, Review of The Taming of the Nations (New York Times, November 9, 1952), p. 5.

[24] Bookman, Reviewer not indicated. Review of Science and First Principles (October, 1931), pp. 213-214.

Professor Sidney Hook is even more forceful in his skepticism. However, while the reviewer for Bookman claims that Democritus anticipated Northrop, Hook cites more modern thinkers, who are hardly similar to Democritus, as persons who have already stated what Northrop has to say. Hook is also critical of the latter's attempt to relate science to a variety of areas in human experience. He puts it thus:

> . . . One must reluctantly conclude that there is not a single valid observation made by the author about scientific method which has not been said, and better said, by Peirce, Dewey, Cohen and Nagel, with whom he professes to disagree. It used to be objected to science that it leaves something out. If we are to believe Mr. Northrop, it leaves nothing out--not even the creatures of myth and superstition.[25]

This study at a later stage will deal with the criticism of Hook and others of a similar persuasion in detail. It is sufficient to note at the present time that some reviewers are not as skeptical as is Hook of Northrop's attempts to stick close to science at various levels of knowledge. Thus, speaking of Northrop's attempt to relate natural science and cultural science, one reviewer says

> The philosopher without science is empty, and the scientist without philosophy is blind. And let it be said in advance that Mr. Northrop's Science

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[25]Sidney Hook, Review of Logic of the Sciences and Humanities (New York Times, January 11, 1948), p. 7.

> and First Principles is neither empty nor blind. Relativity, quantum and wave mechanics, the nature of life and the particular nature of man are tied together by a new monadology which seems to have a certain kinship with Bruno and his infinite worlds, and which is not afraid to acknowledge its debts to the Greeks.[26]

Northrop's philosophy of science, Mr. Hook notwithstanding, is one which several important commentators have found helpful in expressing or understanding some of the implications of scientific procedure. Henry Margenau, Professor of Natural Philosophy and Physics at Yale University, cites several areas of the philosophy of science where Northrop's works are important. In his work The Nature of Physical Reality, Margenau gives high praise to Northrop's clear tracing of the intellectual movement which began with Newtonian physics and led to Lockean empiricism which in turn influenced social and political thought. Margenau notes

> Northrop points out interestingly how Locke's philosophy is a natural sequel to Newton's physics. This gives perhaps the clearest perspective in which Locke's epistemology can be viewed and indicates at the same time its science bound limitations.[27]

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[26] H. B. Smith, Review of Science and First Principles. Saturday Review (June 20, 1931), p. 906.

[27] Henry Margenau, The Nature of Physical Reality; A Philosophy of Modern Physics (New York: McGraw-Hill Book Company, Inc., 1950), p. 48.

Margenau also takes note of other aspects of Northrop's philosophy as "appropriate" explanations of various aspects of modern scientific procedure. These include the concepts of "epistemic correlations,"[28] "concepts by postulation"[29] and Northrop's experimental work together with Harold Burr[30] of Yale's Anatomy Department in the area of applying field theories in mechanics and electrodynamics to some problems in biology.[31] Northrop's theorizations in science are partly based on an intense and detailed study of the theories and methodologies of Albert Einstein and Alfred North Whitehead. Although he was a close student of Whitehead, Northrop felt that in certain areas Whitehead's epistemology was inadequate and that Einstein gave a more clear and reliable theory. One such major area was the theoretical explanation of the simultaneity of spatially separated events. Northrop's views on Whitehead appear in a scattered fashion throughout

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[28] Ibid., p. 63.

[29] Ibid., p. 132.

[30] Ibid., p. 205.

[31] H. S. Burr and F. S. C. Northrop, "The Electro-Dynamic Theory of Life," Main Currents in Modern Thought (September-October, 1962), Volume 19, Number 1, p. 4.

his works. In the Library of Living Philosophers series, the volume on Whitehead contains Northrop's critique of Whitehead's philosophy of science. As is well known, Whitehead did not live long enough to answer the critics whose views appear in this volume. However, several students of Whitehead's philosophy have attempted replies elsewhere. Andrew Paul Ushenko of Princeton's Department of Philosophy is one such person. Professor Ushenko is particularly critical of Northrop's contention that Einstein's epistemology is more adequate than that of Whitehead in certain crucial areas, including the explanation of simultaneity. Prior to examining Northrop's position Ushenko states

> An examination of Northrop's contention is in order not only because in the context of his interesting article on "Whitehead's Philosophy of Science" the misinterpretation enjoys an appearance of plausibility, but also because Northrop may have succeeded in misleading Einstein.[32]

Although it is not within the scope of our study to "resolve" the epistemological differences between Whitehead and Einstein, it is interesting to note that Einstein himself had great respect for Northrop's scholarship in the philosophy of science in general and in Einstein's own method in

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[32]Paul Arthur Schilpp (ed.), Albert Einstein--Philosopher--Scientist, Vol. II (New York: Harper and Brothers, 1959), p. 624.

particular. Speaking of Northrop's article on "Einstein's Theory of Knowledge"[33] as well as another article by a different author, Einstein states:

> The essays by Lenzen and Northrop both aim to treat my occasional utterances of epistemological content systematically. From these utterances Lenzen constructs a synoptic total picture, in which what is missing in the utterances is carefully and with delicacy of feeling supplied. Everything said therein appears to me convincing and correct. Northrop uses these utterances as point of departure for a comparative critique of the major epistemological systems. I see in this critique a masterpiece of unbiased thinking and concise discussion, which nowhere permits itself to be diverted from the essential.[34]

Since part of Northrop's social and political thought hinges on his understanding of Einstein's science it is also important to take note of the fact that Einstein's understanding of the epistemologically different "stages" of science is similar to the views of Northrop. Northrop is at times attacked for his scientific "positivism" especially when dealing with "human values."[35] Yet Northrop, like Einstein, is neither simply a positivist nor only another non-positivist. In both men different cognitive theories play a part at

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[33] Ibid., pp. 385-409.

[34] Ibid., p. 682.

[35] Max Radin, Review of Ideological Differences and World Order (New York Times, March 27, 1949), p. 7.

different points in scientific endeavor. In speaking of this in connection with the previously cited essay by Northrop, Einstein explains this paradoxical epistemological position thus:

> He [the scientist] therefore must appear to the systematic epistemologist as a type of unscrupulous opportunist: he appears as realist insofar as he seeks to describe a world independent of the acts of perception; as idealist insofar as he looks upon the concepts and theories as the free inventions of the human spirit (not logically derivable from what is empirically given); as positivist insofar as he considers his concepts and theories justified only to the extent to which they furnish a logical representation of relations among sensory experiences. He may even appear as Platonist or Pythagorean insofar as he considers the viewpoint of logical simplicity as an indispensable and effective tool of his research.
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> All of this is splendidly elucidated in Lenzen's and Northrop's essays.[36]

Apart from natural scientists, an increasing number of social scientists and theorists are likewise beginning to evaluate the contributions of F. S. C. Northrop. Within the social sciences he is a controversial figure in several disciplinary areas. In the area of anthropology David Bidney has probably provided one of the most careful evaluations thus far of his work. Although Bidney has some reservations about certain particular aspects of Northrop's approach to

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[36]Paul A. Schilpp (ed.), Albert Einstein--Philosopher--Scientist, op. cit., p. 684.

culture generally speaking he feels that Northrop's method "demonstrates that the professional philosopher has something significant to say on questions of cultural presuppositions."[37]

Like Bidney, Professor Ethel M. Albert of the University of California at Berkeley is impressed with Northrop's contributions to theoretical anthropology. Speaking of his Philosophical Anthropology and Practical Politics she says

> Primarily political theory and philosophy, Professor Northrop's latest book is relevant to anthropology both because it assigns a critical role to the study of cultural philosophies featured in the title and because it contains, in effect though not in name, a theory of culture change and a conception of applied anthropology. Viewed from the unique perspective of Professor Northrop's theory, the relevant anthropological concepts assume new and problematic forms.[38]

Albert, like Bidney, is skeptical of some of Northrop's claims, but she also states:

> Because his book is so rigorously logical and so intellectually honest, Professor Northrop has succeeded in making abundantly clear some of the real confusions and conflicts in the relations of the Western and non-Western world, as much in anthropology as in politics. The conflict between cultural pluralism or relativism and the necessity to

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[37]David Bidney, Theoretical Anthropology (New York: Columbia University Press, 1953), p. 169.

[38]Ethel M. Albert, Review of Philosophical Anthropology and Practical Politics. American Anthropologist (October, 1960), p. 1157.

> be identified with one's own culture is becoming increasingly apparent in anthropology; the problems of applied anthropology are forcing attention to the over-compensatory character of relativism as an antidote to ethnocentrism; and the imbalances in anthropological thinking consequent upon insufficiently acknowledged philosophical commitments have barely begun to be redressed.[39]

Although some "empiricists" in anthropology and politics are skeptical of Northrop's "philosophical" intrusion into anthropology,[40] an anthropologist of the stature of Clyde Kluckhohn feels that Northrop's analysis of the need for objective and "scientifically" discovered human norms is an important contribution. As Kluckhohn puts it,

> It is the great merit of F. S. C. Northrop to have pointed out the essential generalization: "The norms for ethical conduct are to be discovered from the ascertainable knowledge of man's nature, just as the norms for building a bridge are to be derived from physics."[41]

Apart from anthropologists and sociologists[42] Northrop's works have been subjected to scrutiny by several political scientists. Professor William C. Havard of Louisiana

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[39] Ibid., p. 1162.

[40] See Marion J. Levy's review of The Taming of the Nations, in World Politics (July, 1953), pp. 555-568.

[41] Clyde Kluckhohn, Mirror for Man (Greenwich, Connecticut: Fawcett Publications, 1960), p. 218.

[42] See Pitrim A. Sorokin, Social Philosophies of an Age of Crisis (Boston: Beacon Press, 1951), pp. 145-158 and 244-259.

State University takes note of the fact that Northrop is one of very few American scholars who have attempted to explore the area of what he calls "political anthropology."[43] He goes on also to claim that

> . . . the notion of political anthropology which stirred Professor Northrop's imagination does raise theoretically relevant questions about the nature of politics and suggests the initial steps in a method of inquiry appropriate to these questions.[44]

Several other scholars, including T. I. Cook, are impressed with Northrop's attempt to broaden the study of politics. In reviewing Ideological Differences and World Order Cook says

> Yet in a real sense this is a book for, and needed by, the political scientist. For . . . our subject as a whole has tended to become narrow, its practitioners divorced . . . from fructifying immersion in the whole stream of culture, one of the sources of strength of the great political thinkers of the past.[45]

Northrop's descriptive methodology in the study of politics has already achieved some recognition. William H. Riker of the Center for Advanced Study in the Behavioral Sciences

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[43]William C. Havard, "The Method and Results of Political Anthropology in America," Archiv Fur Rechts--Und Sozial Philosophie ARSP, XLVII/3, 1961, pp. 395-415.

[44]Ibid., p. 397.

[45]T. I. Cook, American Political Science Review (December, 1949), p. 1268.

refers to this in the following passage dealing with Northrop's method.

> Certainly one should praise him for his emphasis, appropriate from a philosopher of science, on the necessity of deductively formulated, non-normative theory as a pre-requisite to descriptive investigation. Far too many political scientists and anthropologists blithely rely on so-called induction, which, as Russell once remarked, is just another name for guessing.[46]

In Northrop's attempt to apply his descriptive methodology to actual political problems, however, he faces a considerable division of opinion among students of politics. For instance, Northrop's emphasis on the importance of basing political institutions on cultural "living law" has been praised by several writers in the areas of jurisprudence[47] and foreign policy. Drew Middleton, in one review,[48] feels that Northrop's analysis of the pre-requisites for the political integration of Europe are especially noteworthy. He goes as far as to say that "no political planner has made

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[46]William H. Riker, Review of Philosophical Anthropology and Practical Politics. The American Political Science Review, Vol. LV (March, 1961), p. 155.

[47]See Huntongton Cairns' review of The Complexity of Legal and Ethical Experience (New York Times, December 6, 1959), p. 24.

[48]Drew Middleton, Review of European Union and U. S. Foreign Policy (New York Times, December 26, 1954), p. 3.

a clearer, more incisive case for integration than this."[49] Other foreign policy experts, however, are more skeptical of Northrop's approach to politico-cultural problems. Hans Morgenthau feels that Northrop's "basic assumptions of foreign policy are muddled and at variance with historical fact."[50]

Since Northrop is by any standards a daring pioneer unanimity among his critics can hardly be expected. Some who have disagreed with him have appreciated his non-conformity to the narrow canons of political science scholarship even though his efforts may not always seem fruitful. One commentator put it this way:

> Mr. Northrop is a pioneer, and his contribution bears the marks, good and bad, of pioneer enterprise. At the outset, theory inevitably outruns factual evidence; as it did . . . in the speculation of the ancient Greeks. Thus, the Greeks constructed a framework of ideas for science which was to be implemented only after many centuries. . . .[51]

Northrop's complexity in style and methodology often obscures the extent to which he is a speculator in political theory.

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[49] Ibid.

[50] Hans Morgenthau, Review of The Taming of the Nations, Chicago Sunday Tribune (November 9, 1952), p. 14.

[51] Raphael Demos, Review of The Meeting of East and West, Yale Review (Winter, 1947), p. 374.

Some critics whc evidently have not examined his theory in its entirety have been at times far too eager to either praise or blame him. Whenever a scholar strays from the beaten track this is to be expected. But it is well to recall a remark that Alfred North Whitehead once made. He said:

> The progress of philosophy does not primarily involve reactions of agreement or dissent. It essentially consists in the enlargement of thought, whereby contradictions and agreements are transformed into partial aspects of wider points of view.[52]

With Whitehead's caveat in mind the ideas and speculations of F. S. C. Northrop in science and in philosophy will be explored before an attempt is made to evaluate the extent to which he has contributed to the "enlargement of thought" in the study of politics.

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[52]Paul Schilpp (ed.), The Philosophy of Alfred North Whitehead (New York: Tudor Publishing Company, 1951), p. 664.

CHAPTER II

THE CATEGORIES OF KNOWLEDGE

The definitive treatment of Northrop's philosophy is yet to be done. Nor does this work constitute that treatment. So varied are the philosophical interests of F. S. C. Northrop that one finds critical commentaries on his philosophy scattered in journals and works in philosophy, science, anthropology, government, sociology, psychology, education, religion and several other disciplines. Most of the commentators, however, show evidence of having examined only fragments of Northrop's philosophical "system." Yet, to understand Northrop's views on even one specific problem, e.g., the validity of the Supreme Court's opinions in the desegregation cases, one must be aware of the basic elements of his total philosophy. The anecdote is often told that G. K. Chesterton, when enquiring about the merits of a vacant apartment, would ask the landlady, "Madame, what is your view of the universe?" Chesterton maintained that this would be a good clue as to

how the lady actually kept the apartment. This story may not be true and the implied lesson incorrect, but it illustrates the same need of understanding "Northrop" in general, in order to comprehend his analysis of particular problems and studies in specific fields. Thus the following commentary is necessary before proceeding with the configurations of his politics and jurisprudence. At the same time, for the professional philosopher this ensuing discussion could and should be expanded and extended, but this sketch of Northrop's ideas is intended only as a prelude to an examination of his relevance to the study of politics.

Northrop's philosophy is the culmination of many developments in both Western and Eastern philosophy. Like any other philosopher, he is deeply indebted to the influences of a host of thinkers. But the refreshing thing about Northrop is that he so often gives credit consciously to the sources of his influence. The introductory preface to Northrop's Man, Nature and God[1] constitutes a painstaking analysis of his philosophical development and the many influences that helped shape his own particular synthesis.

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[1]F. S. C. Northrop, Man, Nature and God (New York: Pocket Books Inc., 1963.

The Influences on Northrop's Philosophy

One of the major influences on Northrop was the philosophy of Alfred North Whitehead. No writer can overestimate the importance of Whitehead for contemporary philosophy. Northrop went to study under Whitehead when the latter was teaching at the Imperial College of Science and Technology in England. His relationship with Whitehead was both personal and intellectual. One example will suffice.

> Whitehead made it unequivocally clear to me that there must be a reconstruction of not merely the scientific but also the humanistic, including the religious and aesthetic, philosophical assumptions of the modern world. He convinced me that unless one "spends one's days and one's nights with Hume" and also understands concepts such as the "limit" and a "dx/dy" in the infinitesimal calculus, one will certainly go wrong, as did Oxford's well-intentioned Jowett.[2]

Whitehead's philosophy was particularly important in shaping the early interest of Northrop in the philosophy of science. Even in the latter's differences in his epistemology from that of Whitehead there is a tone of respect. We shall refer to the differences later in this chapter but the respect can be illustrated in this passage from the preface of Northrop's first major published work.

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[2]Northrop, Man, Nature and God, p. 16.

> At times, I have been forced to dissent from certain views which Professor Whitehead holds, but this has happened because of an attempt to provide a solution for problems which he revealed to me. And even in dissent, I trust that I am following the true spirit, if not the exact letter, of his teaching. But in the end, I doubt if the differences are as great as at first appears. For the most part, I have but stated, in terms of the physical theory of nature, what he has uttered in terms of the functional theory. In any event, there is no one with whom I would rather agree, and to whom I am more deeply indebted.[3]

Northrop's indebtedness to Whitehead lies in several different areas. Some of these can be briefly noted. Whitehead made Northrop aware of the pitfalls of ordinary language, the necessity of rigor in the search for precision even in aesthetics and the social sciences as well. Also, Whitehead's constant attack on any theory which implies a bifurcation in nature left its mark on Northrop. Northrop's own attack on the artificial mind-body problem in religion and philosophy is an illustration of this.

Another person who influenced Northrop in his philosophical development was A. Einstein. Einstein, like Whitehead, exerted a personal as well as an intellectual effect on Northrop. In fact, Einstein's death was a personal tragedy for Northrop. Several scholars at the University of Oklahoma,

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[3]F. S. C. Northrop, Science and First Principles (New York: The Macmillan Company, 1932), p. xii.

which he was visiting at the time, have clearly recalled how visibly moved Northrop was upon hearing of Einstein's passing. Einstein's primary intellectual influence on Northrop was in the latter's epistemology--in the technical but crucial question of how the mind finds the theoretical constructs or postulates with which it grasps reality. Therein lies also the essence of Northrop's disagreement with Whitehead. Briefly, Northrop claims that the ideas in scientific constructs can be speculatively introduced whereas Whitehead, in his understanding of the nature of reality de-emphasizes the "creative" role of the mind in the process of understanding the nature of the external world.

Besides Einstein and Whitehead, two other influences should be mentioned together. These are the lectures and ideas of Henry Sheffer and Junjiro Takakusu. The former was influential in the formation of Northrop's position of logical realism and the latter was important for Northrop's confirmation of his earlier understanding of radical empiricism. Henry Sheffer, who taught Northrop at Harvard, was also responsible for showing him the nature of concepts which have no immediate counterpart in sense data and which, according to Northrop, are peculiar to intellectual development in the Western world. Takakusu, who was Professor of Sanskrit at

the University of Tokyo, together with other authorities on Buddhism and Hinduism, contributed to Northrop's understanding of Oriental epistemology. These two presumably separate worlds of experience and ways of knowing are the subjects of Northrop's concern not only in his well known book The Meeting of East and West[4] but in other statements of his philosophy as well.

The Platonic strain in Northrop's philosophy is partly the result of the influence of Professor Charles Montague Bakewell, who taught philosophy at Yale. Although Northrop modifies Plato's theory of knowledge, Bakewell was responsible for his understanding of Plato's theory of forms. When Northrop attacks an interpretation of Plato which makes the latter an intuitionist rather than a logical realist he is echoing his understanding of Bakewell's position. Northrop, speaking of Bakewell's influence, states

> . . . he introduced me to his beloved Plato and to Plato's Socrates who tells those who can read, that one cannot arrive at "the idea of the good" except as one has first passed through "the hypotheses of the previous sciences," all of which, if one takes the trouble, as so few humanists do, to turn back a few pages in Plato's Republic, will be found to be mathematical

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[4]F. S. C. Northrop, The Meeting of East and West (New York: The Macmillan Company, 1960).

natural sciences.[5]

Many other important scholars in philosophy, and other branches of knowledge, have influenced Northrop through their writings.[6]

From Hocking the philosopher, to Iqbal the poet, from Margenau, the physicist to Asoke Mehta, the practicing politician, there is a wide divergence in the fields of knowledge which are involved. Such a wide range of intellectual activity is indeed rare in our times. The age of specialization often holds in suspicion those scholars who, like Northrop, hold that an integration of different branches of knowledge is an important task in itself. But, for this reason and his "scientific" bent, Northrop can hardly be called an armchair metaphysician. He does take the trouble of investigating not only the theoretical foundations of several different disciplines, but some of the brutal facts as well. As he himself states,

> Hence, one must not be afraid to get one's philosophical hands dirty and one's spirit disturbed by

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[5]Northrop, Man, Nature and God, p. 10.

[6]For a more detailed and autobiographical statement of those whose influence was direct and in most cases personal, an examination of the introductory preface to Man, Nature and God would perhaps be fruitful.

> handling the unexpected brute subject matter of anything that may, and usually turns out to be, very important--be it neuro-physiology, bio-chemistry, mathematics, symbolic logic, physics, religion, negative feedback mechanisms, morals in concrete decisions, painting, sports, practical politics, anthropology, poetry, and--yes!--that most difficult subject called law, or even Asia and Islam. As the wise Hocking put it many times: "Everything is grist for the philosopher's mill."[7]

Thus, Northrop is somewhat of an anachronism in our times and he himself is well aware of it as is illustrated by the following comment on the variety of his interests.

> Today such philosophy is sometimes derogatorily and humorously labelled "service station" philosophy. The philosopher, whose Credo this book contains, is delighted to be a service station hand. There are two reasons: the first is that if the pre-Socratics, the mathematical Plato and his Socrates, the Stoic moralists and lawyers who transformed Western contractual legal science, Aristotle, Descartes, Leibniz, Kant, and Whitehead, did not believe that it corrupted the superb flour which they produced to have experts in other subjects bring technical scientific and humanistic grist to one's philosophical mill, who am I to do so? Second, my own independent study of natural science, mathematics, and other subjects for their own sake, as well as for their philosophical significance, has made me suspicious of the worth of a philosophical mill that grinds little more than its own verbal philosophical gears, as does so much of both metaphysical and ordinary language philosophy today.[8]

Having briefly described the major influences on Northrop, we can thus proceed with an attempt at outlining

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[7] Northrop, Man, Nature and God, p. 11.

[8] Ibid., pp. 11-12.

his general philosophy. In this attempt our chief concern will be one of simply presenting an interpretation of his philosophy and contrasting it wherever possible with other philosophies which help us better to understand not only his system but ultimately his politics. In fact, since this dissertation is in the area of political science, it is in our discussion of his views on politics that we can attempt a clearer critique of his work from the standpoint of this discipline. In other areas such as his involvement in the natural sciences we can primarily hope only to clarify his position and reserve any "objective" resolution of the major problems, such as the differences between Northrop, Whitehead and Einstein on relatedness in nature to some future effort.

The Importance of Epistemology

Northrop's treatment of epistemology is the key to his entire philosophy. This does not mean that Northrop concerns himself only with the way knowledge is obtained rather than knowledge *per se*. As our explication unfolds it should become evident that his concern embraces a wide range of factual questions as well as normative problems. But the starting point in discussing him must be his epistemology.

Northrop himself, in several conversations with this author, has stated that without a clear understanding of his epistemology there is the great danger of misunderstanding the substantive aspects of the rest of his philosophy. One such possible "misunderstanding" of his epistemology occurs in an article by a Thomist, William M. Walton, entitled "Concept Formation in Certain Empiricist Thinkers in America."[9] Professor Walton in his conclusion attacks Northrop's ontology from a purely Thomist point of view[10] in spite of the fact that Northrop says he consciously avoids as far as in humanly possible to be culture bound in his ontology. Yet Walton quite possibly misunderstands Northrop. Thus, describing the latter's epistemology, Walton states

> The paradox lies in the fact that for an empiricist like Northrop, who initially distrusts his senses, reality in so far as it appears to his senses or to instruments that are read with the help of the senses, is the ultimate basis upon which a hypothetico-deductive system of explanatory constructs rests for verification.[11]

The next chapter will illustrate in detail our own general comment at this stage, on Walton's disagreement with

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[9]Charles J. O'Neil (ed.) An Etienne Gilson Tribute (Milwaukee: Marquette University Press, 1959), pp. 326-338.

[10]Ibid., p. 338.

[11]Ibid.

Northrop. Northrop's "ultimate basis" for verification according to him is not a recourse to the sense world, but to a rigorous set of relationships between the world of the intellect and the world of the senses which he terms epistemic correlations. Sense data directly verifies only those scientific theories which depend on simple hypotheses which symbolize sensed data to which they have relationships based on identity. But this is not the only kind of verification that exists. We never "sense" the identity of the concept of an electron. The senses are only partly and indirectly rather than "ultimately" the source of verification.

Walton's critique illustrates yet another reason for examining Northrop's epistemology. Northrop tirelessly hammers away against any notion that a philosophy can be at all comprehended without an appreciation of the theory of knowledge involved. This may be seen in the fact that Walton's ontological dissent is due to his Thomist epistemology while Northrop is using a different system. Walton himself illustrates this difference between Walton, the Thomist and Northrop the non-Thomist in the following statement by him.

> In the last analysis, then, there is no ontological knowledge in the Thomist sense in which concepts are defined in terms of intelligible being, which, though perceived by the intellect of the philosopher through experiential data, does not depend on any

> methods of sense verification: "in divine science we should go neither to the imagination nor to the sense."[12]

Unless the Thomist and the non-Thomist agree at least on the theories of knowledge being used, if not on a correct theory, any ensuing dialogue will remain a dialogue of the deaf. To prevent such a dialogue we will now attempt to render an account of the theory of knowledge on which Northrop depends.

The briefest description of Northrop's own epistemology is that it consists of "logical realism in epistemic correlation with radical empiricism."[13] Although this brief statement contains the essence of Northrop's own theory of knowledge it is by no means a simple theory. Constant watchfulness has to exist to understand Northrop's thinking at every step. Even professional philosophers have, according to Northrop, misunderstood some crucial aspects of his philosophy. Logical realism or concepts by intellection and radical empiricism or knowledge through immediate experience are two separate worlds of discourse and Northrop is emphatic and even repetitious on this point. Yet, Professor P. T.

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[12] Ibid.

[13] Personal letter sent to author by F. S. C. Northrop, 11-8-1962.

Raju, the well known Indian philosopher and scholar, misreads Northrop when in his excellent work on comparative philosophy he states that

> Intellect and intuition are, therefore, not two separable factors of mind, and perhaps Northrop does not mean that they are separable.[14]

But Northrop does mean that these are two separate methods and that if intellectual concepts are mixed with sense experience simultaneously, any attempt to find a public world, that is, an objective external world is doomed to failure.

But before we discuss why he thinks there are reasonable grounds for holding this position, we must attempt a clarification of terms beginning with Northrop's description of categories in epistemology or listing the various ways by which we know.

In fact, Northrop's discussion and outline of his categories is his own method of approaching the central problem of epistemology by identifying the relationship between the knower and the known. William Pepperell Montague, the well known epistemologist, in briefly describing the "persisting" central concern of epistemology states

> Epistemology, or the theory of knowledge, includes many problems and is consequently susceptible

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[14]P. T. Raju, Introduction to Comparative Philosophy (Lincoln: University of Nebraska Press, 1962), p. 280.

> of many definitions. We prefer to treat under this title that phase of the knowledge relation which throughout the history of philosophy has generated she sharpest and most significant controversy. To what extent, if any, are the things and qualities of the world dependent upon their being related as object to a knower or subject?[15]

Although Northrop to a degree would agree with Montague on what the central problem of epistemology actually is, he is different from Montague in categorizing different theories of knowledge. Northrop is searching for a theory that would be rigorous enough and technical enough so that it could relate philosophies based on different cultural stimuli without being distorted by the structure of language itself. Many theories are culture bound when they express themselves in terms like "consciousness," "spirit," "soul" or "hereafter" because these terms are not rigorous enough to transcend diverse cultural interpretations.

To avoid any culturalistic fallacies, Northrop asks one basic question. How does any theory, culture, philosophy, science derive its theory of knowledge? In answering this he sees several basic possibilities.

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[15]William Pepperell Montague, The Ways of Knowing (New York: The Macmillan Company, 1958), p. 32.

The Various Possibilities in Epistemology

According to Northrop, the two most important major categories in any attempt to analyze meaning or relating the knower to the known are "concepts by intuition" and "concepts by postulation." By concepts he does not mean any fixed or particular kind of idea such as a hypothesis in physics. Northrop is simply interested in how meaning is assigned in any discipline or culture. He sees, therefore, that meaning is assigned anywhere either by postulation or intuition or still yet in combinations of these two methods. He himself illustrates this point

> A concept is a term to which a meaning has been assigned. There are two major ways in which this assignment can be made. The otherwise meaningless term may be associated denotatively with some datum or set of data which is given immediately, or it may have its meaning proposed for it theoretically by the postulates of the deductive theory in which it occurs.[16]

By intuition Northrop means immediate apprehension or experience. We are immediately aware of the blueness of the sky, the greenness of the grass or the coolness of spring water. An attempt to find meaning or to communicate that which is based on apprehension or immediate experience alone

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[16]Philosophy-East and West, Edited by Charles A. Moore (Princeton University Press, 1946), p. 172.

involves concepts by intuition. In precise terms and in Northrop's own words: "A concept by intuition is one which denotes, and the complete meaning of which is given by, something which is immediately apprehended."[17] By "intuition" Northrop does not mean simply what laymen call "hunches." Intuitive knowledge is primarily "pure" sensed or felt experience without any intervening intellectual, formal or cultural categories being allowed to distort the data our senses give us. Calling these data green, yellow or blue is a matter of mere convention between people who think they have had similar experiences of blue, green and yellow.

Apart from immediate experience there is yet another way by which it is possible to impart meaning to concepts and symbols. This consists of the use of symbols whose meaning is entirely contained in the theory itself and therefore does not depend on immediate experience. No amount of immediate experience can help us understand what Locke meant by "natural right." If we run around in "nature" with absolute abandon we may accidentally hit upon the idea of a natural right but we cannot be sure if it is the same as Locke's unless and until we have examined Locke's philosophy in which

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[17] Ibid., p. 173.

"right" has a particular and assigned meaning. This last kind of meaning is found in what Northrop calls "concepts by postulations." As he precisely defines it:

> A concept by postulation is one the complete meaning of which is designated by the postulates of the deductive theory in which it occurs. Any concept which can be defined in terms of such concepts we shall also call a concept by postulation.[18]

Some immediate implications for semantics can be briefly noted as consequences of these two categorizations. To someone who has never seen a rainbow, no amount of imageless symbols can recreate the exact vision of the rainbow. Only by analogy and references to other intuitively common experiences can we even attempt to communicate the experience of seeing the rainbow. On the other hand, the abstract concept of an electron cannot be known by experience alone, if at all. No amount of immediacy can substitute for mathematically precise definitions of electrons. These are two separate worlds of discourse, postulation and intuition and they each have their own particular variations.

Concepts by Postulation

There are four possible ways, according to Northrop, by which postulated concepts can acquire their meaning. These

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[18] Ibid., p. 173.

are termed by him (1) Intellection, (2) Imagination, (3) Perception and (4) Logical concepts by intuition. Each of these ways can exist in turn in two possible forms, monistic and pluralistic. "Monistic concepts designate a single all-embracing factor; pluralistic concepts designate many externally related factors."[19]

Before we proceed with the various methods of postulation one word of caution is necessary. At the risk of being repetitious, and Northrop himself often takes that risk, postulation must not be conceived in terms of just any concepts whatever. Only for those concepts whose meaning does not depend on apprehension or sense data alone can the term postulation be used. In a postulated concept the meaning is contained within the theory. The most important kind of concepts by postulation are those which depend on the method Northrop calls intellection.

Intellection is the method which is completely imageless. Meanings given by intellection cannot be understood by sensing them or even imagining them. Their meaning, rather than their "empirical" validity, is contained in the concepts given in a theory and in the relations between them. Northrop

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[19] Ibid., p. 154.

asserts that many concepts in mathematical physics are derived in this manner. Most of us think ordinarily in terms of only a few dimensions, because we can visualize only a few; length, width and height. But beyond representing the sensed relationships of our everyday experiences some concepts may go far beyond the recreation of experience. Mathematics, for instance, may deal with some concepts which have no direct referrents. These conceptual schemes may be imageless according to Northrop. Their meaning must be found within the postulated theory. Thus he states

> . . . the many-dimensional structures of mathematical physics in those cases in which the dimensions are greater in number than three, are examples of concepts by postulation which are concepts by intellection.[20]

Northrop illustrates this method by numerous examples, both pluralistic and monistic, from Plato to Einstein. This method, according to him, is peculiar to Western cultural development. The implications of this assertion will be pursued later.

Imagination is a second method for deriving concepts by postulation. Here again as in intellection, sense data are not directly involved. But certain concepts or objects

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[20] Ibid., p. 183.

we can postulate by the use of imagination. These objects may never have existed as a sensed fact in the precise and complete way we think them, but these imaginary ideas can be given meaning if we rigorously include them in a theory.

> Centaurs, the atoms of Democritus, the Platonic regular solids of Book XIII of Euclid, and the atomic models of Bohr's and Rutherford's classical atomic physics are examples of concepts by postulation which are concepts by imagination.[21]

One might add that Northrop claims that intellection has displaced imagination as defined above as the major method of acquiring knowledge in physics in the Einstein era. The thesis which is at times expressed with subtlety and elsewhere repetitiously is that intellection is the most "superior" cognitive method as far as postulation is concerned. The implications of this for science, politics and law will be pursued in the proper context.

Perception is the most common method by which the layman postulates reality. In this process there is a combined use of the senses and the imagination does the rest. This is still different from intuition or immediate apprehension. Most of the "objects" of the world of "common-sense" are known by this kind of perception. We do not apprehend simultaneously

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[21] Ibid.

all the aspects of the chairs we sit on, the cars in which we drive, or the planes in which we fly even though we think of them as "complete" objects each with several dimensions. At this very moment I can "sense" only the top of the table on which I am working. But since the theory of what my table looks like has been verified so often by actually sensing at other times the legs, the bottomside and the back of the table, I use a shortcut in my awareness of my table. I combine my sensed top of the table with the imagined rest of the table to construct the concept of the total table that I use every day. Unless one is somewhat sophisticated in epistemology it is easy to assume that we are only sensing chairs, tables or even wives and students whereas

> As Berkeley and Hume have shown, and as we have previously indicated, "perceptual objects" are not immediately apprehended factors; they are postulates of common sense so thoroughly and frequently and unconsciously verified through their deductive consequences that only the critical realize them to be postulated rather than immediately apprehended.[22]

Logical concepts by intuition is the last category in the postulation series that Northrop discusses. This is any method that consists of the following two processes. One is that of experiencing sensed data directly. But to this

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[22] Ibid., p. 184.

intuitive aspect, a second step is added: that of a postulated permanent status. Without this permanent status we would have only meaningless impressions from the senses. This kind of method is considered as a borderline phenomenon between intuition and postulation. It is not quite perception because in perception the imaginative aspects are one step removed from the senses. The back of the chair which we do not see but which we could see would be an illustration of perception. In contrast, we do not see the "Unmoved Mover" in Aristotle's metaphysics which is a logical concept by intuition according to Northrop. For instance, he states:

> There are also pluralistic and monistic logical concepts by intuition. "Hot," in the sense of the immediately apprehended sensation functioning as a "form of privation" in the physics of Aristotle, and the "eternal objects" of Whitehead in their relation of disjunction to each other are examples of the pluralistic case. The "Unmoved Mover" of Aristotle's theology, in which the pluralistic forms are treated as a hierarchical unity is a monistic example.[23]

In summary, therefore, Northrop's last category of postulates applies to any set of concepts where initial dependence is on the world of the senses but where in reality is also finally conceived in the very same theory in terms of "unseen" and "unfelt" concepts which rounds off our

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[23] Ibid., p. 185.

understanding of what is really there. The supreme being who is the final cause in Aristotle's system is the result of this kind of conceptualization. So also, one might add, is any Thomistic philosopher including the Aristotelian St. Thomas himself, according to Northrop. For instance, this is well illustrated in the following passage from the previously cited Thomist, William Walton, who in describing how Thomistic ontological knowledge is obtained, stated that

> . . . concepts are defined in terms of intelligible being, which, though perceived by the intellect of the philosopher through experiential data, does not depend on any methods of sense verification: "in divine science we should go neither to the imagination nor to the sense."[24]

We have thus far attempted a brief description of Northrop's concepts by postulation. Before we begin to discuss critically the "correct" epistemology we must do justice descriptively to the other major category of concept formation which is termed "concepts by intuition."

Concepts by Intuition

There are several ways here also by which concepts can be derived intuitively from experience. These consist of four possible methods of seeing reality as (1) a differentiated

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[24] An Etienne Gilson Tribute, Edited by Charles J. O'Neil. Marquette University Press, Milwaukee, 1959, p. 338.

aesthetic continuum (2) undifferentiated aesthetic continuum (3) differentiations seen by inspection (4) field concepts seen by inspection.[25] We shall briefly define each of these categories beginning with the differentiated aesthetic continuum.

Differentiated Aesthetic Continuum. Except when a particular content or meaning is assigned to the word aesthetic, Northrop ordinarily applies it to the world of pure sensation where there is an absence of constructs or any imposition of meaning. This notion of the aesthetic element of life is a serious attempt on Northrop's part to transcend categories imposed by particular cultures. People anywhere generally see the immediate physical world around them as a continuation of colors, sounds and other sense data. Parts of our field of vision or our range of hearing are marked by intensities, focal points, clarity, distinction or as Northrop puts it, "differentiation." On this point he feels that "it would seem that all people could agree on this as a correct designation of what one immediately apprehends, however differently they might analyze it as inquiry proceeds."[26]

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[25] F. S. C. Northrop, The Logic of the Sciences and the Humanities (New York: Meridian Books, Inc., 1959), p. 99.

[26] Ibid., p. 95.

The Bantu might differ radically from the Scotchman in his attempt to assign meaning, value or importance to a part or all of the world of sensation. But both, unless they are physically blind, deaf and unconscious would see their immediate surroundings as an experienced quality, so long as they are not using concepts by postulation. This qualitative world has its shades and its differences but it is a basic datum which any philosophy or experience begins with. This kind of experience by itself can be extremely difficult to communicate exactly to another person even with the help of words since language itself structures reality. We can approximate perfect communication regarding our experienced qualities by trying to point or draw our friend's attention to an immediately given factor, and thereby create a concept by intuition. If it were possible to have two persons who have left their postulations behind them, sitting one evening under the skies and if all of a sudden a shooting star occurs and one person points skywards and says to the other "Look! A flash" he would be attempting to express a concept by intuition which is also a concept dependent on the differentiated aesthetic continuum. He has pointed to one factor, the flash, among many other possible focii of attention. By pointing to the flash he has differentiated it from the

blackness of the night, the swelling from the mosquito bites or perhaps the howling of pariahs. All these differentiations and their context is a basic sensation-based world of experience. Therefore, once again when a concept's entire meaning is contained in a reference to this world it is a concept tautologically speaking based on an awareness of the "differentiated aesthetic continuum." Different people may see different "differentiations" at different times, but the concept of a field or continuum where there are some things that stick out more than others is the basis of other concepts by intuition. The way other intuitive notions may be classified is on the basis of the factor which that notion is trying to emphasize or "abstract." Northrop is very careful on the meaning of emphasis or "abstraction" here.

> By "abstraction" we mean, throughout this chapter, the consideration of certain immediately apprehended factors apart from their immediately apprehended context; we do not mean the "abstract" in the sense of the postulated.[27]

This kind of abstraction is not imageless in nature. A shade of green or a screeching noise are both abstractions in an intuitive sense. There are several possible levels or ways of intuitive knowledge. These will be discussed in turn.

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[27]Northrop, Logic of the Sciences, p. 96.

do get their meaning. The second point is that although one can subjectively see Northrop's centaurs or one's own private mermaid it is possible to give logical and transmissible description of our imaginary objects. But the undifferentiated aesthetic continuum cannot be completely described by a set of logically related symbols to someone who has not known it first hand. Therefore, it is truly an intuitive concept rather than a postulated concept. Yet another way of abstracting is the method known as the Concept of the Differentiations.

Concept of the Differentiations can be regarded as emphasizing exclusively what the previous method neglects completely. This is the set of particulars of immediately known existence. This should not be equated, it seems to us, with Aristotelian epistemology. Aristotle was enough of a student of Plato to hold on to fragments of Plato's theory of forms. In contrast, Northrop's category here again is purely intuitive in two ways. It can refer either to sensed differences "outside" such as green, yellow or a whistle, or it can refer to introspected particulars which are also known directly, such as pains and pleasures. Perhaps this category can be better understood by examining our concepts and comparing them to one of Northrop's own statements on this subject. He says

> The differentiations which one immediately apprehends may be given (a) through the senses or (b)

> introspectively. The former we shall call concepts by sensation, the latter concepts by introspection. "Blue," in the sense of the immediately sensed color, is a concept by sensation. "Wants" and the images of phantasy are examples of concepts by introspection, following Professor C. I. Lewis, "concepts by inspection."[28]

The last intuitive method is that of the "Field Concepts by Inspection."

Field Concepts by Inspection. This method of knowing apparently did not occur originally in Northrop's philosophy. But it is another example of the intellectual seriousness of Northrop's search for knowledge that he modified his thinking to accommodate what he thought was good evidence. Once again, in typical fashion, Northrop exactly identifies the source of an idea or influence. He states "Professor George P. Conger has called my attention to an additional concept by intuition which is obtainable from the differentiated aesthetic continuum by abstraction."[29]

This abstraction primarily points to only a certain factor among the other factors and yet somehow excludes an examination of other factors. During this process attention is not removed from the total field qua field. This is a

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[28]Logic of the Sciences, p. 98.

[29]Charles Moore (ed.) Philosophy-East and West, p. 189.

One of these is the "Concept of the Indefinite" or Undifferentiated Aesthetic Continuum.

The Undifferentiated Aesthetic Continuum is primarily an "abstraction" from the first concept by intuution we had mentioned. Any concept that de-emphasizes the distinctions and refers completely to the total "field" or "continuum" is a concept intuition of this special type. This is a concept which often is the clue to meaning in many Eastern philosophies and is extremely difficult, although possible, for a Westerner to grasp. More will be said of this concept and its implications later in our observation of religious aspects of Northrop's philosophy as well as of his attempt to analyze "Eastern" thought.

However, one possible question may arise at this point. Since some people may not actually "see" this continuum, is not this concept a postulated concept or a construct like a centaur or a mermaid? If the answer is yes, then the consistency of Northrop's epistemological categories may be seriously questioned. But there is the suggestion of an answer to this problem in Northrop's discussion. The first point to be remembered here is that he is not dealing yet with the "objective" validity of this categorical method but that this is the actual way some philosophical concepts

category which is difficult to explain. This may best be done in Northrop's own words.

> It is a specific inspected quality in the aesthetic continuum with all other differentiations, but not the continuum itself, neglected. Such a concept by intuition we shall term a field concept by inspection. A philosophy which takes this type of concept as basic and sufficient will be positivistic in that it admits only concepts by intuition but will differ from most modern Western positivism by holding a monistic rather than a pluralistic theory of the immediately apprehended.[30]

Unfortunately Northrop does not explain this concept in an elaborate fashion. He states that this conceptualization occurs whenever there is "any instance" of differentiations which is considered as "inseparable" from the undifferentiated continuum. In a very brief statement he refers to two possible illustrations of the use of this category. "In this connection the philosophy of Bradley is suggestive, as is also Gestalt psychology."[31]

These two examples are in some ways unfortunate. Gestalt psychology is by no means so defined by psychologists that it can be clearly classified by anyone using Northrop's methods as exclusively either a postulated system or only an

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[30] Ibid.

[31] Ibid.

intuitive system. Thus the problem of using it may be illustrated by the discussion of Gestalt theory by the noted psychologist Gardner Murphy. In analyzing the "essence" of the method of Gestalt, Murphy states "that aspect of Gestalt psychology which seems to this writer to be most fundamental and at the same time most incompletely worked out is the definition of membership character."[32] Next, Murphy goes on to illustrate two completely different approaches used by Gestalt psychologists without any clear "synthesis" of the two approaches into one category or concept. Thus,

> At times one discovers in the Gestalt literature the conception that all the elements or component parts of a total need to be seen in their interrelations in order to understand the structure.[33]

If this is so, then Gestaltian theory as described here could be adequately categorized as consisting of logical concepts by intuition and would not need the seemingly vague category of field concepts by inspection. Murphy goes on further to discuss the ambivalence of the Gestalt theory regarding basic fundamental assumptions in its theory of knowledge. Murphy states that often right after Gestalt literature seemingly

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[32]Gardner Murphy, Historical Introduction to Modern Psychology (New York: Harcourt, Brace and Co., 1949).

[33]Ibid.

emphasizes relationship between elements, a shift occurs.

> On another page, however, one discovers that there are no elements or component parts. Each aspect or phase of the total manifests these attributes which each must possess if it is to stand at a particular point and function in a particular role; attributes which belong to the elements themselves are not definable. If this second is true, then obviously the first is far from the mark.[34]

In the light of Professor Murphy's remarks one could see this second method as not involving concepts by postulation but more nearly involving an intuitive method of seeing the differentiations and the continuum. Because of the apparent ambivalence of the epistemological aspects of Gestalt's theory, Northrop's use of the theory as an example of field concepts by inspection subjects the meaning of the category to a variety of possible interpretations.

The only other hint of an example of this last concept that is given occurs when Northrop lists without explanation "the philosophy of Bradley." This reference, like the Gestalt example, does not clarify the seeming ambiguity of field concepts by inspection. Bradley is primarily known as an English idealist. Professor Montague goes further and classifies Bradley as being representative of "absolute idealism which, under the leadership of F. H. Bradley, had

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[34] Ibid.

come to be the dominant form of thought at Oxford."[35] Montague proceeds to describe the absolute idealists in the following terms:

> According to the absolute idealists, the world as we see it is not the real world, but a world of appearance. The true reality, the Absolute, is an eternal and unitary system of experience in which our concepts and ideals are transcended and transmuted.[36]

If Montague is even partly correct in his description of Bradley's philosophy there is certainly some degree of postulation involved. Assuming this conclusion to be correct field concepts by inspection seem to go beyond the requirements of concepts by intuition[37] which by Northrop's own

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[35]Montague, The Ways of Knowing, p. 135.

[36]Ibid.

[37]Since this passage was written a telephone interview with Professor Northrop shed some light on this problem. He said that although Bradley is an idealist the "ethical factor" in his philosophy was primary and distinctive and was "intuitive in character." However, he also agreed that Bradley's philosophy had postulated characteristics as well. Seemingly, then, he is using only part of Bradley's philosophy as an example of an intuitive concept by inspection while not including other aspects of Bradley's English neo-Hegelian idealism and its non-intuitive characteristics. This clarifies somewhat his use of Bradley as an example but still leaves the category of field concepts by inspection in an unfinished and incomplete state. It still seems like a borderline case between intuition and postulation. Also there is still a great danger in comparative philosophy of arbitrarily looking at part of a philosophical system and seeing field concepts by inspection while there might be other

definition "gain their entire meaning from the immediately apprehended."[38]

A second possibility is that Northrop regards this as a borderline concept. Just as logical concepts by intuition are diluted or weak forms of concepts by postulation so also Northrop may perhaps regard field concepts by inspection as a weak form of intuition approaching postulation but starting with intuitively known reality. This last alternate meaning seems highly probable but one cannot help wishing that Northrop had avoided the chance of honest confusion and elaborated with "concrete" examples.

"Inspection" brings us to the end of the discussion of intuitive concepts. Care was taken to ensure that in our elaboration of these epistemological categories that a subtle unannounced shift into the "evaluative" mode of thinking was avoided as much as possible. What remains to be done before we proceed to Northrop's own "correct" epistemology is to explore briefly some of the implications and usefulness of this set of categories.

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postulated factors which, if taken into account by a different observer, may make the same philosophical system seem dependent on perhaps logical concepts by intuition (Telephone conversation, 2-16-1964).

[38]Northrop, Logic of the Sciences, p. 95.

Some Implications of the Categories of Knowledge

Northrop has attempted to categorize all the possible ways with which men and philosophers have begun their search for knowledge. These ways are relevant in almost every field of human endeavor. Just as students of politics since Aristotle have known that man is basically a social or "political" animal, so also students of man, including anthropologists, have known that man is a symbol creating animal. Northrop is constantly aware of the role of symbols in man's social and personal experience. For this reason, irrespective of the nature of the subject of his immediate interest, Northrop keeps his epistemological tools always at hand.

Apart from Northrop's contributions in other areas his categorizations of ways of knowing are *per se* a significant set of contributions to problems of classification in epistemology and semantics. The classes of concepts seem to be fairly clear and self-evident with some minor reservations that have already been indicated. Yet as indicated before, some academicians have at times erred in understanding them. Often the error is *simply* one of not reading enough of Northrop, or reading him closely enough. A lesson in this mistake is the case of Pitrim Sorokin, Harvard sociologist, who

although generally sympathetic to many aspects of Northrop's works, at times misunderstands Northrop's categories. Thus, Sorokin basically claims that the theoretic-aesthetic, or what is also called the postulation-intuition modes of knowing, are insufficient to account for a variety of methods of cognition. After stating his own system Sorokin states:

> In the light of this theory, the main shortcoming of Northrop's dyad is that in his "aesthetic" form he unites two fundamentally different forms of cognition, truth, aspects of the true reality and of the cultural super-systems; Sensate and Ideational. Even in the foregoing brief characterization, the profound differences of these two forms is obvious; in no way can they be identified with each other and treated as one "aesthetic" form.[39]

Sorokin in his footnotes refers[40] to passages from The Meeting of East and West alone for his sources of information.

Yet in one of the very passages to which Sorokin refers, Northrop makes clear that several types of concepts by intuition are possible.[41] These concepts are "united" only when Northrop is showing the differences between them and

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[39]Pitrim A. Sorokin, Social Philosophies of an Age of Crisis (Boston: The Beacon Press, 1951).

[40]Ibid., p. 336.

[41]F. S. C. Northrop, The Meeting of East and West (New York: The Macmillan Co., 1960), p. 447.

several possible concepts by postulation which are "united" again only for contrast. But among concepts by intuition alone there are vast differences, and the same is true for the "postulated" concepts. It is precisely because of this that at least as early as 1939, long before Sorokin's elaborate commentary, Northrop had painstakingly worked out[42] the categories we have already discussed. Professor Sorokin apparently operates on the basis of only partial information about Northrop's categories which involve many distinctions and not just "unities."

A lesson to be learned is that these categories can have several possible uses. The first is that of providing a "descriptive" method in order to lay the groundwork for Northrop's own theory of knowledge which is taken up in the next chapter. Secondly, its attempt to meet the dire need for a "comparative" method for "comparative philosophy" can also be noted. Without a method or a common frame of reference the possibility of any objective comparison of philosophies or cultures occurring is quite limited. We would be dependent on culture-bound "common-sense" alone to help us

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[42]See Northrop's 1939 presentation at University of Hawaii's East-West Philosopher's conference in Charles A. Moore, Philosophy-East and West, pp. 168-234.

understand another culture's philosophy, science, law, language, religion, politics and many other complicated forms of social expression and even "behavior." Thirdly, the categories provide a semantical theory important to politics and law which we will take up later. Finally, the categories are crucial to an understanding of two things: (1) Northrop's philosophy of natural and social science, and (2) his speculative and evaluative ventures in political theory and jurisprudence.

CHAPTER III

THE PHILOSOPHY OF SCIENCE AND NATURE

Northrop's analysis of the various possible ways of knowing has been already carefully described. All philosophical systems, political theories, methods and speculation can be classified according to Northrop by using his categories or by using combinations of these categories.

The discussion of these philosophical categories primarily served as a prelude for our introduction to Northrop's own method and approach to an understanding of nature. His "natural" philosophy is crucial for an understanding of his ideas on "political" philosophy and without a thorough examination of the former the task of appreciating his political speculation can become unnecessarily complicated and difficult. The complication arises from the fact that Northrop maintains that all cultural and political ideologies or philosophies make certain assumptions about what "nature" is like. "Nature," therefore, as men know it, has a variety of

meanings relative to the ideas and assumptions of particular cultures. Yet a modern mature science, physics for instance, can give us today a glimpse of nature that is more "universal" in character and less relative and parochial, according to Northrop. Stated differently, his thesis is that the methods of modern science give us the most adequate view of nature that is possible and therefore can also help demonstrate the adequacy or inadequacy of the views of nature that exist in social and political theories. Northrop's analysis of modern science is primarily epistemological in character.

The emphasis on epistemology is one of several persistent characteristics of Northrop. This does not mean that he completely neglects metaphysical questions about the substance of nature. Actually as he himself is constantly aware, being a professional philosopher, there are metaphysical implications in all philosophical analyses, even in the attempts by complete positivists to bypass metaphysics. But he is even more concerned about the kind of metaphysics that leaves its epistemological tools unsharpened and crude, for these tools, crude as they may be, provide the basis for metaphysical systems. The best way, then, to understand any system of thought, whether it is speculative philosophy or a specialized social science is to analyze the method or

epistemology involved. In some areas the epistemology may be specifically stated, as Plato often does in the Republic, whereas in other areas the epistemology used may be covert and difficult to extricate. The latter is particularly true of many aspects of the natural sciences. This writer has often been frustrated in his attempt to extract a coherent scientific method from discussions with "practicing" physicists. Some have maintained that they primarily tinker around without any theory in mind and are therefore purely inductive in their orientation. And yet if this writer were to "tinker around" in a physics laboratory some rather bad physics would result.

An orientation towards epistemology, therefore, involves acting as though one is "from Missouri" and being skeptical about a scientist's attempts to describe his own method, even when a competent scientist is involved. The following passage illustrates Northrop's own skepticism on this point.

> In this connection, Albert Einstein himself gives us very important advice. At the very beginning of a paper "On the Method of Theoretical Physics" he writes, "If you want to find out anything from the theoretical physicists about the methods they use, I advise you to stick closely to one principle: don't listen to their words, fix your attention on their deeds." Obviously this is excellent advice, and, as we shall see, Einstein has followed it, illustrating

> all his statements about scientific method and epistemology by specific illustrations from technical scientific theories and the technical scientific methods which they entail in their formulation, discovery and verification.[1]

Northrop's insistence on the primacy of epistemology is demonstrable in yet another example. In discussing Whitehead's philosophy he criticizes any attempt to understand Whitehead which begins with the latter's Process and Reality. Whitehead's metaphysics, Northrop reminds us, follows from his epistemology or philosophy of science which Whitehead had clearly worked out in his The Organization of Thought (1917), The Principles of Natural Knowledge (1919), The Concept of Nature (1920), and The Principle of Relativity (1922).

> It has been necessary to remind ourselves of these historical facts because since then Process and Reality has been published. The novelty, imaginative scope, and metaphysical subtlety of this work have tended to cover up the earlier treatises, to the detriment not merely of a study and appreciation of Whitehead's philosophy of science but also of Process and Reality itself. For it must be noted that the last third of this work is given exclusively to the philosophy of science. Not merely in its chronological origin but also in its final conclusion Whitehead's most systematic and definitive metaphysical book is

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[1] F. S. C. Northrop, Einstein's Conception of Science in Albert Einstein: Philosopher-Scientist. Edited by Paul Arthur Schilpp (New York: Tudor Publishing Company, 1949). Northrop's quotation from Einstein is from page 30 in a volume of his collected papers, entitled The World as I See It. New York: Covici Friede, 1934.

part and parcel of his philosophy of science.[2]

In this position that epistemology is more important than other more "substantive" aspects of physics and other sciences, Northrop's thesis finds added support in the writings of Henry Margenau, who has been a distinguished professor of Natural Philosophy and Physics at Yale. Professor Margenau, emphasizing the importance of epistemology, states

> Metaphysics is an odious word in some scientific quarters. Its meaning has fluctuated widely throughout the history of philosophy. But since Kant it has tended to designate two large branches of thought, ontology and epistemology. We hold with Kant that epistemology must precede ontology and that epistemology denotes the methodology of the cognitive process. The methodology of science involves deliverances of sense as well as rules of correspondence, constructs, and principles regulating constructs. Having learned that the latter are not conveyed by sensory data and yet function in guiding experience, we should call them metaphysical principles in the modern sense of the word. Metaphysical principles, thus understood, are an important part of all procedures which ultimately define reality.[3]

Professor Margenau further illustrates and supports Northrop's claim that no science can neglect epistemology in yet another passage.

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[2]Northrop, Whitehead's Philosophy of Science in The Philosophy of Alfred North Whitehead. Edited by Paul Arthur Schilpp (New York: Tudor Publishing Company, 1951), pp. 167-168.

[3]Henry Margenau, The Nature of Physical Reality: A Philosophy of Modern Physics (New York: McGraw-Hill, 1950), pp. 80-81.

> To deny the presence, indeed the necessary presence, of metaphysical elements in any successful science is to be blind to the obvious, although to foster such blindness has become a highly sophisticated endeavor in our time. Many reputable scientists have joined the ranks of the exterminator brigade, which goes noisily about chasing metaphysical bats out of scientific belfries. They are a useful crowd, for what they exterminate is rarely metaphysics--it is usually bad physics.[4]

Northrop is also equally critical of those theorists in physical and natural sciences who would neglect the findings of fact that sciences produce and would build an epistemology out of sheer air. The briefest summary of Northrop's thesis on the relationship between epistemology and science is in a statement by Einstein which is echoed in Northrop's works.

> The reciprocal relation of epistemology and science is of noteworthy kind. They are dependent upon each other. Epistemology without contact with science becomes an empty scheme. Science without epistemology is--insofar as it is thinkable at all--primitive and muddled.[5]

Northrop's epistemology is not, therefore, a piece of armchair philosophy, but as should be increasingly evident, is the foundation of his system and in turn it is dependent on an analysis of the "objective facts" that science uncovers.

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[4] Ibid., pp. 12-13.

[5] Paul A. Schilpp (ed.), Albert Einstein: Philosopher-Scientist (Evanston, Illinois: The Library of Living Philosophers, 1949), pp. 683-684.

We have briefly referred to the "ideal" epistemology previously as "radical empiricism in epistemic correlation with logical realism." To examine this more closely is our present task, and is necessary to an understanding of Northrop.

Radical Empiricism and Logical Realism are, according to Northrop, two different ways of knowing and when they are related together through "epistemic correlations" we have objective, scientific and valid knowledge about the world around us. In contrast with these two valid ways of knowing is the erroneous method that is termed Naive Realism. At this stage a legitimate question may arise. What is the relationship between these three categories and the categories we had established in a previous chapter?

In the first set of categories we have discussed, Northrop was simply describing various methods of cognition. The new categories are, however, part of his <u>evaluative</u> frame of reference. Radical Empiricism and Logical Realism together are "trustworthy" ways of knowing, whereas Naive Realism constitutes an "untrustworthy" epistemology.

<u>Naive Realism</u>

Naive Realism in Northrop's terminology is broadly used to categorize any theory which does not clearly separate

"concepts by intellection" from pure immediate sense data. More specifically, it is any theory which assumes that observation, sensed facts, or "feeling" give us objective knowledge. Actually the term is not exclusively used by Northrop alone. William Pepperell Montague, among others, also has used the term in his classic work on epistemology, The Ways of Knowing. Montague outlines three separate types of naive realism: (1) Extreme or Primitive Objectivism (2) Moderate or Common-sense Objectivism and (3) Relativistic or New Objectivism. According to Montague,

> The objectivist holds that all the objects which are experienced exist physically or externally and are independent of mind: I contend that this doctrine is properly analysable into the following pair of propositions:
>
> 1. All experienced objects have an independent meaning or essence that gives them a status of possible physical existence.
> 2. All perceptually experienced objects (sense-data) enjoy a status of actual physical existence.[6]

Northrop's basic definition of Naive Realism is similar to Montague's. In the process of describing a philosophy based on observation Northrop defines Naive Realism in the following terms:

> Such a method of knowing restricts the meaning of concepts to what is given purely empirically and directly with immediacy. To the philosophically

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[6]Montague, The Ways of Knowing, p. 292.

> uncritical such naive direct observation seems to warrant the epistemology of naive realism with its belief in gross public objects independent of perceivers, possessing the qualities and shapes which one actually senses.[7] [Italics provided.]

Northrop's discussion of Naive Realism and his analysis of various naive realistic doctrines is far more extensive than that of Montague or most other epistemologists.

At least two types of postulation and at least two types of intuition among the categories we have already discussed are naive realistic in their approach. These are (1) Concepts by Perception, (2) Logical Concepts by Intuition (3) Concepts of the Differentiations and (4) Field Concepts by Inspection. Each of these four conceptions depends in varying degrees on sensed or "intuitively" felt "facts" for providing knowledge or rather, put in a different way, immediate experience provides knowledge in these approaches.

Contemporary political science, as we shall see in detail later, provides many examples of Naive Realism in political theories and political concepts. The concept of "power" is a core concept in many political theories and approaches. "Power" in turn is the key to other aspects of political reality. Yet this concept is often used Naive

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[7]Northrop, The Complexity of Legal and Ethical Experience, p. 193.

Realistically because in defining the concepts sensed facts such as guns, felt or intuitively known facts such as relationships and theoretical terms such as capability are mixed together. The consequence of this mixture is that the concept often will not have a "public" meaning, i.e., a meaning that anyone can accurately find. The literature on power is replete with examples of the mixture of "observation" and knowledge" within the various definitions of power. Inis Claude, in a recent work, uses "the term power to denote what is essentially military capability--the elements which contribute directly or indirectly to the capacity to coerce, kill and destroy."[8] Robert A. Dahl also mixes sensed "facts" and "felt" "facts" in his attempts to find a formalized concept of "power." He defines his method partly in the following terms.

> . . . I propose first to essay a formal definition of power that will, I hope, catch something of one's intuitive notions as to what the Thing is. By "formal" I mean that the definition will presuppose the existence of observations of a kind that may not always or even frequently be possible.[9]

Charles Merriam's older theory of power also seems to

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[8]Inis Claude, Jr., Power and International Relations (New York: Random House, 1962), p. 6.

[9]Robert A. Dahl, "The Concept of Power," Behavioral Science, Vol. 2 (July, 1957), p. 201.

mix what is observable[10] with what is un-observable[11] in order to define the concept.

The usual concepts of "power" define the entity in terms of directly observed properties, at least in part. Such an entity is defined in Naive Realistic terms according to Northrop's vocabulary.[12] The code law of the Hindu caste system also involves Naive Realism, since rights and duties in that legal system involve sensed differences. The operationalist theories of many behavioralists in political science also are Naive Realistic to some extent because their major concepts depend on direct observation to provide "meaning." Also, the theories of many respected political philosophers are regarded as naive realistic in character at least in part, according to Northrop. Thus, he categorizes Marx as a Naive Realist because Marxian social theory supposedly involves classifications such as "capitalists," "proletariat" which are based both on observation and theoretical "constructs." As Northrop puts it,

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[10]Charles Edward Merriam, Political Power (New York: McGraw-Hill, 1934), p. 6.

[11]Ibid.

[12]F. S. C. Northrop, Philosophical Anthropology and Practical Politics (New York: Macmillan Company, 1960), pp. 85-86. This work will be referred to as simply Philosophical Anthropology.

> Marxist materialism, as he and Lenin, following Feuerbach, emphasize, calls for a realistic epistemology. . . . the notion of an external material object is a concept by postulation, not a concept by intuition. But description of evolving social institutions, following the historismus natural history tradition, calls for concepts by intuition. To combine the two types of concept as Marx has done is to talk nonsense. It is like saying that electrons are pink.[13]

Putting Marx, Merriam, Dahl and others into the same category seems at first sight to constitute a considerable amount of oversimplification. But Northrop puts strange bedfellows together under Naive Realism whenever theorists depend on direct observation for providing universal and "scientific" knowledge.

The Weakness of Naive Realism. Naive realism is the most widespread method used by laymen in many cultures. Many professional philosophers also are often naive realistic in their epistemologies. But in spite of its "popularity" naive realism is an imperfect method of knowing. At times it may be useful as a rough and ready method of knowing, but if we are searching for transmissible, valid and objective knowledge, naive realism is an incomplete, ambiguous and misleading technique.

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[13]F. S. C. Northrop, The Logic of the Sciences and the Humanities (New York: Meridian Books, 1959), p. 259. Hereafter referred to as The Logic.

Naive realism is a subjective rather than an objective technique. It is subjective basically because of its very dependence on sense data automatically providing knowledge of "objects" and concepts. Northrop is of the opinion that the data of the senses vary from person to person and sometimes even in the same person depending on his situation or organs. Since naive realism often claims objectivity and yet depends on sense data which vary from subject to subject it is basically an inconsistent philosophy. Here Northrop agrees with Hume also that sense data do not demonstrate any necessary relationships. As he put it,

> As Berkeley and Hume showed the modern West and as Confucian, Buddhist and Vedanta Hindu philosophers showed the classical Orient, every factor which naive realism assumes to be the same for everybody and independent of the perceiver turns out to vary from perceiver to perceiver and hence to be relative to the perceiver. The assumption, therefore, that radically empirical or naive observation gives objects independent of the perceiver with qualities the same for everyone breaks down. In fact the common-sense theory of naive realism is self contradictory since its realism asserts the belief in public objects with qualities the same for everybody independent of the perceiver and its naive way of knowing gives only qualities and relations which vary from perceiver and whose esse est percipi. Clearly a theory which defines subjects purporting to be independent of perceivers in terms of objects which vary from perceiver to perceiver is self contradictory.[14]

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[14] Ibid., pp. 193-194.

Marx's concept of the "class struggle" can be cited as a relativistic or Naive Realistic concept. The concept is not a "public" entity since although it is "meaningful" when applied to the political dynamics of 19th century Europe it does not apply to the non-dialectical dynamics of Asian societies, according to Northrop. Also, the western political science concept of "interest group," while being suitable for "explaining" the American legislative process, would not be applicable with equal rigor to tribal politics in Africa.

Some Examples of Naive Realism. Naive Realism is regarded as an erroneous method by Northrop. Yet examples of naive realism occur in almost every culture and in almost every age.

In the West, Aristotelian physics stands as one of the oldest examples of naive realism at work. His indictment of Aristotelian epistemology is not an attack on all of Aristotle's philosophy, as the following comment by Northrop demonstrates:

> If I am greatly impressed with Aristotle, as I am, because (1) he is the founder of Western naive realistic, descriptive, natural history, biological science and because of (2) what he wrote about Proposition 1, Book X of Euclid and his predecessors, but am not equally impressed, as this book will make evident, by his theory of knowledge or his physics, metaphysics, and part of his theology, the blame for the latter judgement must not be placed by the

reader at Bakewell's door.[15]

Aristotle is taken to task primarily because he clearly depended on sense data for providing his meanings and categories, for although Aristotle is often honored as a forerunner of modern science, Northrop regards him as primarily a subjectivist since his dependence on the sense world is naive. Aristotle in turn, as is well known, was a major influence in St. Thomas' philosophy. Not until the coming of Galileo and Newton was naive realism to see the beginning of decay. According to Northrop

> In Aristotle's physics the four elementary scientific objects, earth, air, fire and water, were defined in terms of the two pairs of sensed opposites, hot-cold and wet-dry. The important point to note in this physics, for our present purposes, is that the scientific object in Aristotelian and Thomistic physics was defined in terms of sensed qualities. It was not an imaginatively known entity such as chemical element with the shape of one of the five regular solids of Plato's chemistry and physics. In Aristotelian physics the distinction between theoretically known nature and sensed nature was dropped. The real world of scientific knowledge was the world given through the senses. The active intellect merely turned the particular sensations given through the senses into universals entering into the universal propositions of scientific knowledge.[16]

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[15]Northrop, Man, Nature and God, pp. 10-11.

[16]F. S. C. Northrop, "The Implications of Traditional Modern Physics for Modern Philosophy," Revue International De Philosophie (April, 1949). Burxelles, p. 1.

Other naive realistic philosophers of science are strange bedfellows. Thus, St. Thomas[17] with his mixture of sensation and reason and the Marxists[18] with their fusion of matter and mind are, to Northrop, in varying degrees Naive Realists. Similarly, the Indian Charvakian materialists[19] are in the same camp as the non-materialist Alfred North Whitehead.[20]

Of course, there are great differences among the various possible naive realistic philosophies. But insofar as they depend on the sense world for "objective" knowledge, they can be classified together and to that extent they do not provide truly scientific methods. This does not mean that these philosophies are inadequate in other limited areas of philosophy and some particular problems of science. Aristotle's epistemology, in spite of its "limitations" at an abstract level, is adequate for classifications in science or what Northrop calls the "natural history" stage of science.

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[17]Northrop, Meeting of East and West, p. 264.

[18]Ibid., p. 221.

[19]Northrop, Complexity, p. 196.

[20]Northrop, Man, Nature and God, p. 211. Whitehead's concept of "eternal objects" is a good example of Naive Realism, since according to Northrop, these objects are combinations of sense data with abstract patterns and teleology.

Naive Realism is not limited to the philosophies of the sages. Our "common-sensical" everyday world is to a remarkable extent a naive realistically established world. The tables, chairs, wives, planes are all objects which are known naive realistically. Yet, these are subjective apprehensions of the world around us simply confirmed by long experience. However, to use Northrop's example, the "objective" greenness of the grass can be changed to another color by a simple operation on one's eye. Reality in the naive realistic world then depends on one's vantage point. The Japanese play "Rasomohon" contains illustrations of this end effect of naive realism. Given the same event the various characters in the play have completely different and yet for the most part "honest" findings of fact. Each character abstracted his interpretation from reality as he saw it and since the frame of reference of each was different, "objective" truth remained mysterious, illusory and unattainable.

The naive realistic world, therefore, is a subjective world since sense data precedes and then helps form concepts. Since sense data vary from person to person, we cannot have knowledge that is, in Arnold Brechts' terminology, transmissible. To have transmissible knowledge we must have a frame of reference that does not vary from person to person. The

sense world cannot provide that frame of reference. An illustration that is one of Northrop's favorites can show his position on this point.[21]

> It is easy to show that we do not know with our senses the public now-ness of even two spatially separated events which are within the local horizon and no farther apart than a relatively few miles. Consider the following example:
>
> Imagine two loud and very sharp explosions which occur eight miles apart. Suppose, also, that a level, straight road, upon which we and others are standing, connects the places of the two explosions and that a person, A, is at a point near the easternmost explosion, a person B, is midway between the two explosions, and a person, C, is at a point near the westernmost explosion. Suppose, also, that the three people are from the bush of some un-Westernized, isolated spot in Africa and, therefore, know nothing about the Western mathematical physics of acoustics with its concept by intellection theories and their technological gadgets, such as telescopes and Greenwich-time-set watches. Let us then ask these three persons, A, B, and C, the following question: Did the two explosions heard by you occur at the same time, or not? Let it be noted that unless these three persons give the same answer to this question, then no one senses a public time even over the short distance of eight miles, to say nothing of over the spatial extension of the entire cosmos.[22]

In a somewhat humorous vein Northrop goes on to stipulate that an Aristotle, a St. Thomas and a Mortimer Adler

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[21]Northrop has used this example in an interview with the author and it also appears in Man, Nature and God, pp. 211-213.

[22]Man, Nature and God, pp. 211-212.

should keep a close watch on A, B and C to "check" on the accuracy of their oppositions. The fact that Aristotle, St. Thomas and Adler are considered to be naive realists obviously has something to do with their being picked as the guardians of observation in this example.

The whole purpose of this example is clearly to indicate that sense data do not give us scientific, objective and public knowledge. The three persons will in all honesty give three different accounts of the time at which the two explosions took place, provided they are depending on sensed experience.

> In short, even within the local horizon, sensed nowness, i.e., sensed temporal simultaneity, is not public nowness. Hence, we no more know a public time through the senses as given in naive observation than we know a public space. But for any object to be an external object, i.e., a public object the same for all knowers, it must be in public space and time. It follows that even if, as is not the case, any object given to our senses were, qualitatively and imagefully, the same object for all observers, that object would not be an external public object.[23]

Many other examples of naive realism can be given but it would be more fruitful to proceed with the alternative to naive realism. As has been indicated, there are three distinct stages in the "correct" scientific method: logical

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[23] Ibid.

realism, empiricism and epistemic correlations. For an understanding of the epistemology of Northrop these stages should not be fused together. Neither should each be regarded as an adequate tool by itself. Each of these will be discussed in turn.

Logical Realism

Logical Realism is a portion of Northrop's philosophy which probably provides the greatest difficulty in clearly understanding him. No brief "definition" can make logical realism into a clear concept in spite of the fact that in many ways it is not a novel concept.

Logical Realism springs from the assertion that there are and there can be concepts which are not at first perceived in the senses. In this respect Logical Realism is identical with the process that involves in Northropian terms, "concepts by postulation which are concepts by intellection." Not all concepts by intellection are necessarily based on a Logical Realistic frame of reference but if we first discuss the validity of concepts by intellection we can then venture into judgments on Logical Realism.

The Need for Concepts by Intellection. Concepts by intellection are not completely modern inventions. Plato and

several pre-Platonists were well aware of the basic needs for concepts by intellection. Plato's epistemology, according to Northrop and many other authorities, involved a theory of forms which did not depend on sense data for its meanings. Northrop notes that

> As Socrates noted in his exposition of the divided line in Book VI of Plato's Republic, to get ideas that give objective naturalistic scientific knowledge and provide the common meanings necessary to define a common law or justice and goodness, the same for all knowers, we have to drop all images.[24]

Some modern interpretations of Plato have categorized him as an idealist without clarifying the exact epistemological base of Plato's idealism. For instance, A. E. Taylor in his brief but incisive study of Plato observes that

> The "theory of knowledge" is thus the very centre of Plato's philosophy. He takes his stand upon the fundamental assumption that there really is such a thing as "science," i.e. as a body of knowable truth which is valid always and absolutely and for every thinking mind.[25]

Taylor's understanding of Plato's epistemology is similar to that of Northrop and is evident throughout the former's work, The Mind of Plato, including the following passage:

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[24]Northrop, Man, Nature and God, p. 228.

[25]A. E. Taylor, The Mind of Plato (University of Michigan Press, 1960), p. 36. Ann Arbor Paperbacks.

> It is primarily from mathematics that Plato has derived his conception of science and its concepts and their relation to the world of experience. Now, as Plato himself reminds us in the Republic, the visible diagrams of the mathematician are only aids to the imagination: they are not themselves the true objects of his reasoning.[26]

The use of Platonic deduction was, as Northrop shows repeatedly and as many other people are aware of already, gradually de-emphasized in the Western world with the rise of Aristotelian and later Thomistic philosophy. But with the rise of modern science Northrop sees more frequent usage of concepts by postulation which are also concepts by intellection. The brief name for these concepts is "constructs." Northrop's position that theoretical imageless constructs are crucial to modern science finds acceptance among several respectable students of science. The Yale physicist and philosopher, Henry Margenau, for instance, supports Northrop in the following statement.

> The passage to orderly knowledge involves the positing of constructs, which are the rational elements to which datal experience is made to correspond. An external object is the simplest construct which we habitually set over against most kinds of sensory awareness. Others are geometric forms, numbers, and most of the refined entities of modern physics.[27]

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[26] Ibid., p. 49.

[27] Margenau, The Nature of Physical Reality, pp. 72-73.

Einstein also, in several statements of his own philosophy of science, seems to indicate that "pure thought" or constructs may be given an independent value of their own. He has stated that "since . . . perception only gives information of this external world or of 'physical reality' indirectly, we can only grasp the latter by speculative means."[28]

Einstein, for example, in another statement says that

> We have thus assigned to pure reason and experience their places in a theoretical system of physics. The structure of the system is the work of reason; the empirical contents and their mutual relations must find their representation in the conclusions of the theory.[29]

According to these thinkers, then, there certainly seems to be a separation between the "intellectual" aspects of the scientific method and the "sensed" aspects of the same method, and this distinction is an important one for Northrop's philosophy. Whether this distinction is a completely valid one or not is not our central concern but belongs rightly in the province of philosophers of science. We can only indicate that "reason" in the sense of mathematical

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[28]Quoted in Northrop, The Meeting of East and West, p. 294.

[29]Quoted in "Einstein's Conception of Science," Albert Einstein: Philosopher-Scientist (New York: Tudor Publishing Company, 1949), p. 392.

"imageless" thought, according to these several distinguished philosophers of science and scientists, is crucial to modern knowledge. The consensus among Margenau, Einstein, Northrop, and others seems to indicate this. The role of concepts by intellection at least seems to be an important one. Modern "mature" physical science does seem to need the creation of constructs which are unambiguous logically related factors which leaves nothing to subjective perception of sensed data of the particular observer or set of observers. But whatever may be the value or initial stimulus or source of a construct it itself must be theoretically constructed by "intellection" and "deductive" logic or else we would have a Naive Realistic hypothesis, and our knowledge of a public world cannot be based on such a theory which simultaneously fuses sensed data and theoretical data. Particularly this is true in our present age where in the physics of electrons and in the laws for modern corporations we cannot sense all aspects of reality.

Concepts by intellection marks, therefore, the point where Northrop according to his own claims parts ways with his teacher, Alfred North Whitehead. According to Northrop, Whitehead's "theory of extensive abstraction"[30] always even

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[30]The analysis of Northrop's position is based primarily on private conversations with Professor Northrop during his April 1963 visit to the University of Kansas.

according to Whitehead never loses sight of the sense world. Whitehead's method, it seems, is adequate when there is a complete and exact identity between the sense data a theory calls for and that which is actually observable. As Northrop stated it, "for abstractive theory-relatedness in events in sense world must be isomorphic."[31] But when we deal with phenomena that are not completely or directly observable, naive realism or abstractive theory cannot give us reliable public knowledge. For modern "unseen" entities a new kind of construct which asserts more than "intuition" i.e., sense data or feeling can give us and which is imagelessly stated is necessary. This is true for understanding "electrons" or "quantum physics" and even "simultaneous" events which are separated by time and space.

Earlier in this chapter we gave the hypothetical example of two explosions and three sets of observers at different points giving their description of the time of the explosions. Just relying on sense data the three observers cannot fix a time that is public and objective. According to Northrop, in this situation and other cases of establishing the "simultaneity of spatially separated events Whitehead

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[31] Ibid.

holds that simultaneity is given intuitively"[32] whereas Northrop, relying on Einstein, maintains that only for events occurring side by side is intuition adequate.

Without resolving the differences between "extensive abstraction" and "concepts by intellection" we have given a brief description of Northrop's understanding of "constructs." Briefly, Northrop's "constructs" or "entities" are concepts whose meaning is given and assigned by theorists in any science within a deductively formed set of meanings without depending on the sensed world. He frequently affirms, and we shall examine and elaborate on this later, that man's mind is not merely a Lockean tabula rasa or blanked tablet. The very structure of man's neurophysiology allows various logically related concepts to be formed without reference to sense data. This means that man has a kind of a priori way of knowing in his nervous system but the a priori is not simply "synthetic" in character. It is more "analytic" since the categories or values can be freely constructed and logically related. Northrop argues that people find it difficult to understand a logically realistic concept because by sheer habit most of us are used to thinking in terms of sensed data. He expresses his

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[32] Ibid. It must be noted that Northrop uses "intuitively" to mean "directly known through the senses" or "through feeling."

argument in the following manner:

> Let me take the problem of the difficulty people have in recognizing that logically realistic concepts aren't given through the senses. I believe this goes back to the fact that in the modern world, still trapped in people's brains, is the tabula rasa--a theory of the knower. Once you admit the knower to be a tabula rasa or, as Aristotle did, mere formless matter, before it gets knowledge, then it follows of necessity that no concept we have can gain its meaning in any other way than through the senses.[33]

Einstein's concept of "space" and "time," Plato's "ideas" and "atomic ratios" are cited by Northrop as examples of Logically Realistic concepts in science and philosophy. Since political science and legal theory, according to him, has not made sufficient use of Logical Realism it is difficult to find many precise examples of Logical Realism in the literature of these fields. For illustrative purposes, Northrop himself uses Stoic Roman concepts of "legal man" and "contract" as examples of political and legal Logically Realistic constructs.

The Stoic Roman concept that "legal" man is "universal" man has no meaning whatsoever in our directly observed world. We can only "see" black men, white men, eyeless men, two eyed men and men with sensed qualities. Therefore

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[33]F. S. C. Northrop, Cross-Cultural Understanding: Epistemology in Anthropology (New York: Harper Co., 1964), p. 348.

"universal" man was "any" man or man qua man whose rights were not dependent on his physical characteristics. Stoic Roman contracts also were Logically Realistic in character. This was particularly true of "verbal" contracts wherein legal relationships did not exist between sensed categories of light skinned Brahmins and dark skinned untouchables. Instead the emphasis was on the imageless form or procedures of the contract. The substance was left in a variable form. The emphasis was on procedures.[34]

One problem remains before we proceed with other aspects of the philosophy of science. This deals with the question of the reality of "constructs."

Constructs and Reality. The necessity for constructs in physical science does not automatically mean that philosophers of science are in agreement as to the "real" status of constructs. On this question Kantians, Neo-Kantians, Platonists and those who think like Northrop suggest a number of alternatives and a wide divergence exists between people who otherwise agree on the necessity of analytically and logically rigorous methods.

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[34]For a full discussion see F. S. C. Northrop, The Complexity of Legal and Ethical Experience (Boston: Little, Brown and Company, 1959), pp. 216-229.

Some positivistic persons maintain that constructs are simple common frames of reference that have been simply adopted for semantic convenience. For instance,

> . . . Poincare, at least as frequently interpreted, and Duhem affirm that such concepts are mere subjective linguistic conventions upon which people of common sense and science must agree if they are to communicate.[35]

In Kantian philosophy, on the other hand, constructs would operate beyond the world of phenomena and therefore we could not really know this world except through categories which are fixed, rigid and yet a priori. Neo-Kantians, however, have moved away from Kant's concept of necessary categories to more flexible categories. Northrop notes that

> Cassirer and Professor Margenau hold that although concepts by intellection are not realistic and ontological, they have a much more important and even necessary function than the linguistic conventionalists suppose. This additional function is that the concepts by intellection enjoy a neo-Kantian als ob [as if] regulative status.[36]

Professor Hans Reichenbach, the well known philosopher of science, also denies any permanent reality to constructs. He describes his position in the following terms:

> We must regard our statements about unobserved

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[35]Northrop, Man, Nature and God, p. 216.

[36]Ibid., p. 216-217. See Chapter 21 of Margenau's The Nature of Physical Reality which touches on this problem.

> objects not as verifiable statements, but as conventions, which we introduce because of the great simplification of language. What we know is that *if* this convention is introduced it can be carried through without contradictions; that *if* we assume the unobserved objects to be identical with the observed ones, we arrive at a system of physical laws which hold both for observed and unobserved objects.[37]

Einstein also seems to deny Kant's fixed categories of mind and regards constructs as products of philosophy which are or can be created and then introduced. Einstein's position is apparent in the following passage from his words:

> The theoretical attitude here advocated is distinct from that of Kant only by the fact that we do not conceive of the "categories" as unalterable (conditioned by the nature of the understanding) but as (in the logical sense) free conventions. They appear to be *a priori* only insofar as thinking without the positing of categories and of concepts in general would be as impossible as is breathing in a vacuum.[38]

While the authorities we have discussed for the most part seem to support Northrop as to the necessity of constructs they seem to cast doubt, in varying degrees to be sure, as to whether constructs actually exist in nature. Yet Northrop's logical realism asserts that constructed scientific

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[37]Hans Reichenbach, *The Rise of Scientific Philosophy* (Berkeley: University of California Press, 1959), p. 179.

[38]Albert Einstein, "Reply to Criticisms," *Albert Einstein: Philosopher-Scientist*, Vol. II (New York: Harper Torchbooks, 1959), p. 674.

entities are not merely hypothetical objects like ghosts but are part and parcel of reality. Therefore "constructs" are not merely epistemological tools but have ontological status and implications also. He is obviously Platonic in this respect although he differs from Plato in a manner we shall later describe.

If constructs are mere conventions, then Northrop sees this as a new solipsist position. If we "agree" on a framework we can have approximations of reality. If there is no agreement we have no reality. Logical realism claims to explain reality without "agreements" and with some certainty. Logical realism does not postulate at any one time all of reality but constantly and progressively moves towards total reality.

> When so stated with care in terms of asymptotically approximating toward but never perfectly achieving its logically realistic limit, the logically realistic interpretation of concepts by intellection has the two following merits: (1) It accounts for the subject-to-change-with-further-empirical-information character of such theories. (2) With an additional empirically verified assumption about the existential import of scientific objects, it makes it meaningful to say that the rocks were here on this earth, geological ages in the past, when there were no Poincares present to specify a linguistic convention and keep it constant or any Cassirers to project symbols.[39]

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[39]Northrop, Man, Nature and God, pp. 225-226.

The logical component of Northrop's Logical Realism seems to be more easily defensible than the Platonic Realism of the theory. In his defense of Realism Northrop's involved language is clearly his own worst enemy. He seems to imply at times that total Reality lies "beyond" the successions of constructs which we use to grasp it. This seems to require at times, although Northrop does not seem to mean it, an act of faith on the part of man. Man is required to believe in a system of forms for which there is no available macro-cosmic construct as of yet, except in the religious aspects of Northrop's philosophy which does not directly concern us in our present inquiry. It is sufficient to note in passing that as one observer put it

> To Northrop nature is creative, for the facts of nature are not man-made. The creative "source of the making" may be called evolution, God, Allah, Kahweh, Brahman, Nirvana, Tao, or the source of the jen, the name varying with the philosophy of the culture in question.[40]

This particular thesis of Northrop's, that there is a nature which is independent of even the "mathematical constructs "agreed" upon by men, seems to be an intriguing one from a philosophical standpoint. But, since this thesis does

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[40]Paul Douglass, "Northrop and Curricular Reform," Improving College and University Teaching (Oregon State University, Autumn, 1963), Quarterly Journal, p. 194.

not seem to add to or detract from an understanding of the substance of Northrop's political theory, we do not intend to deal with it directly in our present analysis.

In summation, for the later discussion of Northrop's politics the following are the elements of logical realism. (1) Imageless constructs imply more than the immediate objects of knowledge and therefore involve ontological and not mere epistemological knowledge. (2) There are at least two justifications for this: (a) All constructs depend on ontologically real men, scientists and perceivers; we ourselves are not figments of the imagination, (b) The increasing knowledge of nature through constructs implies that there is a real nature about which we slowly learn more and more. (3) Therefore scientists are not engaging in mythology but in understanding the actual ontologically real nature around us.

Although Northrop's dependence on thought and intellect has been noted as being Platonic, unlike Plato, Northrop's venture in the philosophy of science does not end with a theory of forms. The world of empiricism and the senses also play a role as important as the process of intellection.

Thus his Radical Empiricism is a "component" of reality and knowledge separate from intellectually known entities. In making this distinction Northrop is still operating in the Platonic tradition. Radical Empiricism is a method of knowing the immediate world of our senses. Northrop demonstrates his debt to Plato to the extent that

> Plato merely continued what Democritus had initiated, analyzing the unobservable atoms of the Democritean theory into the intuitively given continuum which provided their "matter" and the ideal mathematical ratio which determined their geometrical form. Democritus' and Plato's distinction between the "sense world" and the "real world" is an example of our distinction between what is given to immediate apprehension as denoted by concepts by intuition and what is proposed by deductive scientific and philosophical theory as designated by concepts by postulation.[41]

The sense world in Plato's philosophy was a world of flux and decay and the process of obtaining reliable knowledge would do well to avoid it. Plato does seem to make a distinction between knowledge and sense perception when he tries to separate them into separate categories of episteme and aisthesis. Professor Crombie notes that

> Aisthesis therefore cannot be identified with

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[41]Northrop, The Logic of the Sciences and the Humanities, pp. 87-88.

> episteme. Episteme is to be looked for in the sphere of doxa, in the sphere where "the mind concerns itself with things that are, itself according to itself."[42]

Attention should be drawn at this point that there are differences of opinion among scholars regarding what Plato meant regarding the sense world and the "mathematical" world of knowledge. Northrop's claim that Plato meant that no reliance on sense data was included in Plato's own theory of knowledge is in sharp contrast to an interpretation expressed in Crombie's Examination of Plato's Doctrines. Professor Crombie is concerned that doxa may be erroneously understood to mean some independent purely intellectual faculty.

> Verbally this is a bad description of doxa, for it suggests that doxa or knowledge of the external world is something that the mind achieves by its own resources; and this suggests the picture of aisthesis and doxa as parallel "faculties," the former putting us in touch with sensible objects, the latter giving us some kind of intellectual intuition of arta or things that are really real. However congenial this may be to certain conventional pictures of Platonism it must be rejected.[43]

Whatever Plato's own position may have been, one thing is certain. Northrop himself maintains that in the physics of this era since the coming of Einstein Radical Empiricism

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[42] I. M. Crombie, An Examination of Plato's Doctrines, Vol. II (London: Routledge & Kegan Paul), p. 26.

[43] Ibid., pp. 26-27.

has a special role to play but only at an independent "stage" of scientific procedure.

Radical Empiricism consists of whatever we are aware of, with immediacy and without the mind adding to or interpreting whatever our consciousness or senses deliver to us. This kind of awareness has several implications for art, religion and aesthetics. But in science radical empiricism gives us awareness not of entities or objects but mere qualities or successions of sense data. It perceives a blurry continuum or panorama; depending on where we focus our senses, distinctions and differences begin to appear.

By sense data Northrop means those deliverances of smell, sight, sound, taste, touch and feeling of which we are aware without any learned categories of thought actually structuring reality for us. He takes great pains to demonstrate that our everyday world of square tables and round moons is influenced by forms and categories which are by-products of particular cultures. Without these forms we would see only transient, perishing and successive images.

Again, Northrop accepts Hume's thesis that this world of "sensibles" does not itself demonstrate causality. Although he later shows the inadequacy of the Humean position in modern physics on the question of what pure sense data shows, he

accepts the Humean position completely. Real empiricism shows no necessary relationships. When we think we "see" causal relationships it is primarily a result of previous experience of successions of data which have been reinforced by memory as Hume has attempted to show.

> No one in modern times makes us aware, as does this notable Scot, of what we would be left with by way of factually warrantable beliefs if all that is directly and indirectly warrantable is restricted, radically empirically, to what is given either introspectively or through the so-called outer senses. This is why anyone who has not been wakened from his naive "dogmatic slumbers," as were both Kant and Einstein by their reading and studying of Hume, is likely to keep his mind in the narcotic and dogmatic stupor which is naive realistic slumberland.[44]

Hume's position, while sound at one level, is not accurate at another level from Northrop's view-point. Every working physicist even if he is Humean in his subjective preferences largely ignores Hume in his daily work. Causal relationships is varying degrees are involved in physics.[45] These causal relationships are, however, existent because of imageless mathematical relationships which are carefully defined. Only logical realism or intellection can postulate causation objectively. Hume himself, as is commonly known,

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[44]Northrop, Man, Nature and God, p. 173.

[45]See Margenau, The Nature of Physical Reality, pp. 389-426.

left his empiricism in his library and acted as though there were "causes." But Hume was aware of only naive realistic causes rather than logically realistic causes.

> . . . in his appeal to what he did "in practice," Hume was correct on one point. He saw that meaningful knowledge of a personal self, which is, in some sense, the same person today that it was yesterday, and of external objects in public space and time, is not given by direct introspection or observation radically empirically through the "inner or outer" senses and can be known only by means of indirectly confirmed theory. What he overlooked is that if his appeal to what happens pragmatically "in practice" is not to contradict his correct description of what is radically empirically the case in fact, he must add to his nominalistic semantic premise, inherited, via Bishop Berkeley, from Locke's Essay Concerning Human Understanding the additional epistemological thesis that there also logically realistic, indirectly and pragmatically confirmed concepts by postulation that, in whole or part, are concepts by intellection.[46]

Northrop's critique of Hume's empiricism is somewhat different from that of Whitehead. Whitehead attacks Hume from at least two positions. First he criticizes Hume's concept of what sense experience consists of. Professor A. H. Johnson, the distinguished student of Whitehead, illustrates the latter's position among other places, in the following passage.

> . . . Whitehead offers very vigorous criticisms of this essentially abstract approach to the complex

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[46]Northrop, Man, Nature and God, p. 174.

> environment. In presentational immediacy (or to speak non-technically, in ordinary sense experience), there is a tendency to assign excessive importance to clear-cut, apparently unrelated bits of sense data. This is the basis of Whitehead's vigorous and recurrent criticism of Hume. For Hume, sense data are here, now, immediate, and discrete.[47]

Whitehead also chastizes Hume for his ambivalence in being a positivist in theory but not in practice. On the first point Northrop agrees with Hume that sense experience only gives "unrelated bits of sense data" while he concurs in Whitehead's criticism of Hume's ambivalence.

The paradox of Northrop's similarity with and yet difference from Hume with respect to relatedness and causality can be resolved by focusing our attention on Northrop's epistemology. It can be recalled that there is a distinct bifurcation in Northrop's theory of knowledge although he does not maintain that there is any ultimate bifurcation in nature. The bifurcation is between a theoretically known object and an immediately sensed image. The bifurcation is, however, resolved or reconciled by what Northrop terms "epistemic correlations."

For Northrop, then, "objects" in nature can be causally related. But this causality or relatedness according

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[47]A. H. Johnson, Whitehead's Theory of Reality (New York: Dover Publications, 1962), p. 79.

to him cannot be directly observed. What is observed directly is only the sequences of lights, sounds, odors, tastes, sensations and feelings. The observation of these patterns and sequences is one example of Radical Empiricism at work. Radical Empiricism strictly speaking cannot be expressed without some distortion, but in ordinary language an observation that night follows dusk and dawn follows night is a "concrete" example of reality known in this manner. Mere observation does not warrant a thesis that the dusk "causes" the darkness. The darkness follows the dusk "today." But "tomorrow" is another day and today's perceived patterns may not hold for tomorrow, from a Radical Empirical viewpoint. An incident from the political history of India provides another opportunity to illustrate the implications of Radical Empiricism within the restrictions of language.

In the 1857 Sepoy Mutiny in India the following sequence and pattern of observed events seems to have occurred:[48] (1) Greased cartridges were handed out to Indian sepoys by the British (2) Rumours to the effect that the "grease" was cow fat and pig fat originated in Dum Dum in East India near Calcutta (3) Shooting and arson occurred in Ambala in the Punjab,

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[48]Michael Edwardes, A History of India (New York: Farrar, Strauss and Cudahy, 1961), pp. 250-253.

in Northern India. A Radical Empiricist will not see any causes in these events according to Northrop. Most people, including Hume, however, as we have seen, are not always Radical Empiricists. They do drag in "common sense." With "common sense" one may "know" that Hinduism and Islam have restrictions against use of cow fat and pig fat and therefore Hindus and Moslems are likely to have been incensed by the use of cartridges greased with these fats. In following this procedure the observer is not being radically empirical. He is introducing theories about Hindus and Moslems into the factual situation. These theories may be habitually "proven" or "assumed" but they are not sensed "facts."

Most of the "causation" that we see in our everyday world is seen naive realistically, i.e., we do not directly sense them. We observe them with the "common-sense," habits, categories and theories that our cultural upbringing help us sneak into our perception, according to Northrop. Thus far, he is still Humean and positivistic.

Northrop, however, does think that "public" objects in nature are causally related. But this relationship can be captured or discussed or "proved" reliably through the help of Logically Realistic theories, epistemically correlated, i.e., connected in a special way, with what is

observable. The "causation" and "relationships" in the mature sciences of today with the help of Logically Realistic concepts have bypassed the Humean critique of causality, according to Northrop. Causality, then, can be theoretically known and indirectly varified. Causality is out there and does exist but observation alone cannot tell us how electrons will behave at some future time. Neither can observation alone tell us in a reliable manner what the behavior of a group of political actors will be like in the future. In physics,

> More concretely, this means that the deductively formulated theory provides a time equation such that, by feeding the operationally determined empirical values of the concept-by-postulation, theoretically introduced independent variables of the state function into the equation, the values of these variables for a specific later time t_2 are completely determined by solving the equation for that time t_2.[49]

For politics the implications of this view of causality are that if we want to go beyond mere observed sequences of political events mixed with common-sense and hunches we have to use deductively formulated concepts. In a later discussion we shall see how Northrop's logically realistic concept of "ideology" illustrates an attempt to find

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[49] F. S. C. Northrop, "Causation, Determinism, and the Good," Determinism and Freedom. Edited by Sidney Hook (New York: Collier Books, 1961), p. 205.

relationships and causation in human behavior.

The Radically Empirical world of immediate experience, in spite of its inability to show causality, has many uses both for science and for the humanities.

Ontology and Radical Empiricism. Immediate experience is of immense variety, and in a previous discussion we have seen that there are several different forms of "intuition" of it. Not all of these forms of knowledge, however, give us public, objective or "realistic" knowledge in Northrop's sense. Nor does the existence of various forms of knowledge indicate that the sense world is only a world of appearance.

It is true that the sense world to Northrop is also a real world. It exists. Without the sense world we would be operating in a world of disembodied forms or phantasies of the mind. Even though the sense world is an extremely complex and confusing source of experience it cannot be neglected or be considered "evil" or "unreliable" as it seems at times to have appeared to Plato in his search for knowledge. The sense world, however, to Northrop is the world of pure fact. Facts exist but pure facts do not give ideas, good or bad. The "facts" of the sense world just are. By themselves they do not "verify" anything. As Northrop puts it

> Pure fact may be defined as that which is known by immediate apprehension alone. It is that portion of our knowledge which remains when everything depending upon inference from the immediately apprehended is rejected. Strictly speaking, as has been previously noted, we can say nothing about pure fact, since the moment we put in words what it is, we have described fact rather than merely observed fact.[50]

Since we can only observe pure facts this does not mean that communication between observers is impossible. It is difficult but possible if there is a set of experiences that are common to the observers. If two physicists are in possession of common experiences of green they will be able to recognize separately and communicate together about green flashes in their experimental work. In spite of the indeterminacy of the sense world

> Nevertheless, we can use words to denote it, providing we realize that these words are concepts by intuition which require us to find in the immediacy of our undescribed experience, what the words mean.[51]

With this caution in mind Northrop next attempts to clarify what is immediately given.

The Aesthetic Continuum. Thus he always applies the term "aesthetic" to whatever is immediately given in order

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[50]Northrop, Logic, pp. 39-40.

[51]Ibid., p. 40.

to convey the image of pure sensory experience. The physicist-philosopher Margenau, in a tone similar to that of Northrop, describes the aesthetic component in these terms:

> It is simply an element of experience distinguished from others by its spontaneity, by its relative independence from the other elements, by its irreducibility. Kant's apt phrase, "the rhapsody of perceptions," describes it well.[52]

This rhapsody of perception appears within a continuum or field of aesthetic materials for Northrop. "The complex differentiated aesthetic continuum is ineffable and indescribable and unconveyable to anybody who does not turn away from words and language to experience it and contemplate it with immediacy."[53] In this continuum we are not all at once aware of all the distinctions that are present. We cannot simultaneously see the greenness of the grass near us and the exact shade of a color in the horizon. If we were to take in the whole continuum at one time we would see distinctions beginning to appear towards the center of the continuum with more and more blurring of the edges as we scan farther and farther away from us. It is the center of the continuum, where distinctions exist as we focus our attention,

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[52]Margenau, The Nature of Physical Reality, p. 49.

[53]Northrop, Meeting of East and West, p. 333.

that provides a key to or the radically empirical component of, scientifically known natural and political objects. The natural object "electron" shows its radically empirical aspect as "a colored curved line in the fuzzy aesthetic continuum"[54] of an experimental situation. A political "object" like "Non-Dualistic Vedanta Ideology" with its Radically Empirical ethics shows itself in the behavior and actions of Gandhi mediating between various groups, amidst the continuum of colors and shades in an Indian village.

Northrop sees certain implications for religion, art, aesthetics in several aspects of the "continuum" but the everyday world of science according to him deals with "materials" which are at the center of the focus of our senses.

There are several major implications for political theory in the concept of the "aesthetic continuum," which we will explore in a separate discussion. Briefly, the "aesthetic continuum" must be respected in and for itself in a political system. That is, political and politically created educational systems must be sensitive to the very "natural" human love for beauty. Also, the continuum seems to call for compassion in ethics and mediation in law, according to

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[54]Northrop, The Meeting of East and West, p. 445.

Northrop.

Apart from the total continuum, the center of this aesthetic field is important for natural and social science for making sure that our "constructs" and "theories" are not merely ghosts and demons but have something to do with reality. At the center of our awareness or at terminal point of our sensory perception we begin to see clear differences. The skin color of our wives or the waves on our radar begin to become clear. This world is real but objects seen this way do not have complete, objective and intellectual meaning. They cannot provide the basis for science because they can be only observed and only approximately described. They must be supplemented by constructs.

The examination of Northrop's scientific philosophy, thus far, has established the existence of two epistemological tools. The first was logical realism which gives us a public world but is independent of immediate experience. The second is radical empiricism which gives us experience but denies us public transmissible knowledge in most instances. The problem then arises regarding the relationships between these two worlds. Unless this relationship is approached with philosophical clarity he claims we will end up in a modern version of the old body-mind problem or with a Frankenstein monster

with one foot in Augustine's City of God and another in Hume's complex but material world. To give validity to logical realism sense data are necessary and to give sense data meaning propositions are necessary. Now, the relationship between these "realms of discourse" is determined by a complex set of factors which Northrop terms "epistemic correlations."

Epistemic Correlations

At the risk of sounding repetitious, it must be emphasized that without at least a general understanding of the nature of epistemic correlations one would be misled in an attempt to understand Northrop's philosophy of science. Stated briefly and in his own words, the process of obtaining epistemic correlations

> . . . has to do with what the relation is between the unobservable, intellectually known, scientific objects and events in public spacetime, known by means of concepts by imageless mathematical intellection, and the perishing, vivid, imagefully sensed qualities and relations denoted by concepts by intuition.[55]

Epistemic correlations are not merely simple superimpositions of one kind of data on top of data obtained in a different method. This is often understood to be the case

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[55]Northrop, Man, Nature and God, p. 26.

by laymen because of the very nature of the Indo-Aryan language structure that much of the West has inherited. With the very common subject-verb-object grammatical construction there is the persistent tendency to think of the subject and the object as being "identical" especially when only the verb form "is" connects the two. Thus, the statement "sugar is sweet" tends to identify sweetness with sugar and oversimplifies the correlations with which through habit we have come to rely on sugar for providing sweetness. This presents the great danger that a vital step in our understanding of nature is often overlooked or taken for granted.

In our world of common sense and daily perception and observation a weak and crude form of epistemic correlations constantly occurs but which we habitually overlook. Take for instance our understanding of a giant oak tree. On the one hand we may have a conceptual understanding of the category of an oak tree. On the other hand we immediately "see" the greenness of the branches and the brownness of the "body" of the oak. Our everyday language tends to make us think that the complex of brownness and greenness is an oak tree. This covers up a series of procedures or correlations that we have engaged in and which are reinforced by habit. We may have wondered during childhood what the other side of the oak

looked like and we have repeatedly verified by a variety of correlations that the parts of the oak we do not immediately see are also "real" parts of the "real" oak we know. So commonplace is this procedure that only in the example of a Helen Keller are we made aware of the trial and error ridden complex process of obtaining knowledge about even every day objects.

Now in "mature" science the role of epistemic correlations is far more conscious, subtle and also far more rigorous. Because of the complete "separation" of postulated objects from the sense data that are available the tying in of the two worlds must be carefully approached. There are several distinct steps involved in "deductive" science at the stage of epistemic correlations.

Procedural Steps. First, before searching for correlations Northrop assumes, as we have seen, the existence of deductively obtained and imagelessly stated theories. When the various factors in a theory are carefully related then the search for theorems or logical implications begins. Without a deductive theory epistemic correlations are not really necessary. A statement like "Congress has two houses" does not need epistemic correlations. In a deductive theory, however, epistemic correlations are needed to bridge the gap

between what is seen and the Logically Realistic postulates of any theory. Whenever there is a gulf between two different methods of knowing these epistemic correlations enable one to make sure that out of the theory and the facts a public object is created.

Since political science and most of the social sciences have not reached the stage of deductively formulated, Logically Realistically defined theories it is difficult to find actual examples of epistemic correlations. Most political scientists do mix up theories and sensed facts in various ways according to Northrop. Therefore in contemporary political science we have the absence of these kinds of correlations and the concepts of political and social science often consist of sheer "nonsense," and "pseudo-solutions" are offered for pseudo-problems. Thus, he states:

> A pseudoproblem or a pseudoanswer to a pseudoproblem is one that arises because the different epistemological meanings of "the same word" are not distinguished and thereby kept in their respective worlds of discourse. When this occurs, nonsense results. Politicians and other people then suppose that the following expressions are meaningful: . . . "Dialectical logic causally determines the political triumph of the dictatorship of the proletariat." "Political power causally determines normative political decisions." "Economic facts decide political issues." Contemporary political discourse in "the free" as well as the Communist nations is full of such nonsense, as is much present

"social science."[56]

If an "adequate" theory has been constructed the next step is to discover "theorems." Theorems are logically related to the theories but they also assert ahead of time, the existence of certain facts. If the "facts" asserted by the theorems are found to exist then the epistemic correlations are successful. Northrop makes a clear distinction between theorems or operational definitions and postulated theories.

> It must be emphasized, however, that in an inferred, deductively formulated theory operational meanings are derived meanings obtained by way of the epistemic correlations. The operational meanings are not the basic meanings of the concepts constituting the deductively formulated theory. The latter meanings are derived from the basic concepts of mathematics and mathematical logic and from the images of the imagination--even the most speculative metaphysical imagination. As Albert Einstein has emphasized, the basic concepts and principles of science are not given empirically but are instead "free inventions of the human intellect."[57]

A deductively formulated theory, then, according to Northrop does not automatically give rise to theorems. The search for theorems or necessary logical implications specifying ahead of time what kinds of sense data would validate a thesis is a separate task which may well lag behind a theory.

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[56]Northrop, Philosophical Anthropology, op. cit., pp. 32-33.

[57]Northrop, Logic, p. 123.

For instance:

> Again and again in the history of science deductively formulated theories such as Albert Einstein's theory of the finite universe have been constructed as answers to theoretical questions, and at the time of their construction no conceivable operation for testing them was at hand.[58]

When theorems are discovered they usually assert the existence of empirical data which can then be either confirmed by empirical evidence or if sense data are not forthcoming, the original theory must be abandoned as being less than an objectively valid construct.[59] These theorems or the correlations themselves are not perceived. What we perceive or fail to perceive as the case may be are the empirical sense data that the relations or theorems imply. The theorems are logical implications which if borne out by the presence of the implied facts in turn "validate" a scientific theory. The facts or empiricism per se does not give us "public" knowledge. Objective and therefore scientific knowledge is created by the logical theory once its implications are confirmed.

In physics an epistemic correlation occurs according

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[58] Ibid., p. 130. In political science such theorems are almost non-existent.

[59] Northrop, Logic, p. 130.

to Northrop in the Wilson cloud-chamber experiment. The deductively formed theory of an electron led to a theorem which called for certain flashes to become visible. When these flashes occurred an epistemic correlation had taken place.[60]

Northrop does not provide very many examples of epistemic correlations in the "immature" social sciences. However, here and there he hints at what some of the "crude" epistemic correlations might be. Let us assume that a deductive theory outlines and describes a "radically empirical" ideology in a nation. Then Rorschach tests can be used to confirm or invalidate the thesis. Also, until social science matures, theories asserting the existence of certain values in a society can be verified by "theorems" which predict certain responses. Then interviews or similar social science "operations" can confirm or deny the existence of these values.

Before we leave our discussion of epistemic correlations some brief contrasts and comparisons with other forms of validation and correlation used by other scientists and philosophers may help us see Northropian analysis in the context of other developments in the field of scientific

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[60]Northrop, Logic, p. 126.

conceptualization about validity.

Epistemic Correlations and Other Forms of "Validation". Epistemic correlations are partially the products, then, of deductively formulated theory. However, inductive techniques may also attempt to use a "weak" form of epistemic correlations. In the standard theories of induction the usual procedure involves first a general examination of the immediate facts that are available and then pragmatically or by trial and error one begins to emerge with conceptual statements about the actual entities.[61]

The correlations in our everyday world also have an epistemic quality about them but they more closely follow inductive procedures. Professor Northrop gives a clear example of this.

> It often happens, early in a play, that one is unable to determine whether the directly inspected data which one notes backstage are merely two-dimensional images of book-ends painted on a curtain or the correlates of the bookends of real three-dimensional books located on a shelf. Hence, one is confronted with the problem concerning whether the visual image which one inspects is to be epistemically correlated with merely a two-dimensional surface on a two-dimensional curtain or with one two-dimensional surface of a three-dimensional book. As the play develops one of the characters goes backstage and

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[61]Cohen and Nagel, An Introduction to Logic and Scientific Method, pp. 15-16.

> pulls out the book. The images associated with the latter act are compatible only with one of the two possible hypotheses concerning the epistemic correlate of the original data. Thus one interpretation is eliminated, the hypothesis of real three-dimensional books is confirmed and the correct epistemic correlation is established.[62]

This "unsophisticated" inductive technique has its complicated counterpart in the theories of verification provided by advocates of "operationalism." Operationalism as a method generally involves forms of "correlations" also. Operationalism is similar to Logical Positivism in that Operationalism distinguishes between formal statements and empirical statements. The validity of formal statements rests ultimately on conventions. Empirical statements give forth "meaning" as a result of having concrete objects and events as referrents. These referrents are found and tested by the use of "performable operations."

Operationalism has influenced not only physics but it has influenced the epistemology of the social sciences as well. Behavioristic psychology has felt the impact and so also has "empirical" political theory. The implications of operationalism in political science will be examined elsewhere.

Although there are several notable operational

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[62]Northrop, Logic, p. 122.

theorists, Nobel Prize winning physicist P. W. Bridgman is a fairly authoritative representative of the "school." Professor Bridgman gives considerable emphasis to the role of correlations in operational theory. Correlations in operational theory involve arriving at the same terminus by several different routes. Northrop's epistemic correlations also involve joining two separate routes together. However, operationalism does not separate a conceptual route from a "sensual" one. All the sets of correlations involve the same empirical world of discourse. For example, although operational methods can be extremely complex, the following discussion by Bridgman is a general but clear statement of this fact.

> The world which we want to describe or reproduce is in the first place the world of direct sensation. Our description is not complete unless we can specify what we see or feel or hear or smell or taste. What is more, this world which we are to describe is dynamic rather than static. What our senses give us changes with time, not only if we stay still, but more especially if we ourselves move about or manipulate. As we wait or move about or manipulate we find certain correlations between the reports of our different senses, or between the reports of the same sense at different times. The establishment of such correlations is the first thing we do in getting order and understandability into our world. The thesis that there are such correlations is perhaps the broadest "scientific" thesis that we can formulate.[63] [Italics mine.]

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[63] P. W. Bridgman, The Way Things Are (New York: The Viking Press, 1961), p. 45.

Northrop sees the basic thesis of operationalism as being also reflected in the theories of validation in philosophical "instrumentalism" and legal "pragmatism." Therefore his critique of operationalism applies also to similar theories in other disciplines.

Professor Northrop is among the first to express his awareness of the importance of these operational definitions and experimentations. But he argues that operations, even when they are successful in reaching a "terminus" do not exhaust "objective" meanings in science. Unless there is first a clearly stated deductive theory there cannot be a public frame of reference. The experiments of laboratory scientists whether they be those of Bridgman, Newton, Galileo or ancient Gree, Arab, Hindu and Chinese ancient scientists can be performed again and again in university classes or laboratories today. But the philosophies of science which these experiments <u>illustrated</u> have not remained unchanged. New theories have <u>explained</u> the <u>facts</u> of old experiments and have gone on to explain new experiments and new facts as well. Correlations in operationalism, therefore, since they merely relate sense data by themselves do not give us the most mature form of knowledge since the standard for the judgment of the success or failure of an operation must be found outside the

operation itself.

Although there is a difference between Northrop and operationalists on the role of epistemic correlations there are several reputable philosophers of science whose views are similar to these of Northrop on this point. Among them brief mention can be made again of Henry Margenau, and also Professor Hans Reichenbach.

Margenau's "rules of correspondence" like Northrop's correlations connect deductively obtained "abstractions" with sense data. Thus Margenau in describing the process states that "a rule of correspondence links what has here been called Nature to entities which we have vaguely termed concepts, ideas, reflective elements, and so forth.[64] These rules involve a considerable variety of forms which are found by trial and error. There are no "natural laws" or Kantian *a priori* categories involved. Also these rules themselves are not simply observable themselves, a point which may seem disturbing to many laymen. But the more we move away from our everyday world of common-sense towards rigorous science the rules become more and more important. Thus

In reification we take but a small step toward

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[64]Margenau, *The Nature of Physical Reality*, p. 69.

> concepts, in assigning mass we move a greater distance, until finally, in defining a state function, we make a flight of considerable magnitude into the very abstract.[65]

The identity of Margenau's "rules" with Northrop's correlations is obviously close. Margenau himself notes that

> F. S. C. Northrop, in discussing the connection between the "empirical component of any complete object of knowledge to its theoretic component," uses the very appropriate term "epistemic correlations" for these rules. When adopting this phrase occasionally hereafter we shall remember that the correlations do not have positive epistemic content, that is, do not confer validity upon knowledge in and by themselves. They have to be considered within a larger context of method before they become significantly epistemic, and their acceptance is determined by the functioning of the conceptual apparatus which they generate.[66]

Professor Reichenbach, in his own conception of the philosophy of science also sees a distinctive process of establishing correlations which he calls "co-ordinative definitions." Co-ordinative definitions, for instance, in modern geometry relate invisible forms to observation. Reichenbach uses many examples to illustrate his own understanding of modern scientific method. One of the best examples is his

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[65] Ibid., p. 63.

[66] Ibid., p. 63.

discussion of the nature of geometry.[67] The parallel between Reichenbach's discussion here and Northrop's method is striking. In place of Northrop's "constructs" Reichenbach discusses "geometrical systems" which are "logically consistent" and whose "implications are analytic; they are validated by deductive logic." These "systems are not therefore based on empirical referrents." They are the products of creative reasoning.

> The power of reason must be sought not in rules that reason dictates to our imagination, but in the ability to free ourselves from any kind of rules to which we have been conditioned through experience and tradition.[68]

Reichenbach's method of arriving at the "terminus" of objective knowledge by the use of "coordinative definitions" is also like Northrop's "epistemic correlations" in that both depend on frames of reference not based on observation alone. Also both correlate, connect or coordinate two epistemologically different ways of knowing. Speaking about the futility of having a correlation or "congruence" found on the basis of sense data alone Reichenbach claims that

There is only one way to escape such ambiguities:

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[67] Hans Reichenbach, The Rise of Scientific Philosophy (Berkeley: University of California Press), pp. 125-143.

[68] Ibid., p. 141.

> to regard the question of congruence not as a matter of observation, but of definition. . . . Definitions of this kind are called coordinative definitions. They coordinate a physical object, a solid rod, to the concept "equal length" and thus specify its denotation; this peculiarity explains the name.[69]

Although Reichenbach and Margenau and other philosophers of science have increasingly realized the importance of epistemic correlations Northrop formulated this aspect of his theory as far back as 1939[70] and therefore deserves considerable credit for being a pioneer in clearly describing this process. The process becomes increasingly important itself as our world of experience becomes more and more complex and we deal with growing numbers of "unseen" factors and "structured" entities. Because of the increasing complexity of scientific "facts" as opposed to natural or "sensational" facts Northrop sees scientific inquiry as not primarily involving one scientific method.

Scientific inquiry is a dynamic process and therefore one which involves a progressive use of more and more "objective" tools of investigation which are tailor made for

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[69] Ibid., p. 132.

[70] See Philosophy East and West, Charles Moore (ed.) (Princeton University Press, 1946), p. 224.

each stage[71] of our investigation. Therefore, Northrop is not suggesting that there is one simple "scientific" method for all inquiries or at all stages of the same inquiry.

In the early stages of a discipline mere observation or radical empiricism may often be the only method available. Then as men become more aware of the complexities of sense data a search for classification systems or a form of naive realism may be discovered as a more appropriate method. But as the "science" in a discipline of increasing maturity sees the need of less intuitive and more public, objective and predictive knowledge "logical realism in epistemic correlation with radical empiricism" becomes a necessity. Even then, the same investigator may not be involved in logical realism, correlations and empiricism all at the same time. Just as Einstein was not a "laboratory" scientist so also the average laboratory physicist may not be a theorist but an operational, "induction" oriented detective in search of epistemic correlations.

Our investigation of Northrop's philosophy of science has been modest in its objectives. It is not a definitive

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[71]The recurring theme of The Logic of the Sciences and the Humanities is that the "proper" scientific method is dependent on (1) the nature of the problem, (2) the stage of scientific inquiry.

statement of all the implications of such a philosophy. Nevertheless, in spite of its brevity and the attendant dangers of oversimplification it is hoped that this will set the stage for all the other aspects of Northrop's philosophy as they affect social and political thought.

CHAPTER IV

THE NATURE OF HUMAN SOCIETY

In the course of our discussion of the principles of Professor Northrop's philosophy considerable emphasis was placed on the relationship of that philosophy to the natural sciences. For the sake of clarity in organization and in presentation, major problems in other divisions of philosophy were only marginally treated. Since we will presently begin our examination of Northrop's ideas on culture and society, one initial affirmation needs to be made in order to draw attention to the continuity in and inter-relationship between Northrop's views on science and culture. Professor Northrop's approach to cultural problems is an extension of his method of dealing with the issues of physics and other sciences. This affirmation, it is hoped, will become increasingly self-evident in our present journey.

In contrast to F. S. C. Northrop's approach, modern students of culture have tended to skirt, avoid or neglect

the exact relationship between man's experience of nature and the character that man made institutions and ways of living have imparted to man. Particularly in the large educational institutions the gap between these areas of knowledge is most striking and evident. Northrop, on the other hand, consciously uses his philosophy of science to approach the special problems of "cultural" man. Also, he maintains that this should not be surprising since despite our present multitude of disciplines and approaches man himself has always shown a tendency of applying his knowledge of nature to his relationships with other men in the setting of a culture. To explore this claim, an examination of Northrop's conception of "culture" is crucial.

Culture as a Unit

Beginning with Aristotle, social thinkers in the West of otherwise different persuasions have more or less accepted the proposition that man by nature was a political animal. Flattering as this may seem to the province of political science the context of Aristotle's dictum also demonstrates that the "political" was really synonymous with the "social" in the days of the Greek polis. The academic disciplines of our current epoch would therefore regard man in the Aristotelian

sense as a "cultural" animal. The "homeless," "hearthless" man in our times is the man without a "culture."

Culture most commonly is regarded in everyday academic usage as being the construction by man of his way of living in his particular environment. The study of culture to a considerable extent "deals with man's behavior and specifically with the ways in which human beings carry out the activities involved in daily living."[1]

The general usage of the term provides no major controversy. But when an attempt is made to provide a precise meaning of the term variations in focus and concepts begin to appear. This is due mainly to the fact that no respectable thinker claims that the nature of culture is self-evident. Propositions and frameworks for understanding are necessary. As an elementary text in anthropology states,

> . . . culture is an abstraction from behavior or with material artifacts, such as tools, containers, works of art, and other artifacts that people make and use. The anthropologist cannot observe culture directly; he can only observe what people do and say and the processes and techniques they employ in the manufacture and use of material artifacts.[2]

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[1]Ralph L. Beals and Harry Hoijer, An Introduction to Anthropology (ed ed.; New York: The Macmillan Company, 1959), p. 223.

[2]Ibid., p. 229.

The concept of culture is a broader abstraction than "politics" according to most students of culture. Politics, religion and social inter-action are special manifestations or cases of the total cultural system for Northrop and anthropologists in general. Kroeber sums up the consensus on this point when he states:

> The other social sciences recognized culture in its specific manifestations as they became aware of this or that fragment or aspect of it--economic or juridical or political or social. Anthropologists became aware of culture as such. From that they went on to try to understand its generic features and their results.[3]

As we move away from the general notion of "culture" and attempt to find specificity, Northrop's position becomes distinct and unique and stands in sharp contrast with some other points of view. The differences arise when academicians attempt to isolate the essential or crucial factor or basis of human culture. The differences occur even in the simple concept "culture areas." The definitions of culture areas vary from that based on simple geographical location, or a technological category to that of specifying an ideological basis as in the case of Northrop.

Thus Northrop's conception of culture stands in the

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[3]A. L. Kroeber, Anthropology (New York: Harcourt, Brace and Company, 1948), p. 12.

sharpest contrast with that of the school of anthropology in which Professor Leslie A. White of the University of Michigan belongs. Professor White, like any competent anthropologist, sees culture as an extremely complex system. In his conceptualization he sees four major "components of cultural systems: technological, sociological, ideological, and sentimental, or attitudinal."[4] In the dynamics of a culture these components interacting together, much like our physical processes. contribute to the "behavior of the cultural system as an organic whole--as breathing, metabolizing, procreating, etc., are processes carried on by a biological organism as a whole."[5]

The various components of culture, however, are not each other's equal in significance and importance. White, like many other social scientists, tends to isolate "technology" or the methods of obtaining "food, protection from the elements, and defense from enemies," as the key factor in culture and claims that this in turn molds and affects the other components or categories. As he puts it,

> . . . the fact that these four cultural categories are interrelated, that each is related to the other

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[4]Leslie A. White, The Evolution of Culture (New York: McGraw Hill Book Company, Inc., 1959), p. 18.

[5]Ibid., p. 19.

> three, does not mean that their respective roles in the culture process are equal, for they are not. The technological factor is the basic one, all others are dependent upon it. Furthermore, the technological factor determines, in a general way at least, the form and content of the social, philosophic, and sentimental sections.[6]

Briefly, therefore, White clearly paralleling Marx considers "ideas" as factors which are dependent on the technological element involved. Ideas or philosophies are post facto verbalizations of experience. Cultural change then in this light takes place as technology changes and will leave its imprint on philosophy rather than the other way around. White quite positively declares that this "means that as the technological structuring of experience changes, the philosophic expressions of experience will change."[7]

F. S. C. Northrop's conception of culture in its briefest possible synthesis is rooted in an emphasis on "ideational" components rather than in technology or in social interaction by themselves. Thus he is not a Marxist on this point. Each culture has an inherent "unity" to be sure. But this unity is not just a sum total of its parts. The unity is provided by a set of philosophical "pre-suppositions,"

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[6] Ibid., p. 19.

[7] Ibid., p. 23.

like dialectical materialism in the case of Soviet Russia which together in turn has a logical unity or wholeness, at least for the people in the particular culture involved. These "primitive postulates" or pre-suppositions are not "caused" in a mechanical sort of way by technology or geography. Their meaning is given by various types of speculation by men as they go about building the artifacts of culture. Lenin's elaboration of Marxian dialectics for Soviet Russia's institutional pattern would be a case in point.

The postulates of the culture in a primitive sort of way is the basic "philosophy" of a culture. This philosophy in turn "molds" the cultural experience of man in a variety of areas. Varying from White and others Northrop clearly summarizes his position by saying:

> In short, a single culture is not made up of five independent economic, political, legal, religious and aesthetic assumptions but of a single set of assumptions of which the economic, political, legal, religious and aesthetic are parts. This single set of assumptions is the philosophy of a given normative culture.[8]

From Leslie White's vantage point Northrop's position is a highly questionable one. The following remark by White could well have been directed at social thinkers of a

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[8]Northrop, The Logic of the Sciences and the Humanities, op. cit., p. 275.

persuasion similar to Northrop's.

> But if one explains technologies in terms of ideas, the ideas are either unexplained or are accounted for by appeal to other ideas, which amounts to the same thing.[9]

On the basis of Northrop's theory, an answer to White's criticism involves several distinctions. Northrop, in talking about the "unity" of a culture, is not referring to the sum total of all the ideas present in a culture but is concentrating on the "primitive" or basic ideas which are not logical implications of or do not follow from any other set of ideas or from technology. Also from Northrop's viewpoint many anthropologists are not clear as to the meaning of technology. At times technology seems to involve at least partly "relationships" between various mechanical instruments. This alone would give some status to the role of "ideas." At other times White claims that "technologies can be explained in terms of the physico-chemical mechanical means of adjustment of one material body to another."[10] Idea systems or "ideologies" hence are primarily "rationalizations" of experience rather than the makers of experience.

There are, of course, a number of important and noted

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[9]White, The Evolution of Culture, op. cit., p. 19.

[10]Ibid.

scholars who, although they constitute a minority in this "empirical" age, treat the problems of cultural ideologies with some of the respect that Northrop believes these ideas deserve. Professor David Bidney, the theoretical anthropologist, for instance vigorously affirms that

> The analysis of the metacultural postulates of a given culture, whether deductively inferred or intuitively conceived, is essentially a philosophical, or meta-anthropological, undertaking and as necessary a part of anthropological science as is the collecting of empirical data. To appreciate properly the philosophy of life and Weltanschauung which serve as leitmotifs for a given culture requires some measure of philosophical discipline and insight, which necessitates that there be professionally trained philosophers working in the social sciences as well as philosophically minded social scientists. . . .
>
> The point is one, however, which requires restatements for our times, because social scientists, in their ill-considered attempts to imitate the radical positivism and empiricism of the natural sciences, have largely tended to neglect this philosophical perspective.[11]

Furthermore, much of the suspicion of a "philosophical" approach to culture is a reaction against the type of approach in the past which was superficially "intellectual" and which paid too little attention to the "empirical." Also, previous "intellectual" approaches tended to over-simplify

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[11]David Bidney, Theoretical Anthropology (New York: Columbia University Press, 1953), pp. 168-169.

the "mind" of man by categorizing it in "rational" or "irrational" terms. On the other hand the empirical reaction in anthropology as well as in other social sciences is at times pursued with almost religious fervour. Professor Bidney in describing this contrast says:

> If some of the nineteenth-century ethnologists and sociologists tended to go to one extreme by attempting to explain native thought in intellectualistic terms, the modern tendency is to go to the opposite extreme by failing to reckon with intellectual wonder and theoretical specualtion as significant factors in the developments of native thought.[12]

Northrop's position, on the other hand, attempts to combine the "intellectual" approaches of the past with the "empirical" methods of the present in dealing with the nature of culture. His claim that theoretical presuppositions "determine" the institutions and values of society has much "in common with other contemporary philosophers, such as Whitehead, Cassirer, and Dewey. . . ."[13] But Northrop's views are also supported by findings of persons in several areas of anthropological inquiry. In particular the observations and conclusions of Clyde Kluckhohn, the late Harvard anthropologist, provide major support and justification for the

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[12]Bidney, Theoretical Anthropology, p. 168.

[13]Ibid., pp. 169-170.

cultural theory of F. S. C. Northrop.

Available Evidences of Unity and Purpose in Culture

Kluckhohn, in his study of the culture of the Navaho Indians, established the existence of a unifying philosophy whose assumptions molded the apparent and empirically verifiable aspects of Navaho behavior. The elements of this philosophy are extremely difficult to verify empirically because these philosophies are to a considerable degree institutionalized and have become essential parts of daily experience. However, Kluckhohn explains the evidence as follows:

> Synthesis within a culture is achieved partly through the overt statement of the dominant conceptions, assumptions, and aspirations of the group in its religious lore, secular thought, and ethical code; partly through unconscious apperceptive habits, ways of looking at the stream of events that are so taken for granted as seldom or never to be verbalized explicitly.[14]

He also adds that this exists not only for the Navaho but in other cultures as well:

> In sum, the way of life that is handed down as the social heritage of every people does more than supply a set of skills for making a living and a set of blueprints for human relations. Each

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[14]Clyde Kluckhohn, "The Philosophy of the Navaho Indians," Ideological Differences and World Order, F. S. C. Northrop, ed. (New Haven: Yale University Press, 1949), p. 358.

> different way of life makes its own assumptions about the ends and purposes of human existence, about ways by which knowledge may be obtained, about the organization of the pigeonholes in which each sense datum is filed, about what human beings have a right to expect from each other and the gods, about what constitutes fulfillment or frustration.[15]

In support of his own thesis about the "mind" of a culture Northrop cites findings in other areas of science as well. This evidence is elaborately described in several of his works.[16] The "essence" of it seems to indicate that human behavior is more than "a mere response to the stimuli of sex or hunger, with philosophy a mere pseudo-rationalization" after the "fact." Man's mind is not a mere passive mechanism which translates incoming stimulus into outgoing responses. Northrop, in fact, argues that stimulus-response types of analysis are being increasingly abandoned in psychology and cites the works of the psychologists Walter S. McCulloch and Walter Pitts, the Spanish neurologist Lorente de Nó and many others[17] to illustrate the poverty of simple behaviorism. As

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[15] Ibid., pp. 358-359.

[16] See Philosophical Anthroplogy and Practical Politics, p. 42, and Complexity of Legal and Ethical Experience, pp. 102-124.

[17] Elaborate citations and references of the articles and books of the various psychologists, neurologists and others are listed in The Complexity of Legal and Ethical Experience, pp. 307-358 and Philosophical Anthropology and Practical Politics, pp. 357-358.

he puts it:

> McCulloch and Pitts have shown, however, that recent neurological research and theory necessitate the reconstruction of Hull's behavioristic psychology in crucially important ways. They noted that if the nerve cells or neurons of the human nervous system were ordered linearly, then the stimulus would completely determine the response, and philosophical concepts would have the irrelevance in human behavior which many previous thinkers have supposed to be the case. In technical terms, the stimulus of the sensory neuron would fire the intervening cortical neurons in the linear net, which in turn would fire the motor neuron, thereby producing the overt, muscular behavioristic response. Thus the stimulus alone would determine the behavior, the intervening cortical neurons being merely carriers of the impulse from the stimulus to the motor response.[18]

The "mind" he claims, then, has other characteristics besides that of a linear net. Thus Dr. McCulloch noted that some evidence already existed for believing that cortical nerve cells are often found in the form of a circle.[19] Impulses from the nerve cells connecting the cortex with the senses would enter the circle at one point. An impulse would later leave from the other side of the circle in order to transmit the "command" of the cortex to various parts of the human body. In between the input and the output there existed a time lag during which the cortical counterparts of

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[18]Northrop, Complexity, p. 109.

[19]Northrop, Philosophical Anthropology, p. 51.

the initial impulse would "reverberate" around. McCulloch and Pitts see in the existence of these reverberating circuits the sicentific or "public" version of what Northrop calls a "privately introspected and remembered idea."[20] McCulloch then constructs his theory of "trapped universals" which carefully and logically postulates the "knowing mind" of man which "structured" reality on the basis of a set of symbols "trapped" in his cortex.

In addition Northrop notes that McCulloch's theory of "trapped universals" is itself a scientifically valid construct because it is based on the current "correct" scientific method which we have previously described. He even carefully retraces step by step McCulloch's procedural stages to illustrate this point. Thus the theory of "trapped universals" is an "indirectly confirmed theory" and has to be since we do not directly see cortical neurons just as we do not directly see electrons in physics. The "logical realism" of McCulloch's work, according to Northrop, was present in the earliest and most vigorous stage of his work.

> McCulloch also began, as early as 1923, to envisage the ordering of nerve cells and the neural firings in any animal's cortex as ordered in ways

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[20] Ibid., p. 48.

> that possess the logical and mathematical formal properties of the primitive logical relations of Principia Mathematica. . . .
>
> McCulloch learned also from Fitch how to think with formal logical rigor about discontinuous and continuous processes. . . . Hence the earliest formulation of the formal logical structure of neural nets was by McCulloch and Pitts.[21]

The radical empiricism of this theory is of course contained in the concept of the immediately introspected or felt idea or "universal." In Northrop's own words,

> . . . the concept "universal," regardless of its content, refers to an idea or meaning the content of which (though not the truth or falsity) is introspected, and hence is a concept by intuition. . . .[22]

Finally, there are several "epistemic correlations" which relate the unseen and unfelt world of cortical neurons arranged in a circle and felt ideas, images, recollections and picturial representations in the human mind. Thus, one set of "operational" verifications occurs in cybernetics and computer technology. To summarize this point briefly, Northrop states that

> Upon one fact all builders of calculating machines and students of the nervous system are, however, agreed. A neural net of sequentially firing nerve cells as simple as that of a reverberating

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[21] Philosophical Anthropology, p. 47.

[22] Ibid., p. 44.

> circuit does have the formal properties necessary to be the epistemic neurophysiological correlate of the introspected memory of a particular meaning or idea.[23]

McCulloch and Pitts both, therefore, give a theoretical account of the internal cognitive operation of the cortex.[24]

In order to further justify his thesis about the "knowing" mind, Northrop depends on the investigations of a team of behaviorists for an understanding of the external behavior of the human nervous system and the brain. It is true that McCulloch "proved" that the cortex was constitutionally a symbol creating mechanism but McCulloch did not directly touch on the question of the actual relationship of the structure of the "mind" to the external world. However, Arturo Rosenblueth, Norbert Wiener and Julian Bigelow focused their attention on the external behavior of mechanisms like the human nervous system.[25] Rosenblueth and his associates regard the nervous system of man as an active rather than a passive system. By an active system they mean one "in which

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[23] Ibid., p. 53.

[24] Dr. No's demonstration of the existence of neurons arranged in a circle is yet another form of operational verification.

[25] A. Rosenblueth, N. Wiener, and J. Bigelow, "Behavior, Purpose and Teleology," Journal of the Philosophy of Science, Vol. 10 (1943), pp. 18-24.

the object is the source of the output energy involved in a given specific reaction.[26] The nervous system is not only active but also displays purposeful behavior. The nervous system is goal oriented. That is, it directs itself to the attainment of goals through "voluntary acts" which they define in the following manner:

> . . . the purpose of voluntary acts is not a matter of arbitrary interpretation but of physiological fact. When we perform a voluntary action what we select voluntarily is a specific purpose, not a specific movement. Thus, if we decide to take a glass containing water and carry it to our mouth we do not command a certain set of muscles to contract. . .; we merely trip the purpose and the reaction follows automatically.[27]

The trio go on finally to claim that evidence shows that the human system also has one additional characteristic. This involves a negative feedback mechanism by which the actual responses of a system in this case our nervous system, are gradually directed closer and closer towards the goal or purpose that is ingrained in the mechanism. From this finding as well as from the findings already described Northrop carefully draws some implications which tend to "corroborate"

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[26]Quoted by Northrop in his article "Ideological Man and Natural Man" in Ideological Differences and World Order. Edited by F. S. C. Northrop (New Haven: Yale University Press, 1949), p. 419. Hereafter referred to as Ideological Differences.

[27]Ibid., quoted by Northrop, p. 419.

his thesis. Thus, the following observations can be made.

The Implications of Available Evidence. Rosenblueth's finding of the "negative feedback" system in the mind of man validates for Northrop his theory of the primacy of the postulates of a given culture in determining man's response to the challenges of nature and culture. The mind of man is not merely created by the natural environment or technology. Man constantly adjusts his behavior not merely by reacting to a stimulus but also by creating responses which will gradually attempt to fulfill his ingrained goals or purposes. Man molds the tools of life and is not just simply molded by these tools.

Man's goals and purposes are not born out of historic necessity. They are his own creations. The fact that our motor neurons are the sources of the "output energy" of our nervous system indicates to Northrop that man is to a considerable degree the instigator of his actions. Man is not a passive vehicle for the passage of stimuli into responses. Man's mind actively participates in the process.

McCulloch's findings provide Northrop with an understanding of how this active participation takes place. The presence of neural "symbols" or "reverberating circuits" allows man to symbolize and internalize his ideas and ends. The

symbols in our cortex do not all represent the same set of referrents. There are all sorts of possibilities in the type of stimuli we can symbolize. Our sensory neurons from each of our senses are constantly and simultaneously bombarding our consciousness or in other words our cortical neurons. These cortical neurons in turn abstract, symbolize our experiences and "trap" them for our reference in separate areas of the cortex for each of our senses. Northrop in this connection mentions that we already know the location of these areas. Stimulation by doctors of any one area "has the effect in the patient's concept by intuition consciousness of his sensing the species of sensuous image that is epistemically correlated with the brain area in question."[28] These various sensory areas, however, by themselves provide a variety of simple concepts which would be unrelated if it were not for the "association area" of the brain. According to Northrop

> In this area different trapped universals are spontaneously combined. Without this association area, imagination, the novelist's fantasies, detective stories and, even more important, scientific and philosophical theories and any knowledge of either ourselves as a public person or our external world would be impossible.[29]

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[28] Philosophical Anthropology, p. 56. The stimulation of the "auditory" areas will supposedly make us hear sounds.

[29] Ibid.

The association area is the source of creativity. It is here that different individual intellectuals and ultimately cultures associate data in a variety of combinations. The true speculators, according to Northrop, find unique ways of associating ideas at this stage of the "neural" story.

Then Northrop turns once more to McCulloch in order to receive support for the postulation that the associative areas send impulses to be trapped in circular nets "located" in the "higher areas" of the cortex. In these higher areas "of the cortex the empty, circularly ordered neural nets or their formal equivalents are so laid down at birth or earlier before anything is trapped in them that they are related hierarchically."[30] This hierarchy is significant for two reasons. One is that the fixed relationship between the locations of net possibly explains the possibility of deductive reasoning. The second is that it enables us to distinguish between basic values and other ideas of lesser significance for us.

Finally, depending on Kluckhohn and others,[31] Northrop states that when groups of individuals share an identical

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[30] Ibid., p. 58.

[31] Pitrim A. Sorokin, Social Philosophies of an Age of Crisis (Boston: Beacon Press, 1951), pp. 275-322.

set of these basic values there exists a common culture.

A Critique of Ideational Unity of Culture. Northrop's use of such "evidences" from other disciplines makes the task of the critic an extremely difficult one and at times frustrating. Our present task is conceived in fairly modest terms. Only a general critique is attempted since only specialists in psychology, medicine, anthropology and cybernetics can be qualified to engage in a detailed examination of Northrop's conceptualization of the structure of the mind.

However, even a cursory examination of other interpretations of the same evidences seems to give a degree of corroboration to Northrop's thesis. Thus, Northrop's dependence on McCulloch and others for the view that human values are hierarchically arranged that the human mind knows universals and categories, is supported by other thinkers, e.g., Dr. Percival Bailey, Director of Research at the Illinois State Psychiatric Institute in an article entitled "Cortex and Mind" makes the following observation.

> However random may be the horizontal organization of the cortex, we must not forget that it has a very definite vertical organization in six layers. The significance of this arrangement is not known, but Craik[15] supposed that it might imply a scanning mechanism, and this scanning was related by Grey Walter[52] to the alpha rhythm. Pitts and McCulloch[46] have

> shown how such a mechanism might enable the cortex to recognize universals, such as chord regardless of pitch, or shape regardless of size. This ability is the so-called supra-sensuous reason--the power to indicate universals and relate them to another.[32]

Northrop also seems to be on fairly solid ground in his assumptions that the mechanisms of the human mind do not come automatically prepared with a fixed set of symbols with which to interpret sense data. These symbols are dynamically created in various stages of human development. The particular compositions or structures of man's feed-back mechanisms are not "given." As Dr. Bailey put it

> The greater part of the cortex, then composed of neuronal nets arranged somewhat at random at first, completes its structural organization some time after birth and modifies its functional organization constantly by the interaction of new experience with old experience retained in the form of memories. In order for the cortex continually to alter its organization in this way, it is necessary that its equilibrium be dynamic, a multitude of parts being free to interact with one another after the manner of feedbacks. There is abundant evidence, since the initial demonstration of Hans Berger, of the dynamic nature of the cortex, and Grey Walter[53] has shown that it is possible, by altering the feedback relationships, to cause serious perturbations of its functioning, even epileptic attacks.[33]

Northrop's use of de Nó's findings also does not seem

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[32] Jordan M. Scher (ed.) Theories of the Mind (New York: The Free Press of Glencoe, 1962), pp. 5-6.

[33] Ibid., p. 5.

to be arbitrary. Northrop depends on de Nó's and others' construct of circular neural nets for the theory that man's primary values are not determined by specific stimuli. The primary values which direct our responses are the products of complex symbolizing structures in our cortex.

Professor Clifford Geertz, Professor of Anthropology at the University of Chicago, in an article entitled "Growth of Culture" also seems to provide independent corroboration of Northrop's observations. The anthropologist states

> One of the more encouraging--if strangely delayed--developments in the behavioral sciences is the current attempt of physiological psychology to arouse itself from its long enthrallment with the wanders of the reflex arc (Pribram, 1960). The conventional picture of a sensory impulse making its way through a maze of synapses to a motor nerve culmination is coming to be revised, a quarter century after its most illustrious proponent pointed out that it was inadequate to explain the integrative aspects of the behavior of a sparrow or a sheep dog, much less that of a man (Sherrington, 1953, p. 170). . . . Advancing under the banner of "an active organism" and supported by the closed circuit anatomizing of Caral and de No' (1943), this new persuasion emphasizes the way in which the ongoing processes both of the brain and subordinate neuronal aggregates select precepts (Bruner, 1958), fix experiences (Gerard, 1960), and order responses (Lashley, 1951) so as to produce a delicately modulated pattern of behavior. . . .[34]

Professor Geertz also maintains that "human thinking

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[34] Ibid., p. 725.

is primarily an overt act conducted in terms of the objective materials of the common culture, and only secondarily a private matter." This position is remarkably similar to that of Northrop in that the latter maintains that, to the extent that human beings live with shared meanings, we do have a "public" culture.

It must be noted, however, that there is considerable opposition in academic circles to psychological and anthropological positions similar to Northrop's. Some psychologists still cling to the stimulus-response framework by maintaining that the "mind" of men is simply more of a complex set of abilities to respond to situations than had been first supposed. These situations themselves determine the mind's actions. Professors James Taylor of South Africa and Dr. Joseph Wolpe of the University of Virginia School of Medicine in the article entitled "Mind as Function of Neural Organization," summarize their position by stating

> . . . we do not recognize <u>any</u> form of mind that exists autonomously or independently of some behavioral substratum. Hence we reject every form of psychophysical dualism, and all derivatives and unacknowledged relics of dualistic theory.[35]

In anthropology similar assertions are made by White

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[35] <u>Ibid</u>., p. 218.

and others when they maintain that the human systems of knowledge are dependent on the natural surroundings of man and/or the tools[36] that he uses. These authorities provide formidable opposition to the ideational views of human culture. The argument seems to be far from resolved and our present inquiry is hardly the place in which to provide the solution. We can simply demonstrate that there is some evidence and the views of some authorities in support of Northrop's contention that much of man's experience is bound up with his culture and this culture in turn is the product of some fundamental pre-suppositions which make up a "philosophy."

If the theories of the cortex are correct, then man does not simply represent in his mind the entire set of tools called technology. He can have ideas about technology. These ideas are not simply biological in character, either. Human creativity enters in at various stages. Cultural "evolution" is not purely determined by the organic development of man. As Geertz states it,

> With the unequivocal triumph of Homo Sapiens and the cessation of the glaciations, the link between organic and cultural changes was, if not severed, at least greatly weakened. Since that time organic evolution in the human line has slowed to a walk (Carter, 1953), while the growth of culture has continued to

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[36]White, The Evolution of Culture, p. 23.

proceed with ever-increasing rapidity.[37]

In any case, we have critically examined the bare essentials of Northrop's view of culture. For his views he finds considerable academic support and "empirical" evidence. But at this point he also strikes out away from many others with a unique and distinctive theory of the nature of cultural unity and the process of cultural change.

The Key Variable in Cultural Unity

Cultural unity, as we have seen, is the product of a set of interrelated presuppositions generally referred to by Northrop as "ideology." We have already noted early in this chapter the particular way the concept "ideology" is used by him in contrast to the usage of White and others. But the uniqueness of Northrop to a considerable degree rests on his assumption as to what is the key factor in any given ideology. This factor unhesitatingly is isolated by Northrop as being the "philosophy of science" of any culture.

Each culture uses certain presuppositions about "science." These scientific conceptions are the ones which in turn mold our political and social presuppositions. After examining various occasions where science has determined

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[37] Theories of the Mind, Scher (ed.), p. 725.

values Northrop states:

> All these considerations indicate that differences in ideology in the social sciences and the humanities are rooted in differences in the philosophies underlying these ideologies and that the philosophies in turn are connected with the results of scientific inquiry and are always regarded by the people who hold them as called for by the scientific knowledge which they take into account. Put more concretely, what this means is that any people are impressed by the facts of their experience which fall within their attention. From these facts they derive, consciously or unconsciously, a specific scientific generalization or theory.[38]

Some scholars seem to make a distinction between Northrop's general theory of the role of ideas and his conception of the role of natural science. The anthropologist Bidney, for instance, notes that

> It is important at this stage to distinguish between the general thesis that native cultures reveal basic philosophical or metacultural presuppositions which serve to integrate their cultural perspectives, and the special contention that any given native ideology is based upon a specific philosophy of natural science. The general thesis is acceptable to most anthropologists, whereas the special theory is not.[39]

Bidney acknowledges that Northrop's emphasis on the "ideational factor in the study of human cultures" is an important contribution to anthropological theory. But although

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[38]Northrop, Logic, p. 355.

[39]Bidney, Theoretical Anthropology, p. 172.

there is increasing consideration being shown among social scientists for Northrop on this point, Bidney goes on to state

> The question remains, however, whether in maintaining that native cultures, together with other historical cultures, are based upon determinate philosophies of science he has not claimed too much and has not gone beyond the available ethnological evidence.[40]

Before we examine Northrop's own marshalling of evidence in support of his theory, one initial classification should be helpful. Northrop does not maintain that all philosophies of science within cultural systems are equally valid. Some philosophies of science may be "valid" only according to a parochial group. We have already seen that only when scientific concepts are unambiguously and mathematically stated do we have a universal and public conception of science. Also, each culture apparently "thinks" according to a philosophy of science which is regarded by people of that culture as "valid." On this point Professor Bidney disagrees with Northrop's views on the importance of a culture's scientific philosophy, although he does accept the thesis that the "primitive" ideas of a culture provide the foundation on which its unity rests.

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[40] Ibid., p. 173.

Perhaps part of the criticism of Northrop is due to a misreading of what he means by "philosophy of science." Although he obviously has some ideas about the correct "philosophy of science" in a general way by the label of "scientific philosophy" he means the presuppositions of any method of investigation which attempts to examine the relationship between man and the external world around him. Einstein's theories as well as Buddhist philosophy, attempt to find the relationship between man and nature. Consequently the term "philosophy of science" has a broader meaning and significance here than is usually associated with it. This does not mean that all "scientific" attempts are equally valid attempts but merely implies that all philosophies of science are after all philosophies of nature also. As human beings analyze the implications of their "attitudes" of "ideas" or "philosophies" of nature there begin to emerge conceptions of social, ethical and political theory. In short,

> When the ontological results of the analysis of one's scientific theory of nature and the epistemological results of the analysis of its method of verification are combined, one has a complete philosophy.[41]

As noted before, natural science as conceived by

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[41]Northrop, Logic, pp. 360-361.

Northrop consists, therefore, of not merely the actual "facts" that a science deals with but the philosophical consequences of the method that is involved.[42] The development and elaboration of the philosophical consequences of any "scientific method" or "theory of nature" can lead to the construction of a political theory on which political institutions can be based. Scientific ideas or ideas about nature are therefore the "first causes of political and social 'facts'." To demonstrate the importance of "scientific" ideas as compared with political and social theories Northrop analyzes a variety of cultural doctrines throughout his numerous books and articles.[43]

In fact, the validation of this portion of his thesis and its implications takes up most of the space of Northrop's analysis of the problems of society and politics. Consequently we can hope to describe only in bare outline and in summary form Northrop's discussion of this aspect of his philosophy and some of his examples.

Thus, Northrop often draws our attention to individual intellectual giants who have influenced cultural philosophy

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[42]Northrop, Man, Nature and God, p. 68.

[43]The most ambitious attempt is in The Meeting of East and West.

but whose first disciplined efforts were in the direction of scientific inquiry. For instance, on one of many occasions he states:

> The number of philosophers of the first order who were scientists before they became philosophers is notable. Democritus, Leucippus, Plato, Aristotle, Albert Magnus, Descartes, Leibniz, and Kant are but a few. Professor Whitehead continues this great tradition.[44]

However, individual philosophers do not concern us at the present time unless these individual philosophers have provided the intellectual underpinnings of particular cultures. One such philosopher is John Locke.

Locke and American Political Culture. Northrop claims that although the backgrounds of the early settlers and the influence of the frontier and other factors were important, the basic cultural norms of the United States to some extent find their genius in the philosophy of John Locke. After citing historical evidence to demonstrate that Locke's influence on Jefferson was crucial and that the Lockean philosophy of the Declaration of Independence "had become the common property of all colonists," Northrop goes on to observe that

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[44]Northrop, "Whitehead's Philosophy of Science" in The Philosophy of Alfred North Whitehead. Edited by Paul Arthur Schlipp (New York: Tudor Publishing Company), p. 167.

> It is to the moral, the religious, and the political consequences of John Locke's philosophical conception of man and nature that Thomas Jefferson gives expression in the Declaration of Independence. In short, the traditional culture of the United States is an applied utopia in which the philosophy of John Locke defines the idea of the good.[45]

Next, Northrop rigorously sets out to prove that Locke's philosophy of man was the result of his epistemological investigations of earlier scientific theories in general and Newton's conclusions in particular. Locke himself was "an experimental chemist and a physician and an intimate friend of Newton." One of the basic conclusions of Newtonian physics was that sensed qualities were not part of the furniture of nature. They somehow are connected with the observer of nature rather than nature _per se_.

> The warmth which we sense in the stove, the fragrance which we smell in the rose, and the red which we see on the flag, do not belong to the material objects at all, independently of the presence of the observer.[46]

If the observer is removed from nature, therefore, the sensed qualities vanish with him. Therefore Newtonian physics postulated three entities, the public object, the observer and the sensed qualities which are dependent on and

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[45]Northrop, _The Meeting of East and West_, p. 71.

[46]_Ibid._, p. 71.

related to the observer.

Locke was concerned about the exact nature of the relationship between these three entities and "when Locke made explicit the complete consequences of the physics of his friend Newton, this experimentally verified physics was found to provide a theory not merely of physical nature but also of conscious man."[47] In order to explain and describe the relationship Locke began to conceive of the observer as being in possession of something called a mental substance. This mental substance, when it was affected by the material substances of nature, produced in the observer a consciousness of sensed qualities. In subjecting Newtonian physics to epistemological analysis, therefore, Locke felt that the category of "mental substances" was the only one that did justice to the important scientific theory of his time. Locke thus arrived at a new conception of the state of nature.

Now Locke's conception of the state of nature, according to Northrop, has a direct bearing not only on his own philosophy but on several aspects of American culture. Political man in Lockean philosophy becomes defined as introspective man, a conscious animal who has an independent mental

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[47] Ibid., p. 77.

substance besides a physical body which is part of the material substances of nature. These mental substances are not part of our material universe. Therefore, unlike material substances, there are no "scientific," "physical" or "objective" relationships between the various mental substances. Northrop summarizes his description of Lockean mental substances in the following passage.

> The modern Lockean scientific and philosophical theory specifies no relation between the many mental substances. In fact, the theory leaves their relation exceedingly ambiguous. All physical relations between people have to do with their bodies, and the latter are quite independent of their mental substances.[48]

Political man became subjective man with his own separate political awareness and natural law was given the natural rights "twist." Each man became his own judge of what was politically good for him. Therefore, only as men "willed" to be bound by a set of political conventions was there the beginnings of political society.

Northrop goes on to trace the direct relationship between the Lockean concept of the free man and the Lockean concept of the justification of the existence of government being the preservation of private property, "where property

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[48] Ibid., pp. 86-87.

means not merely external material things but also one's material body."[49] Northrop explains Locke's description of this relationship in the following manner.

> Man, as a mental substance, by means of his body and other physical objects of nature, cuts down the forests, tills the soil, grows his crops, and builds his home. Other mental substances, with their native freedom and perhaps their more indolent bodies, note this accomplishment and, finding it easier to combine and steal the neighbor's home and crops and perhaps even to destroy his physical body, than to develop and construct their own, take the individual man's property. This is the reason why the modern free and independent man gives up some of his ideal and actual native liberty to submit himself to conventionally prescribed laws of the state. As a free and independent individual he cannot protect his property.[50]

Since individual man enters into political society largely for the preservation of property, property rights of individuals remain beyond the dominion of the state.

Northrop goes on to illustrate how Locke's doctrines had important consequences for theology and resulted in the creation of the general religious milieu of toleration which affected even American Catholicism. The basis of religious toleration, like political freedom, was the atomic individual with his own separate mental substance which gave him his own subjective glimpse of truth which could not be publicly

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[49] Ibid., p. 95.

[50] Ibid.

censored. Quakers, Congregationalists, Methodists and Episcopalians, although different in their detailed ritualistic procedures, have this common ground in their theologies.

> . . . with all these Protestants, whose earthly practices fall further and further away from the modern religious ideal, the professional clergy exists largely merely to remind one that one has this private, spiritual self, this introspectively given mental substance, in addition to the material substances of one's body and of nature, and not as in any way necessary to convey the meaning of religion or the means by which it can be actualized in one's life.[51]

The direct influence of Locke likewise can be directly seen in the American Constitutional system. In the United States, the concept of the Bill of Rights which protects the life, liberty, property and religious conscience of any man is an expression of Lockean natural rights. On the other hand other laws passed by "consent" are actual political versions of what Locke called mere "conventions."

In addition to the influence of Locke's epistemological analysis of Newtonian science on political and religious ideology, his analysis also affected American "economic" culture. That is, American economic philosophy, indirectly, to be sure, but yet to a considerable extent, was the product of many people who followed Lockean assumptions to their

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[51] Ibid., p. 92.

logical conclusions.

> The science of the traditional American businessman was the Anglo-American economics which was reared in Great Britain by Adam Smith, Bentham, Malthus, John Stuart Mill, Ricardo, Senior and Jevons. This economic science did not spring into existence without any previous intellectual causes. Adam Smith, who initiated the science, was a philosopher in the University of Glasgow and for the last twenty-five years of his life an intimate, personal friend of David Hume. Jevons, who put Anglo-American economic theory into its final traditional form, was explicit in his insistence that it was grounded upon the utilitarian hedonism of the philosopher Jeremy Bentham. Bentham's philosophy in turn was determined by that of David Hume.[52]

> But Hume's philosophy also did not spring into existence without previous causes. Instead, it was the result of pursuing one of the basic assumptions of John Locke's philosophy to its inescapable, logical consequences. This was done in part by Bishop Berkeley and completely by David Hume.

Locke also had a similar influence, in Northrop's analysis, on the "ideologies" of various factions of American political parties, and also upon some basic trends in early American art and other institutionalized aspects of American culture. This is not to say that Northrop claims that Locke is the sole maker of all the innersprings of American political and cultural behavior. All sorts of other influences were also at work. But through his analysis, he does show that the "inner order" of various aspects of American life is

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[52] Ibid., p. 111.

rooted in a specific philosophy of science. This philosophy of science was that of Newton.

Newtonian science, however, did not automatically "create" American culture. The dominant pattern of American culture was created by political and social theories based on Newtonian science on the one hand and the habitual acceptance for the most part of these theories by Americans on the other. Newtonian science does not directly deal with value theory. But when Locke pursued and expanded on Newton's ideas regarding man's relationship to nature the result was a political theory which included notions of individualism, property rights, religious and political toleration, limited government and the separation of powers.

John Locke's theory, then, in turn became the prevailing ideology or value system in the American colonies. The Declaration of Independence and the Bill of Rights which bear the mark of Jeffersonian influence are evidences of the absorption of Lockean values. As Northrop repeatedly notes, Jefferson was a close student of Locke's philosophy. But Jefferson was not the sole Lockean of his time. Northrop maintains that Locke's fundamental political and social ideas were widely accepted in the colonies.[53] What Jefferson

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[53] Ibid., p. 70.

apparently did was to give a clear statement of the philosophy that became the dominant ideology of his time and which in turn was related to Newtonian physics as a result of Locke's work.

Without a Locke, Newtonian physics could have led to several other possibilities. The theory of Thomas Hobbes, for instance, was also based on an "interpretation" of Newton's physics. But Hobbesian theory was not the conceptual framework that the Jeffersonians used according to Northrop. The importance of Newton, Locke and Jefferson for American ideology dramatizes the inter-relationships between various elements which go into the building of a culture. These are (1) a theory of nature, (2) a social theory based on this theory of nature, and (3) the acceptance by people in a culture of the social theory.

The American success in technological development, in Northrop's analysis, is to a considerable extent due to the first element, the Newtonian-Lockean theory of nature. Since nature in this theory is only indirectly known through deductively formulated theories, the search for more adequate "constructs" about nature is a continuing feature of American society. In other words, Americans are more likely to look upon nature as something to be challenged and conquered

rather than something to be only contemplated and enjoyed. Nature, then, for most Americans is not merely an intuitively felt and enjoyed harmony, as indeed it seems to be among traditional Japanese, Chinese and Indians.

The second element is the unifying factor that gives the various socio-political institutions their basic purpose. This factor persists even though institutions eventually increase in complexity. Thus, the Lockean theory of politics is important for an understanding of not only the politics of Jefferson's time but today's politics as well. To a considerable extent, Northrop's analysis explains the persistence of Lockean notions of private property in spite of the fact that the General Motors Corporation is hardly an institution which can be said to be the product of a single Lockean mental substance hewing out a piece of property from a forest with the help of physical labor.

The third and final fact, i.e., consensus, or habitual acceptance of a political theory, helps provide stability in any socio-political entity. Without consensus any political system is likely to be plagued by chaos and disorder.

Northrop maintains that his method of studying the ideology of a culture as its crucial variable is applicable to a "Western" society like the United States as well as non-

Western Asian and African societies. This is due to the fact that he feels that other cultures' artifacts are related to their own unique theories of nature in somewhat the same way as American artifacts are related to Newtonian-Lockean philosophy.

Oriental and Primitive Cultures. A considerable portion of The Meeting of the East and West is devoted to an analysis of Buddhist, Hindu, Shinto and other Oriental cultures. Again, these cultures and their various ideological, social, political, legal and religious components are found to be based on specific philosophies of nature and science. Further, what applies to oriental cultures also applies to so-called "primitive" cultures. That is, primitive cultures also have philosophies of science and nature on which they base their ethics and social relations.

> Even a so-called primitive and very matter-of-fact people order their relations to one another in terms of a specific set of shared meanings, i.e., their particular philosophy. Moreover, Kluckhohn was able to articulate the positive legal norms of the Navaho and found them to be related essentially to their cognitive natural philosophy.[54]

Northrop's position that there exists no innate difference between "primitive illiterate" man and "complex

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[54]Northrop, Philosophical Anthropology, p. 38.

modern" man in their basic ability to think of man's relationship to nature may seem astounding at first. But here he is supported by some anthropologists, including Kluckhohn, who do not see innate differences between various societies in their ability to create an underlying and consistent philosophy. For example, Kluckhohn, in his article entitled "The Philosophy of the Navaho Indians," notes that

> The publication of Paul Radin's Primitive Man as a Philosopher did much toward destroying the myth that a cognitive orientation toward experience was a peculiarity of literate societies. Speculation and reflection upon the nature of the universe and of man's place in the total scheme of things have been carried out in every known culture. Every people has its characteristic set of "primitive postulates."[55]

Therefore, "primitive" thought according to Northrop and Kluckhohn also has a "logic" of its own, depending on a particular view of reality although its discovery by an outsider may be an extremely laborious and frustrating process. Northrop, however, seems to go a little beyond Kluckhohn's conclusions in an attempt to defend this thesis. In one essay he goes so far as to declare that

> I question [he writes] whether there has ever been a society that had myth in any sense other than that of a metaphorical or aesthetic expression of

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[55]F. S. C. Northrop (ed.), Ideological Differences and World Order, p. 356.

> what was to it a literal empirically verified conception of nature. It is not an accident that the early gods are connected with thunder, lightning, rain, and the sun.[56]

This position is questioned by Bidney, who is generally favorable in his reaction to other aspects of Northrop's philosophy. He says

> Thus, in order to justify his thesis that all cultures are rationally integrated systems based on a philosophy of science, Northrop is apparently prepared to rationalize primitive myths as being scientific allegories, thereby returning to the type of mythological interpretation originally maintained by the Stoic philosophers, Francis Bacon, and the German nature-mythologists of the late nineteenth century.[57]

However, Bidney's criticism is in some ways based on a misunderstanding of Northrop. The latter's choice of language is often unfortunate. Northrop often tends to make statements which seem startling at first sight but which become meaningful when taken in light of other aspects of his theory. Thus, Northrop's views on myths are really logical extensions of his views on the role of the philosophy of nature which is in many ways similar to the concept of

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[56]Northrop, "Ethics and the Integration of Natural Knowledge," in The Nature of Concepts, Their Inter-relation and Role in Social Structure (Proceedings of the Stillwater Conference Conducted by The Foundation for Integrated Education), p. 127. Quoted by Bidney, Theoretical Anthropology, p. 173.

[57]Bidney, Theoretical Anthropology, p. 174.

metaanthropology which Bidney accepts.

Culture in any case for Northrop, is the construction of man rather than of "nature" in Professor Northrop's philosophy. Nature in the sense of ontologically real objects or in the sense of sensed data does not automatically demand that man create certain prescribed artifacts. Only as man draws implications from his understanding of nature does he begin to create the basis of his social world. The world of politics, therefore, is not an independent process of natural behavior. The political system is one which together with other interrelated systems springs from an underlying philosophy which in turn rests on certain scientific assumptions. The paradox of human society is that while it involves a world quite different from the world of science, it also depends on an understanding of the world of science. To understand this paradox one has to adapt and adopt tools of understanding of politics and society which are precise enough for the particular problems of the politico-social world and yet broad enough to relate this world to other dimensions of human experience. But this in turn depends upon a philosophy of science and man's view of nature.

CHAPTER V

THE STUDY OF POLITICS

The study of politics in our times is marked by an intense and persistent search for a clearer focus or meeting ground in which political scientists of varying persuasions can work in close cooperation. In spite of the restless search for a consistent core of politics and in spite of the increased concern about methodology political scientists have yet to arrive at a basic consensus regarding the central concern of political science. Professor Dwight Waldo of the University of California at Berkeley, in taking note of this state of affairs in the profession, has stated that

> The mood of contemporary American political science is one of dissatisfaction tinged with hopefulness. There is a great amount of self-criticism, of stock taking, of discussion of methodology, but also of hopeful and enthusiastic pursuit of new (or rediscovered or refurbished) ideas and methods.
>
> Contemporary political science might be said to be engaged in an intensive "quest for the real." There are some who assert that the "reality" which is the proper study of political science is something <u>sui generis</u>, for example, that it is "power"

> or "the political process" which is the central and distinguishing phenomenon and concept of political science. Others might be said to seek some base outside political science itself upon which the discipline can be firmly rested. There are those, for example, who seek to base the study of politics on the methods of the physical sciences, or the concepts and data of the other social sciences. On the other hand, there are those seeking to rest political study upon foundations of metaphysics or theology.[1]

Although the various alternatives may not be "mutually exclusive" as Waldo points out,[2] the differences in emphasis are often very considerable and the methodological gulfs often very real. Thus in spite of the remarkable growth in the field of political science within the United States,[3] American political scientists are separated in their orientations by widely varying sets of theoretical presuppositions. The politics of F. S. C. Northrop if examined by political scientists may help enlarge the intellectual context in which the methodological differences in political science may be not only examined in a clearer light but also partly resolved. But before we proceed with Northrop's contribution here it

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[1]Dwight Waldo, Political Science in the United States of America (Paris: UNESCO, 1956), p. 18.

[2]Ibid.

[3]See Bernard Crick, "The Science of Politics in the United States," The Canadian Journal of Economics and Political Science, XX, 3 (August, 1954), pp. 308-320, p. 308.

will be necessary for some readers to review briefly some of the most fundamental differences among political scientists in their approaches to the study of politics.

Here what is often termed the "fact-value" problem must be regarded as an important but continuing question that has plagued political science as well as other disciplines at least since the time of Hume. This problem goes to the very basic raison d'etre of normative political theory. The modern Humeans or non-cognitivists in particular often characterize traditional political theory propositions as being emotive in character. The non-cognitive theorist, therefore, sees "objectivity" as being possible only at the "instrumental" level. "Ultimate" values are regarded as only subjective preferences which are not subject to cognitive validation. As Professor Felix E. Oppenheim, in the course of an incisive statement of the non-cognitivist position puts it

> Non-cognitivism does not maintain that value-words, even in the intrinsic sense, are meaningless, but only that they have normative, evaluative, directive, rather than cognitive meaning.
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> . . . Non-cognitivism denies the verifiability of intrinsic value-judgments but does not question the possibility or legitimacy of value-commitments, even in the social sciences, provided they are clearly characterized as such.[4]

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[4]Felix E. Oppenheim, "The Natural Law Thesis: Affirmation or Denial?" American Political Science Review, Vol. II, No. 1 (March, 1957), pp. 41-55, 50-51.

In spite of the present popularity of this view and the attempt of most political scientists to avoid "value" studies some political theorists maintain that the search for "objective" values is not a futile pursuit and that the non-cognitivists are the real subjectivists. One political theorist, Professor John Paul Duncan, for instance, maintains that

> . . . the denial of natural law by the scientific value relativists and the value non-cognitivists rests upon the subjectivist philosophical position that man is a relatively self-contained, value-creating animal, a unique, separate, subjective ego who in the Kantian sense trots about, either individually or in groups, placing blobs of value upon a factual world.[5]

Although Professor Duncan sees certain limitations in the position of most non-cognitivists he gives them considerable credit for bringing into focus the exact nature of the theoretical dispute. He says

> . . . the crux of the philosophic issue concerning the validity of natural law is the same for any one of the varieties as pointed out in a previous note above, so in that each school must rest its case finally on the premise that somehow the "oughts" of life which are the real law reside in the nature of things, the facts of life, that "nature" exhibits JUSTICE. Whatever criticism may be made of them as "subjectivists" the scientific value relativists or value non-cognitivists from Hume to the present Vienna School and its followers have had both the

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[5]John Paul Duncan, "Natural Law as Corporate Purpose," Oklahoma Law Review, Vol. 13 (1960), pp. 274-287, p. 285.

> sense and the courage to see this fact and state it as the key issue.[6]

Another area of controversy centers around the differences between the so-called behavioral and institutional "persuasions" in political science. The institutionalists usually seem to feel that politics and political reality is most aptly examined in the process of studying man's socio-political institutions since it is through his institutions that man objectifies his wishes and desires and is affected by these institutions in turn. The institutional "approach" is often regarded by many as the "traditional" approach within political science. For instance, Avery Leiserson says

> The oldest tradition in political science (as distinct from postulating and elaborating ideal forms of society and government) emerges in what may legitimately be called institutional analysis, i.e., the study of the historical, legal and structural development of political institutions, their modes of operation, and their differential efforts in terms of general types of organizational behavior.[7]

The "institutional" approach in one form or another has been regarded by many political theorists as being objectively the most important tool for finding the causes and clues to human socio-political behavior. However, in spite

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[6] Ibid., pp. 285-286.

[7] A. Leiserson, Parties and Politics: An institutional and behavioral approach (New York: Knopf, 1958), p. 369.

of the past "popularity" of the institutional approach there have been in recent years remarkably few articulated theories of politics and society which have indicated institutions to be their central concern. Instead it is the behavioralists who have been the most active in the methodological literature of our times. The behavioralists are hard to categorize since there are wide differences among their approaches. But certain general tendencies can be noted.

First, they claim to have made political science more "empirically" oriented. Dwight Waldo in the previously cited "trend" report illustrates this point in connection with dealing with the increasing concern for the "science" in political science. He says

> The more recent, "harder" conception of science is associated with the term (or some variant of the term)[3] "behavioural science" and the cluster of ideas and interests designated thereby.
>
> Behavioural science is not strictly a political science term. In fact, most of the so-called behaviouralists are trained primarily in some other discipline. They are devoted to a very strict interpretation of the meaning of science. The focus of their attention is sharply upon "what can be observed"--the behaviour of humans.[8]

A second tendency of behavioralists is to focus their attention on individual man and his "state of mind." As one

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[8]Dwight Waldo, Political Science in the United States of America, op. cit., p. 21.

behavioralist put it,

> The root is man. I don't think it is possible to say anything meaningful about the governance of man without talking about the political behavior of man--his acts, goals, drives, feelings, beliefs, commitments, and values.[9]

Although many behavioralists feel that they pay adequate attention to institutions, in practice their concern is often with individual behavior. As one commentator has put it

> Everywhere, in the literature we have examined, the "behavioral" approach is characterized by sympathizers and critics alike as "concerned with individual behavior or with action in small, face-to-face groups and . . . a wide range of action not specifically relevant to any particular institutional context" (Truman, 1955, p. 209). So conceived "behavioral analysis" is identified with analysis of items of individual behavior, whether these items are responses to a survey questionnaire, categories of response in interaction situations or in specified communication networks, or alternate strategies adopted by an individual faced with the necessity of reaching a decision.[10]

One final problem that is related to the controversy over "empiricism" and yet unique in its own right is the question of the relationship between political science and

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[9]Heinz Eulau, The Behavioral Persuasion in Politics (New York: Random House, 1963), p. 3.

[10]Muzafer Sherif and Bertram L. Koslin, The "Institutional" vs "Behavioral" controversy in social science with special reference to Political Science. Research Report. Institute of Group Relations, University of Oklahoma, Norman, 1960, p. 5.

other disciplines. For example, many scholars including Hans Morgenthau have maintained that the study of politics is a separate and unique discipline based on some central concept such as "power" or "influence." Professor Morgenthau argues that

> Intellectually, the political realist maintains the autonomy of the political sphere, as the economist, the lawyer, the moralist maintain theirs. He thinks in terms of interest defined as power, as the economist thinks in terms of interest defined as wealth; the lawyer, of the conformity of action with legal rules; the moralist, of the conformity of action with moral principles.[11]

In contrast to Morgenthau's attempt to carve an exclusive role for the political scientist some political scientists insist in reliance on other disciplines, particularly philosophy for providing insights into normative and descriptive problems in political science. Professor Mulford Sibley often argues eloquently for the traditional cooperation between political science, philosophy and historical scholarship as well. Sibley has stated

> The study of "politics" will necessarily involve all facets of human life and thought which have a bearing on or relate to the central concern. Thus, insofar as religious beliefs explain attitudes to the political world, they are of concern to students of

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[11]Hans J. Morgenthau, Politics Among Nations (New York: Alfred A. Knopf, 1961), p. 11.

> politics; and the systems of value preferences held in a given society must necessarily be studied if we are to understand the formulation and implementation of policy and the distribution of power. Policy and power distribution involve, among other things, the effectuation of value hierarchies in the institutional world. Then too, the study of politics, as of any other aspect of life, will always occur within the framework of a world-view of some kind. To comprehend politics, therefore, the student must keep in mind and be aware of the general framework of thought which characterizes the scientific and philosophical outlook of a given age.[12]

Traditionally, of course, political science has frequently relied on philosophy and what is broadly called history. But one effect of the rise of "empiricism" has been an increasing dependence on fields of psychology, sociology and anthropology, particularly among the behavioralists. In fact, the behavioralists often claim to be inter-disciplinary in their orientations. As Waldo notes

> . . . behavioral science extends far beyond political science; it is an interdisciplinary movement or focus. In it are met and joined students from other social sciences, such as anthropology, sociology, social psychology, and economics, together with mathematicians, clinical psychologists, physiologists, geographers, and zoologists. In a sense and in some aspects it is a "unity of science" movement; its boundaries are indistinct and fluid.[13]

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[12]Mulford Q. Sibley, "The Place of Classical Political Theory in the Study of Politics: The Legitimate Spell of Plato," in Approaches to Study of Politics, Roland Young, Editor (Evanston: Northwestern University Press, 1958), p. 127.

[13]Waldo, Political Science in the United States of America, op. cit., p. 22.

Still, with the intense concern with methodology and the "fluid" boundaries between the disciplines no clear interdisciplinary method has yet become accepted among students of politics. Some observers seem to feel that a careful eclecticism will continue to be a general trend at least in some areas of socio-political studies. As Professor Oliver Benson put it

> This probably means that the future of the field will need to be as eclectic as its past, with the exception that where past eclecticism was based on selection from the older traditional disciplines related to international studies: law and history, the newer eclectism [sic] will be based on a wider variety of subjects.[14]

Although Professor Benson warns that the "answer for research . . . is not to be found in inter-departmental cooperation or cross-discipline research projects"[15] in practice interdisciplinary efforts have not yet rested in any significant degree on a common conceptualized framework. Thus Sherif and Koslin note

> On the whole, interdisciplinary efforts in joint conferences and volumes have consisted largely of juxtaposing contributions by representatives of the

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[14]Oliver Benson, "Toward a New Eclecticism in International Studies," Unpublished Report for Curriculum Study Project. Political Science Department (Evanston: Northwestern University, March 1, 1955), p. 40, p. 29.

[15]Ibid.

> various disciplines. It seems to us that one of the obstacles to effective interdisciplinary efforts is that conceptual approaches in the various disciplines are still formulated in terms of irreconcilable dichotomies--dichotomies which are part of our intellectual heritage. . . .[16]

The foregoing discussion shows, therefore, that in this period of intellectual "restlessness" within political science any "new" approach has to contend with several different "issues." But the three "issues" that we have attempted to isolate seem to incorporate to a degree other persisting but subordinate problems in what once was called the "master science." With this general framework in mind we can attempt to discuss and evaluate F. S. C. Northrop's approach to the problems of society in general and politics in particular.

The Political System

Northrop's own conception of politics is an extension of his views on culture. Culture as we have seen is basically regarded by him as a pattern of living based on certain value presuppositions about "science" arranged hierarchically. These presuppositions provide the underlying unity among the various sub-systems of a particular culture.

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[16]Muzafer Sherif and Bertram L. Koslin, "The 'Institutional' vs 'Behavioral' Controversy," op. cit., p. 3.

The political system in Northrop's theory, then, does not turn out to be an independent variable but is inextricably connected with the cultural system. The cultural system expresses itself in several "forms." Usually a culture, he claims, will exhibit at least five different forms or systems. Politics, economics, law, religion and art are systems that can be separated for scholarship and for convenience. It must be remembered, however, that they are not actually separated in reality according to Northrop. They are connected together by the ideational elements of a culture. Thus Northrop states

> Each one of these normative theories is understood when its specific economic doctrine, political theory, legal theory, religious doctrine and conception of art are specified. . . . But the primitive assumptions of the economic theory of a given culture are intimately related to the primitive assumptions of its political theory, its legal philosophy, its religious doctrine and its art forms.[17]

The political system is, therefore, not only the various entities known among political scientists as groups or institutions but far more important, it is the set of values that are institutionalized and are being implemented as well. Politics is, therefore, a major form through which

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[17]F. S. C. Northrop, The Logic of the Sciences and the Humanities (New York: Meridian Books, Inc., 1959), p. 275.

men regulate their own behavior in the light of the underlying ideational goals. It is partly, therefore, also a technique of social control within the larger context of culture. Northrop puts it this way

> . . . not everything with which the anthropologist or the sociologist concerns himself is relevant to the needs of the lawyer and the politician. The reason is that law and politics have to do with the intrinsic norms, or goal values, used by a people to order their relations to one another and to nature.[18]

The legitimacy or validity of a political system consequently too depends on its ability to implement its political theory and its political norms. The element of "force" or "power" plays a secondary role in keeping the political system together. This does not mean, however, that political systems can dispense with authoritative patterns or institutions. The elements of force and violence even are present in every system to help implement the norms. But the success of these norms depends primarily on how well they have become institutionalized. Thus, Northrop maintains that

> This approach in no way entails pacifism. Even the sleepiest domestic community in either Gandhi's India or Holderness, New Hampshire, has its policemen. Usually also the state militia are not far away. The fact that law and political policies

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[18] F. S. C. Northrop, Philosophical Anthropology and Practical Politics (New York: Macmillan Company, 1960), p. 25.

> receive both their justice and their effectiveness from the normative content of the living law and the living beliefs and habits of concrete men and women who together, in their individual creative thinking and acting, make that living law what it is, does not entail that physical implementation of both the living and the positive law is either mis-spent or unnecessary.[19]

Three sets of conclusions emerge from this portion. The first is that the political system is related to the cultural system. The second is that the political system is not simply a mere collection of institutions such as parties, courts or groups but is based on the ideational continuity among all these institutions. Finally, the success of the political system is based primarily on consensus and only secondarily on force.

Although Northrop is not a political scientist by training it is interesting to note that some of his views on the political system are to a degree parallel to those of many political scientists today. David Easton's conception of a political system as a unity is one such example. Easton suggests that

> . . . there is already implicit the notion that each part of the larger political canvas does not stand alone but is related to each other part; or, to put it positively, that the operation of no one part can be fully understood without reference to the way in

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[19] Ibid., p. 15.

which the whole itself operates.[20]

Also, like Northrop, Easton seems to suggest that the political system is a convenient temporary abstraction from the total social context.

> The very idea of a system suggests that we can separate political life from the rest of social activity, at least for analytical purposes, and examine it as though for the moment it were a self-contained entity surrounded by, but clearly distinguishable from the environment or setting in which it operates.[21]

Northrop's dependence on the living law with only a secondary emphasis on force also seems somewhat similar to the following statement by Easton.

> Of course, a government may elicit support in many ways: through persuasion, consent or manipulation. It may also impose unsupported settlements of demands through threats of force. But it is a familiar axiom of political science that a government based upon force alone is not long for this world; it must buttress its position by inducing a favorable state of mind in its subjects through fair or foul means.[22]

Thus, there is much in Northrop's political theory which would correspond with Easton's characterization of political science

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[20] David Easton, "An Approach to the Analysis of Political Systems," World Politics, Vol. IX (April, 1957), p. 383.

[21] Ibid., p. 384.

[22] Ibid., p. 393.

as the study of the "authoritative allocation of values for a society" where "authoritative" is "used to mean only that policies, whether formal or effective, are accepted as binding."[23] However, since there are significant differences between Northrop's conception of the "science" of political and social science and the views of other empiricists, a brief examination of Northrop's discussion of the "logic" of the social sciences will help clarify Northrop's position.

Thus Northrop argues that there is no one "scientific" method if by science we mean the general pursuit of disciplined public knowledge. There are several different "valid" scientific methods. The validity of the method will depend on two major criteria, the nature of the problem and the stage or level of the scientific inquiry. He feels that the scientific techniques for the study of politics must be tailor made for the peculiar and unique field of politics. Simply and carelessly to borrow a scientific technique from one field and apply it to another will result in "scientism" rather than science. Thus, he states:

> Again and again investigators have plunged into a subject matter, sending out questionnaires, gathering a tremendous amount of data, even performing

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[23]David Easton, The Political System: Inquiry into the State of Political Science (Alfred A. Knopf, 1960), p. 133.

> experiments, only to come out at the end wondering what it all proves, and realizing after years of industry and effort that the real difficulty has slipped through their fingers. Others, noting the success of a given scientific method in one field, have carried this method hastily and uncritically into their own, only to end later on in a similar disillusionment.[24]

Therefore, Northrop urges that great care should be exercised in the process of borrowing "scientific" methods. He himself in his own adaptation of the methods of physics to the problems of politics attempts to exercise this care and caution himself making adjustments for the unique problems of politics.

Also, crucial to the appreciation of the "validity" of a method, Northrop goes on to argue, it is important to appreciate the stage or level at which the inquiry is operating. He suggests that within the same discipline, whether it be physics or politics, a scientific theory may be valid at one level and invalid at another level. As he puts it,

> . . . the problem of the traditional treatises on scientific, concerning whether Bacon, Cohen or John Dewey has the correct conception of it, turns out to be a pseudo-problem. There is no one scientific method. John Dewey has the appropriate method for one stage of inquiry, even though he never pursued it fully. Bacon is correct for another stage, and Cohen for still another stage.

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[24]Northrop, The Logic of the Sciences and the Humanities, p. 1.

> Such are some of the fruits of cultivating an understanding of logic and scientific method as they exhibit themselves in different specific scientific investigations, as compared with its cultivation in a vacuum or in the light of its character in one specific type of science, as has happened all too often in the traditional treatises on the subject.[25]

Problematic Differences between Science and Politics. As has been indicated, therefore, the "scientific method," which is applicable to any discipline, depends on the subject matter of the discipline according to Northrop. And the subject matter of political science is different from that of the natural sciences in one important respect. Although man and nature are immersed in the same physical continuum of reality man as a matter of fact is subject to a somewhat different type of causation than that of a stone or a tree. As has been stated elsewhere in greater detail, Northrop sees the uniqueness of man in his physical ability to create and live with symbols. This ability which can be explained in non-mystical and scientific terms according to Northrop is the key to man's behavior. Therefore any "scientific method" which is simply borrowed from physics or botany has to be adapted in order to do justice to the "ideological factor" in the behavior of man. Many humanists are often disturbed

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[25] Ibid., p. ix.

by the apparent neglect by scientists of what is often called the basic "spiritual" nature of man. Northrop to some extent may seem to echo their concern. The methods of physics cannot be blindly applied to the problems of man but this does not mean that the arbitrary separation between the "sciences" and "humanities" is legitimate. If the methods of the natural sciences are adapted to take into account the ideological, crucial variable in man's "nature" a science of man is genuinely possible according to Northrop. Man's political ideas within the cultural setting are influenced by science anyway and therefore Northrop feels that the political scientist can neither ignore nor unhesitatingly imitate the methods of the natural sciences.

Also, the natural sciences deal only with "factual" problems. There is no need to take a public opinion poll among electrons or stones in order to ascertain their "behavior." As Northrop in stating the obvious says,

> In natural science there are only problems of fact. Having found, upon the verification of Kepler's three laws of planetary motion, that planets move in an orbit which is an ellipse, astronomers do not face the normative problem concerning whether the planets should not do squads right in an orbit which is a rectangle.[26]

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[26]Northrop, The Logic of the Sciences and the Humanities, p. 255.

Political scientists, therefore, face not only the ideological variable but the fact-value problem as well. Unlike the mere problems of description, students have to deal with questions of prescription as well. Thus, Northrop states that

> . . . social institutions, being in part at least man-made, confront the scientist with two different questions: (1) What is the character of social institutions in fact? This is a question comparable to the astronomer's question with respect to the solar system; and (2) How ought social institution [sic] to be? Even though murder and unemployment exist, should one or the other or both be outlawed? Even though actual social organization in a given society be monarchical, should it not be replaced by social organization of a democratic, a socialist or a communist form?[27]

In fact, since the methods for resolving factual problems and value problems are somewhat separate and distinct each will require separate treatment.

Science and Description

Thus, Northrop attempts to impress upon students of politics and society that the process of describing political reality is far more complex than even a sophisticated political journalist-reporter or researcher may initially suppose. Even if normative questions were completely left out,

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[27] Ibid.

description also should involve a philosophically clear and scientifically valid methodology. Merely a concern for facts will not do, either.

It is Northrop's contention that even a search for "pure facts" cannot by-pass philosophical issues, even though the only "pure fact" that exists for Northrop is one that does not come with intellectual labels or categories attached. As he states it

> Pure fact may be defined as that which is known by immediate apprehension alone. It is that portion of our knowledge which remains when everything depending upon inference from the immediately apprehended is rejected.[28]

The initial stage of an inquiry must be marked, therefore, not by a search for facts but by what in pragmatic terms is called the "problematic situation." The problematic situation usually arises according to Northrop because of the failure of previous descriptive theories to do justice to the facts. It is not the failure of facts that creates a problem according to this analysis. It is the failure of theoretically described facts or "facts" which are postulated within a political theory. Therefore at this point the crucial thing to do is not to be inductive or engage in

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[28] Ibid., p. 39.

formulating testable hypotheses or even engage in Cartesian reasoning but to engage in a theoretical analysis of the problem at hand. Professor Northrop is here acknowledging his debt to pragmatism and indeed notes

> John Dewey has the correct answer to our question concerning the positive method to be used in initiating inquiry. His prescription is correct because it affirms a tautology, the tautology, namely, that one must begin inquiry with what one has at the beginning, namely, the problem. It is the problem and its characteristics as revealed by analysis which guides one first to the relevant facts and then, once the relevant facts are known, to the relevant hypotheses.[29]

The importance of this analytical stage of inquiry in political studies can be seen from the fact that few political scientists in their methodological treatises give any great emphasis to the need for theoretical analysis of the problem at hand in the early stages of scientific inquiry. Many political scientists instead tend to emphasize the need for "hypotheses." Arnold Brecht in his monumental work on "political theory" after cataloging different types of inquiry states:

> Before we discuss these scientific actions, operations, or steps in detail,[1] several points should be made perfectly clear. In the first place, our enumeration is not meant to express the postulate that Scientific Method proceed exactly in the given order.

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[29] Ibid., p. 17.

> On the contrary, actual procedure will generally begin with a tentative working hypothesis ventured upon not infrequently on the basis of an as yet most cursory knowledge of facts and used as a trial balloon to guide more systematic research. In the absence of conclusive data, the inquiry may even start out from a purely factual assumption.[30]

Thus Brecht does not seem clearly to recognize any need to begin with analysis. Northrop's concern with analysis is, on the other hand, clearly stated, and this concern, very briefly, is due to several crucial factors. First, scientific inquiry is often needed because of the inadequacy of previous theory. Secondly, a conscious sloughing off of habitual modes of thought and conceptualization is good science. Finally, in certain problems of politics there is the very real danger of reading cultural values and meaning into the "facts" of a different culture. All three of these dangers can be met only by a careful analysis before making any empirical hypotheses. Further, such an analysis may save the researcher considerable time and inaccuracies in determining what should be the next step. Also, in some cases it may be learned that the problem must be analyzed chiefly due to logical inconsistencies in previous approaches. In other instances a simple empiricism may be in order with the usual

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[30] Arnold Brecht, Political Theory (Princeton: Princeton University Press, 1959), p. 29.

construction of hypotheses. Or, if there are normative questions involved in the problem, a distinct set of procedures may have to be followed, ones suitable for evaluative purposes.

The Natural History Stage of Inquiry. After the first stage of problem analysis Northrop maintains that disciplines generally tend to reach what he calls the "natural history stage." Northrop seems to imply that this tendency is a general rule. Yet, he is far from a deterministic "evolutionist" in his general philosophical position.

The natural history stage is in any case marked generally by the use of inductive methods such as observation, description, and classification. At this stage the importance of theory is again noted. Even though the search for facts is still important this stage does not end by "finding" facts but by describing them. Since any described fact involves language and observations of relationships between facts there are bound to be, according to Northrop, propositions or theories involved. As he puts it

> It cannot be too strongly emphasized that if one wants pure fact, apart from all theory, then one must keep completely silent, never reporting, either verbally or in writing, to one's colleagues. For the moment one reports or describes what one has observed, one has described fact rather than merely observed, or immediately apprehended, fact. In short, one has observed fact brought under concepts and propositionized. And to have concepts and propositions is to have

theory.[31]

Although there are great dangers of being inaccurate in this stage of description, this is nevertheless an important stage for scientific procedure. Science needs sheer collections of raw facts and classificatory systems, before it gets to the stage of deductively formed theory, which as we have seen before, is a characteristic of mature science. Northrop feels that among the social sciences psychology in particular has attempted to move to the deductive stage without immersing itself sufficiently in the "description of different observable personality traits and types in the manner of the natural history biologists."[32]

Unlike psychology, the study of political science has been involved more intensely in the natural history stage of inquiry. Beginning with Aristotle's classification[33] of political systems based on such an inductively based category as the number of people who rule political science has been concerned for a long time, although unevenly, with the search

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[31]Northrop, Logic of the Sciences and the Humanities, p. 36.

[32]Ibid., p. 38.

[33]Northrop generally regards Aristotle both in politics and physics as a "naive realist" since the latter's theories seem to rely on observation for knowledge.

for facts. The "modern" aspect of this concern for "facts" can be seen in what David Easton calls "hyperfactualism" Easton states

> Examination of the important political literature over the last half century or more reveals that students of political life have been captive of a view of science as the objective collection and classification of facts and the relating of them into singular generalizations.[34]

Using Northrop's guidelines one can see many evidences of the natural history method in several fields and sub-fields of political science. The traditional methods following Aristotle's example of classifying governments and institutions provide one set of examples. The usually followed procedure in the study of constitutional law through the inductive study of cases provides another example. Also, the description of the size and constitution of various governmental agencies and bureaus and the raw data of voting records are all phenomena peculiar to the natural history stage.

Important as the natural history concern for facts is nevertheless there are several inherent dangers at this level. One is that observers may be inaccurate in relating what they actually saw. Since the observer has to use

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[34]Easton, The Political System, op. cit., p. 66.

synbols and language there might be a loss of "factuality" in the transition. The second problem is that at this level of analysis "naive realism"[35] is the prevalent epistemological tool. Consequently there will be some differences even among "sincere" observers in their description of the same situation. As a result, true objectivity is not very possible at this level of understanding. Even pure fact is elusive from an objective point of view. Northrop claims that

> All that we can say about them is that we immediately sense them. We apprehend the qualities as qualities, or their particular relations as particular relations, and nothing more. Certain qualities do not come with a tag on them saying "I am the sign of an external object beyond me which I qualify." Nor do other qualities come with a tag on them reading "I am purely subjective in origin."[36]

Since pure facts are few and far between, natural history methods use inference in order to establish inductively inferred facts. A "piece of chalk," "National Power" or the "Negro vote" are examples of inductively inferred facts because they mix sensed facts and assumptions about sensed facts. Pure facts cannot themselves provide a picture

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[35]"Naive realism" is any theory which discusses "public" events and objects in terms of direct observation. Most inductive theories in political science like those of Lasswell, Almond and others are examples of "naive realism."

[36]Northrop, Logic of the Sciences, op. cit., p. 42.

of Aristotle's monarchy. For the description of a monarchy inference and categories are needed which are based on approximations of pure fact. The method for checking the "facts" of inductive science often consists of constant checking and re-checking by different observers or by the use of dialogues between people who are ostensibly in the pursuit of "truth." Thus, in the average law courts the system of cross examination clarifies some of the errors of people who claim they saw the "facts" of a crime. Important as these methods are, the pursuit of "objective" science leads beyond the inductive to the deductive stage of inquiry.

As we have already indicated on a previous occasion, Northrop contends that the "advanced" sciences are at the stage where deductively formulated theory is an essential feature of scientific methods. Thus the theories of Newton and Einstein are deductively formulated theories in physics. For political science and social science to grow the primacy of deductive theory must be recognized, in order to pass beyond the "naive realistic" pseudo objective "historical" data and inductive inferences and reasoning.[37] Since we have

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[37]Studies of pressure groups, bloc voting, or comparative studies based on "party structures" are examples of efforts where knowledge is inferred from what is observed and therefore is "naive realistic" in character.

examined Northrop's analysis of the methods of science in detail elsewhere we need not repeat our previous discussion. It is sufficient to note the following summary by Northrop of the characteristics of a deductive system which attempts to portray reality objectively.

> The methods are well known. They involve the construction of a deductively formulated system. The basic assumptions or postulates of this system designate unambiguously what is proposed to exist. To this proposal or hypothesis, formal logic is then applied to deduce theorems or consequences. Among these consequences one seeks for certain theorems which define experiments that can be performed, such as Galileo's famous inclined plane experiment. The experiment designated by the theorem or theorems of the theory is then performed. If in all instances the experiment gives the result called for by the theorems, then the hypothesis is said to be confirmed and the entities and relations designated by it are said to exist. If the experimental result is negative, the hypothesis or postulate set is known to be false and some alternative hypothesis suggested by the data of the second stage of the inquiry, is put in its place and subjected to the same procedure.[38]

An increasing number of political scientists seem to echo Northrop's emphasis on the need for deductive theories and their importance. The rise of "science" and "empiricism" therefore has not destroyed deductive logic but some authorities claim that deductive logic is more important than inductive. Arnold Brecht, for instance, argues

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[38]Northrop, Logic of the Sciences, op. cit., pp. 60-61.

> It is utterly false, therefore, to say what is often heard, that Scientific Method has replaced deductive (analytical) with inductive reasoning. Actually, deductive reasoning has remained one of the most important tools in modern science. . . .
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> If there be any order of rank between inductive and deductive reasoning, then the latter still deserves first prize as to logical validity. Inductive reasoning from mere samples, if ever so numerous, is never fully valid. . . .[39]

Some behaviorists, of course, have been conceptualizing in terms of deductive systems, sometimes in the form of "models" especially in international relations. Professor Morton A. Kaplan in an unusually theoretical book on international politics observes

> In a strict sense, a theory includes a set of primitive terms, definitions, and axioms. From this base, systematic theorems are derived. These theorems should be logically consistent. The terminal theorems or propositions should be interpreted in such a way that the terms of theorems can be given unequivocal empirical references. Finally, the theorems should be capable of refutation or confirmation by means of controlled experiment or systematic observation.[40]

Although there are some points of departure, Kaplan's definition of scientific theory is in many ways similar to that of Northrop. One behaviorist who has examined a part of

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[39]Brecht, Political Theory, op. cit., p. 92.

[40]Morton A. Kaplan, System and Process in International Politics (New York: John Wiley and Sons, Inc., 1957), p. xi.

Northrop's words more directly speaks with approval of Northrop on this point. William H. Riker of the Center for Advanced Study in the Behavioral Sciences in referring to Northrop says

> Certainly one should praise him for his emphasis, appropriate from a philosopher of science, on the necessity of deductively formulated, non-normative theory as a pre-requisite to descriptive investigation. Far too many political scientists and anthropologists blithely rely on so-called induction, which as Russell once remarked, is just another name for guessing.[41]

Not all "behaviorists," however, are convinced of the necessity at least at the present time of deductive theory in political science. Professor Heinz Eulau who is often an articulate special pleader in the "behavioral movement" notes

> There are not many practitioners of the behavioral persuasion in politics who believe that this is the right time for constructing logically closed deductive pictures of the political process. I have a great deal of admiration for these efforts, but I must confess to some doubt, not because I question the practicality of formal models or their suggestiveness in research, but because I suspect they are not as theoretically pure as their creators insist.[42]

Many behaviorists, in spite of the "newness" of their

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[41]William H. Riker, Review of Philosophical Anthropology and Practical Politics, American Political Science Review, Vol. LV, No. 1 (March, 1961), p. 155.

[42]Heinz Eulau, The Behavioral Persuasion in Politics (New York: Random House, 1963), p. 25.

approach are still in what Northrop calls the natural history stage of preoccupation with facts although they deal with facts in a more complicated and rigorous manner than other previous institutionalists or "institutionists." The natural history stage is necessary but it is only a prelude to the deductive theory stage. Also, the inductive behaviorists have been often concerned only with "action in small, face-to-face groups."[43]

Northrop, therefore, is to a limited extent similar to these behaviorists in question like Riker and Kaplan and others who are concerned with deductive theories about wider societal patterns. These latter behaviorists are more on the fringes of the behavioral movement when compared with those who are primarily microcosmic and inductive in their orientation, at least according to David Truman. Truman, after discussing those who study small face-to-face groups, notes

> The formulation of theory of a more inclusive sweep has not been, strictly speaking, the object or the product of the efforts of the behavioral scientist. That function has been left to the more historically and philosophically inclined sociologist or anthropologist, concerned with reflections about the state of society, in the tradition of Max Weber

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[43]David B. Truman, "The Impact on Political Science of the Revolution in the Behavioral Sciences," Introductory Readings in Political Behavior, S. Sidney Ulmer, Editor (Chicago: Rand McNally, 1961), p. 14.

> and Mannheim, or to speculative synthesizing like that of Talcott Parsons.[44]

In spite of these similarities with these latter behavioralists, however, Northrop's philosophical training and approach places him beyond easy categorization as a behavioralist or as a non-behavioralist in methodology. As a general rule Northrop is likely to appreciate the search for deductive theories on the part of any political scientist, behavioral or philosophical. Thus it is interesting to note that for him the need for deductive theory does not necessarily imply the end of speculative political theory. The role of the political theorist in speculating about political "reality" is in no way rejected by Northrop. However, the "traditional" political theorist is asked by him to insure that irrespective of the origin, source, or genius of the theory it should be carefully stated and logically coherent. Then when the deductive system is completed logical inferences can be drawn and these "theorems" can be tested against the available "facts." Without these tested "theorems" however, deductive systems, whether made by Kaplan or by a Platonist remain for him mythical and hypothetical constructions.

However, according to Northrop just as some

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[44] Ibid., p. 14.

philosophically oriented political theorists do not see the necessity of epistemic correlations as previously described, so also many "empiricists" in their "revolt" pay insufficient attention to the need for deductive theories. Logical positivists and "operationalists" often deny the possibility of meaning in any concept which has no direct counterpart in experience. Here Northrop is supported by others. Thus Professor Abraham, in his important new work on methodology in the behavioral sciences, regards logical positivism, operationism and pragmatism as variants of what he calls the school of "semantic empiricism." In defining the major epistemological thesis of this school Professor Kaplan says

> It is the view that to be meaningful at all a proposition must be capable of being brought into relation with experience as a test of its truth. Its meaning, indeed, can be construed only in terms of just such experiences as provide a test. . . . For semantic empiricism asserts that what cannot be known by experience cannot be said either, or more accurately, that there <u>is</u> nothing more to be said.[45]

Extreme empiricists tend to question the need for deductive theories and frameworks which do not directly have empirical referrents. Northrop, in contrast, sees considerable validity in the work of operationalists but only at a specific stage

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[45]Abraham Kaplan, <u>The Conduct of Inquiry</u> (San Francisco: Chandler Publishing Company, 1964), p. 36.

of science. The work of operationalists can be equivalent to the search for "epistemic correlations" but without a deductive theory neither operationalism or any search for correlations can give public or objective knowledge according to Northrop.

True, as has been already indicated, not all behavioralists or empiricists bypass systematic deduction. Some theorists are well aware that a concern of facts is not enough, especially when there are a number of facts that have become unmanageable. The natural history stage must then be left behind because

> It may be necessary also to regard the observable data as entirely too gross, complex and crude to provide the entities or relations necessary to resolve the problem with which inquiry begins.[46]

Some of the statements of David Easton seem to suggest that he would support Northrop's claim that rigorous theorizing must replace a concern for "facts" which has become inappropriate. Easton states at one point

> When the discipline was younger as an empirical science in our modern sense, the reservoir of factual knowledge was slight, the need for plunging into the collection of more data was great. . . .[47]

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[46]Northrop, Logic of the Sciences and the Humanities, p. 59.

[47]David Easton, The Political System, op. cit., pp. 93-94.

He goes on to note the following:

> Today, however, the condition and quantity of political knowledge has changed radically. Political science has accumulated bulging inventories of facts and their insistent pressure drives it towards an effort to draw these facts together into some meaningful whole.[48]

Easton's own conception of the "political system" as a whole wherein there are inter-related parts is an example of an attempt to formulate a deductive system since "the operation of no one part can be fully understood without reference to the way in which the whole itself operates."[49] The works of Gabriel Almond,[50] Talcott Parsons[51] and other "model" builders provide other examples of similar attempts at theory and system building. These theories are examples of concepts which do not, in Northropian terms, refer directly to what is immediately apprehended. Objects are theoretically constructed

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[48] Ibid., p. 95.

[49] David Easton, "An Approach to the Analysis of Political System," World Politics, Vol. IX (April, 1957), p. 383.

[50] Gabriel Almond, "Comparative Political Systems," in Political Behavior. Edited by Heinz Eulau, Samuel J. Eldersveld and Morris Janowitz (Glencoe: The Free Press, 1956), p. 34.

[51] Talcott Parsons, "Some Highlights of the General Theory of Action," Approaches to the Study of Politics. Roland Young, Editor (Evanston: Northwestern University Press, 1958), p. 282.

which "are known to exist by means of postulation rather than by immediate apprehension."[52] Speaking in terms similar to those of Northrop, Arnold Brecht also describes models thus:

> Abstract wholes, such as "society," "economy," "markets," "capitalism," the "nation," the "collective mind," are "never given to our observation but . . . constructions of our mind." They exist only if, and to the extent to which "the theory is correct which we have formed about the connection of the parts which they imply and which we can explicitly state only in form of a model built from those relationships."[53]

Northrop's acceptance of deductively theoretical orientations is not, however, unconditional. There are several forms of deductive theories which are appropriate only in particular "stages" depending on the nature of the problem. If the problem at hand involves only directly observable data such as the voting data in an election then the deductive theory may well avoid the need for epistemic correlations. All the theory would have to do basically would be to make rigorous abstractions from the sensed world and then test these abstractions or theories again in the world of observation. Northrop calls such a theory "abstractive

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[52]Northrop, Logic of the Sciences and the Humanities, p. 60.

[53]Brecht, Political Theory, op. cit., p. 524.

deductively formulated theory."[54] He claims that such a theory as well as other deductive theories are important for the social sciences but he does not think that the social sciences show any extensive use of deductive theories, at least of the abstractive type. Northrop may well have overstated his case at this point. In an amazing passage he states:

> Only certain of the social sciences have to date achieved deductively formulated factual social theory. Economics has such theory in the case of W. Stanley Jevons' formulation of the science,[2] and also in the case of the very similar theory of the Austrian school[3]. . . . Sociology to date has not achieved a deductively formulated factual social theory, even for statics.[55]

Since he does not make references directly to the status of deductive theories in political science, it is difficult to fathom exactly the basis for his remark. It

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[54]Northrop does not provide a concrete example in political science of such a theory. But an example from one of the other social sciences may illustrate his point. Speaking of the economic theory of the "Austrian School" and also Lionel Robbins, Northrop says: "By restricting itself to the generic properties of the introspected valuations, economics has accomplished something unique in the method of empirical science; it has attained deductively formulated theory which is empirically verified directly through its postulates without the need of appeal to their deductive consequences." Logic of the Sciences and the Humanities, op. cit., p. 247.

[55]F. S. C. Northrop, Philosophical Anthropology and Practical Politics (New York: The Macmillan Company, 1960), p. 95.

can only be noted that if his remark on sociology is applicable to politics as well he has done his own theory an injustice by not elaborating on his criticism with specific examples from political science. Certainly, part of the theoretical efforts in political science towards system building and model creations go beyond "pure" empiricism and aim towards abstractively deductive methods, like those of Kaplan.

However, even if abstractive theories were prevalent they would not exhaust the possibility of even more advanced deductive theories. "Concepts by imagination" and "concepts by intellection" with their "indirect verification" or "epistemic correlations" are supposedly superior types anyway. "Imagination" and "intellection" are both unlike abstractive theories in that the first two do not depend on sensed facts or relationship for their deductively formed concepts. When we move away from the world of colors and sounds, pleasures and pains and become aware of other entities, "imagination" and "intellection" become important. And yet another reason for developing un-sensed concepts, according to Northrop, is that they have far more effective predicting power. As he put it,

> Thus it happens that even when scientists solve the problem initiating inquiry in terms of the

> observable entities and relations and the deductively formulated theory of the hypothetically designated, rather than the abstractive type. The reason is that the appeal to such entities and their more timeless laws and relations often enables one, given a knowledge of the present state of their subject matter, to rigorously and logically deduce the future state.[56]

Since in their descriptive methods the social sciences are at a relatively immature stage, the distinction between "imagination and intellection" need not be elaborately treated again here. Once these disciplines, including political science, are firmly at the deductive stage, these distinctions will become important. For the present, from Northrop's point of view the important thing to do is to try to graduate from the natural history stage of inquiry.

Northrop's own prescription for deductive theory is to pay attention to the key variable or variables and express these with such rigor that there will not be the great danger of smuggling in one's own values at least for descriptive purposes. The key variable in political behavior is the ideological system of a socio-political entity. Unlike Marx, Mannheim, or the anthropologists of the Whyte school, Northrop, as we have seen, isolates "ideology" per se as the crucial variable. If the primitive postulates of an ideology

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[56]Northrop, The Logic of the Sciences and the Humanities, op. cit., p. 116.

are stated with sufficient deductive rigor he feels that at least this will be an added step towards more genuinely objective social science methods.

We shall pursue the application of Northrop's factual theory in later discussions but one major political science "issue" once again should be noted. Even if a deductive system of political behavior were possible, what happens to the continuing fact-value problem?

Science and Values

The fact-value problem in its is-ought form is of course a problem that is peculiar to the social sciences. The physical sciences do not have to deal with normative problems. Northrop maintains that since normative questions are peculiar only to social science and that the methods for studying the dynamics of a billiard ball will not by themselves solve the normative value problems of man.

The study of politics cannot exclude the study of values. On this question the major schools of political science seem to be in agreement. The preoccupation of scholars like Easton, Laswell and others with problems of empiricism does not exclude the study of policy and values. As we have seen, on the contrary Easton makes the study of policy

crucial for his study of politics. Other political theorists who are not "empiricists" have also traditionally maintained that the study of values is part if not the central concern of politics. Leo Strauss stands with the "policy students" when he notes that "Aristotelian political science necessarily evaluates political things; the knowledge in which it culminates has the character of categorical advice and of exhortation."[57]

As we have said, the area where the consensus among political scientists almost hopelessly breaks down is on the question of the exact role of values in the policy and how to study them. It would be pointless at this stage to recapitulate the long history of arguments and exchange of "scholarly" vituperation that has often provided political science conventions with much heat and little light. Since our present concern is the theory of F. S. C. Northrop we will concentrate on his particular approach to the problems of value. Northrop's value theory is discussed in several areas of this work; therefore our task will be that of reducing his approach to value problems to a sharper focus here. There

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[57]Leo Strauss, "An Epilogue" Essays on the Scientific Study of Politics, Edited by Herbert J. Storing (New York: Holt, Rinehart and Winston, Inc.), p. 310.

are some inherent dangers in being brief and in simplification. But it is hoped that our discussion of Northrop's value theory in several other areas including the "good life" and "natural law" will clarify some of the questions that may arise.

The heart of the value problem for Northrop lies in the problem of whether values can have cognitive meaning. Although questions of "bias" and "value" can creep into descriptive studies Northrop feels that a deductive system rigorously stated avoids the relativity that "biases" can create. But the problem of cognitive meaning is a far more difficult matter. The problem of cognition actually appears often under varying other labels such as the fact-value problem, is-ought issue, the logical positivist-non-positivist argument and the natural law-empiricist arguments. In all these "debates" the same issue appears: is it possible to establish an objective "validity" of values? Also, is it possible to establish the truth or falsity of norms in an objective fashion? On the one hand groups of scholars generally "cognitive" in their approach have maintained that "there are normative statements in the area of law and politics which are demonstrably true or false."[58] Professor

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[58]Felix E. Oppenheim, "The Natural Law Thesis:

Felix Oppenheim on the other hand has summed up what is loosely called the non-cognitivist position in the following terms:

> Non-cognitivism maintains that intrinsic value-judgments can be neither valid nor invalid in a cognitive sense; i.e. that they are not capable, in principle, of test by reference to empirical evidence or of proof on logico-mathematical grounds.[59]

Northrop's approach to the problem that Oppenheim and others have posed begins with an attempt to demonstrate the goal oriented nature of man's behavior. Keeping our previous analysis of culture in mind, Northrop theorizes that man's physical constitution makes him much more than an empty box caught between a simple stimulus-response pattern. Man "interprets" his stimulus with his symbolizing properties. Many empiricists have accepted this type of description of man. Heinz Eulau, the behavioralist, taking cognizance of this states:

> Modern behavioral inquiry has little in common with the physiological stimulus-response psychology of behaviorism which in some departments, sought to exorcise from social science what were considered "merely mental" phenomena-drives, motivations, attitudes, defenses and so on. On the contrary, modern

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Affirmation or Denial?" The American Political Science Review, Vol. LI, No. 1 (March, 1957), p. 42.

[59] Ibid., p. 48.

> behavioral science is eminently concerned not only with the acts of man but also with his cognitive, affective, and evaluative processes.[60]

Factually man does conceptualize his experience. But basically he does this in two ways. He discovers "facts" and he "evaluates" facts. The way he evaluates "facts" according to Northrop is through the basic ideology of his culture. It is within the context of culture that man looks at certain facts and passes judgment on them. Northrop attempts to categorize two types of facts, "natural" facts and "cultural" facts. Natural facts are "first-order" facts, that is facts that exist independent of perceivers. Regarding these "pure" facts it is meaningless to be "evaluative" ethically according to Northrop. The blueness of what we call the sky cannot be intrinsically naughty, mean, or evil. The blueness just exists. Theories about whether some natural facts exist or not are *per se* non-normative theories. The cognitive meaning of these theories is therefore within the realm of proof. One can demonstrate whether the "facts" proposed by a theory in natural science are there or if they are only asserted by subjective faith.

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[60]Heinz Eulau, "Segments of Political Science Most Susceptible to Behavioristic Treatment," in *The Limits of Behavioralism American Academy of Political and Social Science Symposium* (Philadelphia: October, 1962), p. 30.

Value theories, unlike the theories of science, do not deal just with facts; they deal with norms. These normative theories deal with what "ought to be." Northrop's conception of the legal-political system involves the thesis that man-made systems are based on normative cultural theories. For instance, the Russian political system is based on Marx's ideas on what society "ought" to be. Men construct their political institutions, laws, agencies, sanctions, rewards in the light of these theories. The separation of powers in the American system is logically derived from Locke's and Jefferson's concept of limited government which in turn was based on Locke's unique concept of "mental substances." What emerge, therefore, are cultural facts. Since cultural theories create facts of human political behavior these facts are man-made and cultural facts for which Northrop uses the term "second-order" facts. A "whites only" sign in the south is such a second-order fact. Stones do not symbolize and create second-order facts. Only man with his neurological structure orders his behavior. Northrop repeatedly urges political scientists to keep in mind that there are two distinct levels of meaning for the term "is": the "is" of nature and the "is" of culture.[61] When we talk

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[61]That children are born to women is an "is" in nature. The affirmation that the "first born" has special

about the gulf between the is and the ought we have to be careful about which of the two levels of meaning we are operating in.

Normative political theories are by their very nature not based on the totality of second-order facts. Normative theories approve of some facts and disapprove of others. Thus the "naive realistic" legal theory of the south approves of whites marrying whites and disapproves of Negroes marrying whites. Theories, therefore, contain exhortations as well as affirmations. Even though people may in fact kill a president normative theories can contain fiats against the fact of killing. People may actually extort money from a governmental employee and yet a Hatch Act may regard such an act as "wrong." Since normative theories create political and social facts, Northrop regards it to be a futile venture to justify objectively a political theory on the basis of what exists in political society. Thus an appeal to people in the Southern states to be truly Christian in their attitudes on the race question may be "practically" desirable if one wants a change in the status quo. But this appeal has no "objective" or

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rights when made into an actual fact in a society is an "is" in culture. The latter is characteristic of the patriarchal groups in the Middle East, India and other "traditional" societies.

"scientific" meaning whatsoever unless one is ready to prove that being "truly Christian" means to act in the light of a scientifically reliable theory. Thus he states

> . . . normative social theories, by their very nature, as conceptions of society not yet realized fully at which human beings are aiming, differ at least in part from the factual organization of actual society, it follows that they cannot be completely in accord with what is in fact the case.[62]

The "ought" of political life cannot be derived from the "is" of actual political facts alone. For instance, again by describing the existing racial prejudice in the United States one cannot deduce that racial prejudice "ought not to exist." To bridge the gulf between the is and the ought Northrop turns to the basic postulates of the ideological system. These postulates contain certain presuppositions about the natural world. Thus Jeffersonian-Lockean theory sees nature in a three-termed relationship between mental substance, physical substance and sensed qualities. These scientific propositions can be in "error" since descriptive theories are subject to cognition. For instance, we can in science find out whether nature develops "dialectically" or not. Thus if these scientific propositions assert the existence of factors and entities which the methods of the mature

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[62]Northrop, Logic, op. cit., p. 331.

deductive science show to be untrue any political speculation which is based on these propositions cannot be objectively valid.

The full implications of Northrop's dependence on first-order facts for the regulation of second-order facts will be treated in subsequent discussions. It is important to note at this stage, however, that he is not depending on a theory of wants, pleasures and pains. Political values are final results of our conceptualizations of the world around us and, if these assumptions are based on inadequate theories about nature, Northrop points towards the possibility of the falsity of the related political values and norms.

Before we speculate about the adequacy of Northrop's descriptive and evaluative theories, an examination of how Northrop relates his methodology to particular issues of political thought will further help illustrate his extremely complex approach to the study of politics.

CHAPTER VI

MAN, FREEDOM AND COMMUNITY

The examination of Northrop's philosophy of science, culture and his political methodology has given a synoptic view of the inter-relationships in his system between nature and culture as well as between culture and politics. His treatment of some of the enduring questions of political theory concerning the nature of man, his freedom and his political community, therefore, cannot be truly understood unless one keeps in mind that Northrop is attempting to create an integrated philosophy, i.e., one which will be adequate for examining man truly "in the light of the whole." Since Northrop does not claim that there is a real ontological bifurcation in nature he feels that philosophy and the specialized sciences must once again be coordinated as they were in Plato's Greece rather than compartmentalized as they are today. As one student of Northrop's works pointedly remarked,

> Is there valid ground today for compartmentalizing knowledge into bins labeled <u>natural</u> <u>science</u>,

> social science, and the humanities? Northrop says "No!" emphatically.[1]

Northrop's "political philosophy" is, therefore, primarily a convenient abstraction from his total philosophy.

A discussion of Professor Northrop's political ideas might well begin by drawing a general picture of the present "concrete" state of politics as he sees it. Domestic politics within the United States or within other countries abroad as well as relations between countries are all part of a total chaotic situation in human affairs, as a result of not seeing the important role that ideologies play in political interaction. Another major reason for the chaos is the failure to exercise disciplined intelligence in this arena. Within the United States the conflicts and eruptions over the civil rights "struggle" are a case at hand. In illustrating this point Northrop states:

> Domestic politics also is not what it needs to be. The lack of foresight at both the state and federal levels in adjusting the cultural customs of the Old South to the unanimous decisions of the Justices of the Supreme Court of the United States in the desegregation cases and the resultant recourse to the military in full battle array with its breeding of bitterness suggests that the relation between legal

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[1]Paul Douglass, "Northrop and Curricular Reform," Improving College and University Teaching (Corvallis: Oregon State University, Autumn, 1963), p. 193.

> decisions and social customs calls for more attention by ourselves and our politicians than it is now receiving.[2]

The neglect of the cultural, i.e., the ideological, factor is particularly apparent to Northrop in the race problems in the United States. But the United States is not alone in this dilemma.

In an era where nations are emotionally committed to progress without examining what constitutes progress, where nations use "incomplete"[3] symbols of "freedom," "democracy" and "social justice" without being clear on their meaning or the operational methods needed to achieve them, Northrop's description seems to be remarkably accurate:

> Domestic events abroad reinforce this conclusion. Since World War II as Africans, Middle Easterners and Asians have freed themselves from Western imperialistic domination, they have not returned to their medieval political customs in which they were ruled by theocratic Hindu maharajas, caliphatic sultans, Judaic patriarchs or African tribal chieftains. Instead, modern-minded leaders in the Westernized African, Islamic, Israeli and Asian cities have insisted on placing their domestic affairs under democratic control. . . .

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[2] F. S. C. Northrop, Philosophical Anthropology and Practical Politics (New York: The Macmillan Company, 1960), p. 1.

[3] An "incomplete" symbol is one which has no sensed referrent. Its "meaning" is assigned within a particular theory. Locke's "freedom" is different from Hegel's "freedom."

> The result is the political paradox: The more these "democratic" governments are run by people who understand democracy and its modern ways and instruments, the less representative of their people their "democracy" is: conversely, the more the masses of the people truly express their own beliefs, values and customs in their government, the more family-centered, tribally divided and tribally led and dictatorial their new "democratic" nation becomes. This paradox defines the major domestic political problem of the nations of the world today, including, as Little Rock shows, even the United States.[4]

Thus the new nations or the "emergent" nations are only superficially attempting to "reform" their societies by the introduction of "new" values, according to Northrop. But since he argues that values are outgrowths of particular epistemologies, Lockean values and Marxist values or any other values cannot be introduced successfully without the first "trapping" the accompanying frames of reference or epistemological symbols which are at the base of the particular value systems that are to be introduced. Many of the new nations are therefore erroneously hoping to keep their "naive realistic" or "radically empirical" values without any compromise while they hope to introduce "technology" and at times "democracy." But if "technology," "modern science" or the "rights" of man are to become a reality, the cultural values of Asian and African society and the epistemological

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[4] Ibid., p. 2.

roots of these cultures will have to be altered to include the "roots" that have gone into the making of Western technology and also those "roots" which have created democracies with Bill of Rights content. But Northrop sees very little evidence of sophistication in epistemology and value theory among leaders in domestic or international politics.

If this is indeed the state of affairs in the world today, what are the reasons why we are where we are? Northrop provides a complex set of answers to this question which we shall gradually explore.

A growing body of philosophers and political theorists are also expressing their concern about the "anarchy" of values in the world today and are pointing toward "subjectivism" as the chief source of our difficulty. "The Revival of Natural Law" is a particularly good example of this concern.[5]

In his criticism of "subjectivism," however, Northrop is rather unique in his approach. Unlike other critics

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[5]The literature on this subject is vast. But the following works may provide the interested reader with a start in his enquiry. Charles G. Haines, The Revival of Natural Law Concepts, Cambridge, Mass.: 1930 and 1946. Lon L. Fuller, The Law in Quest of Itself, Chicago: 1940. A. P. D'Entreves, Natural Law, London, 1951. John Ching-hsiung Wu, Fountains of Justice, New York: 1955. F. S. C. Northrop, "Ethical Relativism in the Light of Recent Legal Science," Journal of Philosophy, LII, No. 23, Nov. 10, 1955, pp. 649-662.

of subjectivism who approach the problem by depending primarily on general metaphysical arguments, Northrop depends on his specialization in epistemology. Thus he charges that a commonly used but erroneous epistemology, applied to today's situation, is the "naive realism" of many political scientists. He also maintains that this method or variations thereof cannot give us reliable or objective knowledge, i.e., knowledge whose meaning is clear to anyone and therefore is transmissible in character. "Naive Realism" he claims, rests upon the assumption that observation gives us knowledge. This completely overlooks the fact that observation gives us knowledge only on the same plane or frame of reference.

This means that "observed" or "sensed" facts cannot be communicated to others exactly as they appear to be, unless others have had exactly the same sense experiences. Analogies do help but they can only approximate reality. Thus an astute observer, by observing the overt political actions of people in a particular country, can have some sophisticated hunches as to the "meanings" of politics there but he cannot give an accurate account of what he "saw" to others who did not "see" the same set of "facts" from the same vantage point. Only when symbols like those of mathematics or symbolic logic, whose meanings are unambiguous, are used, can there be a

"public," inter-personal understanding of a description of political reality. The "feelings" of political observers who have traveled abroad when expressed in "naive realistic" everyday language have to be treated with some skepticism.

If we are not clear on the exact meanings of symbols used in communication, we are living in personal worlds of feeling and experience and with fleeting states of mind. Yet in spite of the utter failure of this form of psychological subjectivism, unexamined feeling and emotion is often made into the basic root of our political behavior. This is partly due to the bifurcation so often assumed between "spirituality" or "consciousness" and "matter" as metaphysically different categories. Thus the Lockean-Jeffersonian mental substance--physical substance dichotomy leads to some extent to the notion of "mind" and "body" as separate categories. Northrop, arguing against the assumption of the polarity of idealism versus materialism, illustrates the dangers of making the "psychical" characteristics of man and nature such as "feeling" or "consciousness" into cardinal absolutes. This results in the rampant subjective emotionalism holding sway in our religious and political lives.

> At this point a great danger arises: the temptation to forget one's scientific and philosophical principles and turn the psychical into a cause of the

> determinateness of experience. When this happens, art and religion and science degenerate into sentimentalism. One of the most important tasks of philosophy is to [sic] clearly define the nature of the psychical, locate its place in the scheme of things, and keep it in that place. In this connection it is to be remembered that the determinate character of mind is as completely conditioned by physical and formal principles, as is the determinate character of a chemical element. All determinateness is physical and formal: the psychical contributes mere indeterminate experienced quality.[6]

In order to extricate ourselves from the morass of subjectivism Northrop emphasizes the need for objective methods, i.e., deductively formulated, in both descriptive and evaluative aspects of political science. His contribution to politics is rather unique in this respect. On the one hand, he would be rather critical of the pseudo-objectivity of much of the behavioral sciences particularly where it is shot through with "naive realism," like the inductive techniques of Lasswell. For instance, he states "sociology to date has not achieved a deductively formulated factual social theory, even for statics."[7]

On the other hand, he is equally critical of some natural law thinkers for their peculiarly vague and culture bound methodology. We will elaborate and develop Northrop's

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[6]F. S. C. Northrop, Science and First Principles (New York: The Macmillan Company, 1932), p. 262.

[7]F. S. C. Northrop, Philosophical Anthropology, p. 95.

natural law ideas in the discussion of his jurisprudence. For the present discussion a brief illustration should be sufficient. Much of the revival of natural law jurisprudence particularly of the Thomist school as well as Leo Strauss' Chicago School would be good examples of evaluative frameworks which are less than objective according to Northrop, even in spite of their claim that they excape relativism. Northrop, speaking of the Notre Dame Natural Law Institutes efforts in examining natural law in various cultures, states that

> Every major culture in the world in its classical tradition affirms a natural law jurisprudence. This fact alone, however, is not enough to establish the thesis that natural law jurisprudence escapes the relativity of ethical and legal norms. In addition it must be shown that the content of the natural law ethical and legal norms in the different cultural traditions treated in this volume is identical with the content of the ethical and legal norms of the Roman Catholic natural law jurisprudence.[8]

This view is an extension of Northrop's semantical theory that the meaning of legal and ethical norms involves symbols which are relative to the epistemologies involved. Thus a Thomist's argument that there is a reason in nature and a Chinese philosopher's assertion that there is a

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[8]F. S. C. Northrop, The Complexity of Legal and Ethical Experience (Boston: Little, Brown and Company, 1959).

universal pattern in nature only appears to constitute an agreement that there is a "natural law." But Northrop claims that the Thomist conception of what nature is and a Confucian's view of what nature is are different. For the Confucian nature is known with "intuitive immediacy" which is quite different from Thomistic "reason" and epistemology.

Therefore, to be objective one's method of approach must fit the requirements of transmissible knowledge, without which we may have our private glimpses of truth without being able to give even an intelligible description of our comprehension of reality. One way of seeing what Northrop insists upon in the way of "proper" epistemology in political theory is to examine his answer to the enduring question of ethical and political philosophy, "What is Man?".

Man

Almost every political theorist deals with the concept of the nature of man, in order to discuss "man" and the "state," "man and political values," "man and government" or "political man." Some are fairly clear in their treatment of man, while for others even the careful reader has constantly to dig through the particular philosopher's concept of man or simply note the definition as implied. Northrop himself is

rather critical of many traditional thinkers who postulate the nature of man without bothering (1) to express their concept in a disciplined logical and deductive manner, or (2) to state their concept in a manner which lends itself to some verification, through epistemic correlations. It should be noted in this connection that he is not against speculation. Being a professional philosopher he could hardly be against philosophising itself. But at the same time he urges that free speculation in the process of being stated for the benefit of others be subjected to semantic clarity. To do this one has to have a minimum degree of competence in the meaning of words. Where words refer to sense data immediately apprehended the danger of mis-communication is not great. But the speculator's vocabulary, he claims, is so cluttered up with words which do not point towards immediately apprehended facts that words of this second type are the ones that cause the most frequent breakdowns in communication. Thus in discussing the nature of man he claims that one frequently runs into phrases like "body," "mind," "spirit," "consciousness," and a host of other incomplete symbols. Since these symbols are so frequently used laymen as well as professionals alike often unconsciously assume that these terms have fairly constant or invariable meanings. Inductively trained historians, for

instance, can be easily led to make comparisons between different levels of cultural phenomena on the basis of dangerous yet rigid categories like "concept of soul" "nature of the hereafter" or even "law" whereas the actual method of arriving at meanings may vary from culture to culture. Thus as we have noted, the presence of some "law" in "nature" is asserted by the non-dualistic vedanta Hindus or the Chinese as well as St. Thomas has, from Northrop's viewpoint, erroneously been regarded as proof that nature contains values by some respectable "natural law" scholars.

Northrop attempts to base his own concept of man on a philosophical awareness of the findings of the sciences, thereby avoiding the "culturalistic fallacy," as he uses that term. Man to him is a composite of all that we "scientifically" and "objectively" know about him, i.e., in the "light of the whole." His emphasis on the sciences does not result in viewing man as an isolated entity in himself. He is critical, for instance, of confusing the biological concept of man and the total man. In our present age of specialization he claims there is always the continuing danger of reifying the abstractions of our particular disciplines into absolute entities. Therefore, to him a fusion of the knowledge of various disciplines is essential for a greater understanding

of the nature of man. His criticism of a purely biological approach is evident in the following passage.

> Furthermore, the organic character of the inorganic universe and of living things has been so firmly established by recent physics and physiological chemistry, that one must be very suspicious of all theories of biological organization which would locate its source wholly in internal entities, whether they be entelechies, or genes or organizers. At a time when certain physicists are threatening to throw all entities out of inorganic nature, and leave nothing but mathematical equations and formal relatedness, it comes with something of a shock, to find so many contemporary experimental zoologists, locating the form of that most organic of systems, the living organism in nothing but internal entities.[9]

To avoid, therefore, the constricted view of man as seen in only one field one must be philosophically sophisticated enough to integrate the findings of separate disciplines. The challenge that any "inter-disciplinary approach" for instance, within the "field" of international relations must face is that without explicit, clear consistent and philosophically sophisticated methods any approach for "integrating" the social sciences clearly cannot succeed. A mere throwing together of geography, sociology, economics, politics and anthropology without having a shared epistemology does not give us a view of "man" or "nations" or "international

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[9] F. S. C. Northrop, Science and First Principles (New York: The Macmillan Company, 1932), p. 214.

politics."[10] Nor does the focus on a single problem like "Underdevelopment" or "South Asia" help. This becomes evident again in examining Northrop's critique of the biological concept of man.

> Yet there is no reason why biological philosophy should be in such a state. Enough evidence is at hand to correct the one-sided overemphasis of the gene theory. The only difficulty is that one must cultivate the philosophical attitude of mind in order to know it.[11]

The reason for this has been mentioned in the narrowness of our disciplines on the one hand and our philosophical inability to integrate them on the other. Northrop claims that this

> . . . is inevitable. The chemist is concerned with the properties of gross matter, the physicist with matter and motion, the astronomer with stellar bodies, the student of thermodynamics with energy and its transformations; but the living organism is all these factors merged into a grand synthesis. Moreover, the essence of life centers in the cosmic forces which produce the synthesis, as well as in the local constituent materials themselves. Now, the science of the synthesis of the sciences is philosophy. Hence to understand life without looking at one's local technical experimental evidence from the philosophical point of view is impossible.[12]

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[10]The "inter-disciplinary seminars" that are held in state universities from time to time provide some examples.

[11]Northrop, Science and First Principles, p. 214.

[12]Ibid., p. 214.

Man, therefore, even "physically" speaking is not just the "flesh" and "blood" individual entity but is a synthesis of various other elements of nature. Therefore the mature scientist must not see man and nature merely from the confines of a particular "discipline" or viewpoint. Nature itself is not merely chemical, or biological or geological in character. The mature scientist, if he is interested in "man," must also subject to rigorous analysis all that is known about man. Here Northrop, being the philosopher that he is, maintains that analysis is the beginning of philosophy. Regarding this analysis of the "scientific" view of nature he has stated his argument at one point in the following manner:

> Now, the science of the synthesis of the sciences is philosophy. Hence to understand life without looking at one's local technical experimental evidence from the philosophical point of view is impossible.
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> This does not mean that every experimental or descriptive biologist should close his laboratory and study professional philosophy; it does mean, however, that the present approach to living things through intensive analysis must be supplemented with the construction of a general accurate picture of the living organism in its actual physical, geological, chemical, astronomical and thermo-dynamical connection with the rest of nature.[13]

To take such a view is not "mystical" in the common

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[13] Ibid., p. 215.

and usual sense of the word. Northrop keeps both feet too solidly implanted in the sciences at all times to be called a mystic. He is simply saying that there is, at present, no one science of man and that constant integration of knowledge is needed. Man is partly his genetic factors but scientifically he is also a synthesis of nature. This synthesis is only intellectually known. It is not immediately given to the senses.

> . . . the senses are always misleading the experimental worker. Unless one is continually correcting and supplementing observation with a correct conception of the general physico-chemical nature of life as a whole, which reveals it to be a complex heterogeneous physico-chemical equilibrium rooted as unequivocally in the physical and dynamical foundations of the environment, as in internal private genetical materials, the apparently solid character of living things causes one to regard them as a purely local entity. Then the notion arises that life is to be understood solely in terms of what is contained in the gross local body itself.[14]

In our discussion of Northrop's general philosophy we have treated his concept of man in greater detail than is attempted here. One problem remains for our present discussion. If man is part and parcel of nature what role does his "free" will, if any, play in his interaction with other men, for instance in politics?

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[14] Ibid., p. 215.

The basic answer that Northrop gives is that the ability to symbolize in a variety of ways and categories, due to man's peculiar nervous system, gives man the ability to have ideas. These ideas are the roots from which political action and political behavior spring. The brain does not come with meaning and symbols and values already in it. These symbols can be given meaning by the individual human being. But most people are content with habitually living with the same set of symbols that society and its institutions have taught them. Institutions are the vehicles and instruments of societies' ideas, and institutions can help propagate the epistemologies, and the consequent ideas they rest on. But institutions, which are the result of man's ideas, are not mechanically deterministic. They are not the causes in every case for man's behavior. A man can, through reflection and knowledge, arrange his own symbols in a different way than most other men have done in society.

There are several implications for politics in Northrop's concept of man. Man is not by his very "nature" a political animal, an economic animal or a religious animal. His "nature" leaves his cortical symbols undefined. When man's symbols are given meaning by other men or in the case of a genius by himself then he becomes a goal oriented man

who with other men with similar goals and purposes builds institutions, economic systems and patterns of politics. All of man's political institutions are "epistemic correlates" of his ideas. The institution of property is a reflection of the idea of property. In the United States, property as an institution exists because of the "trapped" Lockean epistemology in most people's minds. Institutions have no mystical character for Northrop. They are counterparts of men's ideas, instrumental means for fulfilling purposes. These purposes, however, themselves can be "good," "evil," "bad," "reliable" or "unreliable" from Northrop's "scientific" point of view.

Thus, for Northrop man simply because he is part of nature is not relegated to a pre-determined existence. This position again, it must be noted, is not that of a mystic. He attempts to justify this position by discussing the neural nature of man. Man is a dynamic creature whose "neural organization is a mixture of rigidity and flexibility."[15] Without this twin characteristic man would be either constantly reacting in a purely conditioned manner or on the other hand would know only what appears immediately before him. If the former condition alone were true, the question

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[15] Ibid.

of political and moral responsibility would evaporate. If only the last were true, the Humean analysis of man's ability to "know" would be the definitive one. In the light of this discussion an important question needs to be clarified and answered. If man is partly structured, i.e., physically, and partly unstructured, i.e., neurologically, what is Northrop's position on the question of the extent of man's freedom in dealing with the problems of politics?

The Problem of Political Responsibility

This seemingly philosophical question has immediate and practical implications for political science. Without a clear notion of the nature of human freedom, political systems which rest to some degree on consent cannot continue to function with clear guidelines regarding the "ideal" conditions in which freedom can operate.

As Sidney Hook notes, the question of whether man's nature is physically deterministic is related to the problem of human freedom:

> Whereas in the past the extension of the deterministic philosophy in the natural sciences was hailed as a support of human freedom because it increased man's power of control over nature, today belief in determinism in the social sciences and social affairs is feared by many because it increases the power of

men to control other men.[16]

Northrop's discussion of political freedom and responsibility is dependent on his philosophy of causation as particularly demonstrated in the physical sciences. As we have seen, Northrop's political man is never estranged from scientific man and the scientifically known universe around us. Therefore, in order to understand the extent of human freedom, we first have to understand the extent of mechanical causation around us.

Laymen, in their usual common-sense references to causation and determinism, usually mean necessary relationships between observed events as causes. Were this the only meaning of causation and were this alone true, determinism would leave very little room for human freedom. Fortunately, however, the possibility of freedom cannot be this easily dispensed with. Nature as known by mere observation does not provide true evidences of causation or relatedness. Without speculation and the exercise of intelligence we would see only the succession of perishing images following each other. Sunsets would follow sunrises and sunrises would

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[16]Sidney Hook (ed.), Determinism and Freedom in the Age of Modern Science (New York: Collier Books, 1958), pp. 7-8.

follow sunsets and apart from an aesthetic sensitivity to the world around us, we would not know a truly public world. As we have seen, Northrop believes that Hume's critique of causation is especially effective when applied to events seen by mere observation. In physics also causation as seen by mere observation has no major role to play. The perceiving of causation in human everyday experience or in the disciplined world of physics, requires the exercise of human speculations and therefore of freedom. Illustrative of this theme is the following statement by Northrop:

> Since, as Hume showed, we do not observe any relations of necessary connection, two things follow: (1) The concept of mechanical causation in modern physics cannot be attained merely by direct inspection of a common-sense example or by so called "analysis" of the grammar of an Englishman's description of such an example; only temporal succession will be found by such a method. (2) Physical systems obeying mechanical causation can therefore be known only by deductively formulated, axiomatically constructed, indirectly verified theory.[17]

Nature, therefore, in its public aspects is known speculatively. It is from speculation that we derive deductive models and then operationally verify them. The theoretical deductive system can be derived in a variety of ways.

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[17]F. S. C. Northrop, Causation, Determinism, and the "Good" in Human Freedom, Sidney Hook, Editor (New York: Collier Books, 1958), p. 205.

This itself is of major significance for any discussion of human and political freedom. To be truly scientific one must have speculatively introduced theories. Operational and empirical tests, whether in physics or politics can come only later. As Northrop himself states:

> The universe in which we live is very complicated. In order to obtain theories adequate to understand it, it is necessary to open the basic concepts of scientific theory to every possible source of meaning. Flights of the imagination, speculation--both physical and metaphysical--and mathematical investigations not merely of this empirical world but, as Leibnitz and Bertrand Russell following him have noted, of all possible worlds are not merely permitted but required.[18]

This illustrates that man's curiosity and the theories with which he searches for reality do matter. Without speculation man can not know and this itself illustrates his moral responsibility. Whether it is truth in the natural sciences or knowledge about himself that man is seeking he is truly free to initiate his own theoretical inquiries. There is no gap between the social and natural sciences on this question.

> Hence, quite apart from the scientific evidence that determinism does not hold even for subatomic inorganic systems in quantum mechanics, there is evidence that

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[18] F. S. C. Northrop, The Logic of the Sciences and the Humanities (New York: Meridian Books, Inc., 1959), p. 124.

> scientific knowledge is quite compatible with moral responsibility and the rejection of the reductionism of judgments [sic] of right and wrong to causally deterministic antecedent factors.[19]

The ability to speculate that is inherent in man has two separate implications for political thought. The descriptive political scientist like his counterpart in the natural sciences must speculate about the "is" just as Einstein did or just as theoretical physicists do. Theoretical physicists in Northrop's view are truly creative persons. They do not merely observe and then relate their observations to each other. They speculatively create theories about nature. Therefore, the age of empiricism has not destroyed the need for speculative theory in physics or in politics. Mature science needs more speculation than science in the inductive or natural history stage of development.

Also, man's normative political theories, too, require the work of speculative minds. According to Northrop man's "imperatives" or "oughts" do not come with labels fixed by nature. They, too, are the creations of man operating through his culture which in turn rests on man-made epistemologies. Man is a goal oriented creature but his goals to

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[19] F. S. C. Northrop, Determinism and Freedom, Sidney Hook, Editor (New York: Collier Books, 1958), p. 211.

a considerable extent are his own creations. Man's political theories can be creatively formulated. Also, the implementation of these requires the creative abilities of man again. Just as the discovery of epistemic correlations in science requires inventiveness, so also the discovery and construction of political institutions for the implementation of political values also require the genius of man. Man's freedom to speculate about what "is" and what "ought" to be, as well as the search for efficient institutions for their implementation arises out of the peculiar character of our nature.

Apart from man's freedom to speculate about the world around him there is yet another aspect of man's freedom. This has to do with the special type of human causality. Thus, Northrop states:

> Recent psychology has emphasized the importance of the unconscious portion of ourselves. From psychoanalysis we have learned the value, if we would know ourselves, of bringing our dream life and the vast portion of ourselves that goes on unconsciously and automatically into the center of consciousness. Nevertheless this supplementation of introspective conscious psychology with the psychoanalytic psychology of the unconscious does not take us to the truest and fullest nature of ourselves.[20]

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[20] F. S. C. Northrop, A New Approach to Human Nature, Reprint of an article published in the Christian Register, January, 1954 and sent to author, p. 1.

The fact is, Northrop insists that this nature is such that we do not operate only under the laws of causality in inorganic nature. Whereas changes in the systems of inorganic nature can be predicted on the basis of laws of mechanical causality, an entirely different situation occurs in the case of man. In inorganic nature if we are able to isolate the independent variables at a given time we can with the help of mathematics predict the verifiable values of the system at a different time. Causality in inorganic nature is merely the relationship between two states of the same system at two different times.

Human nature, unlike inorganic nature, does not lend itself to this kind of mechanical causality. The kind of causality that governs man's actions to a significant extent is termed "logico-meaningful," a phrase Northrop borrows from Professor Pitrim A. Sorokin, the Harvard sociologist.[21] Briefly, what Northrop means by "logico-meaningful" is the epistemology with which man integrates the "facts" or "stimuli" of his experience.

Northrop is asserting that man is a "knowing" animal.

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[21]Pitrim A. Sorokim, Society, Culture and Personality (New York: Harper and Brothers, 1947), pp. 145-149; 333-335.

This for Northrop means more than it does to the layman:

> The nature of logico-meaningful causality begins to become evident when one pursues the analogy of Newtonian mechanics in the cultural sciences as far as it will go. Any natural system designated byNewtonian mechanics has its entities. They are the physical or scientific objects. The cultural systems also have their entities. They are the human persons and their physical environment. When in Newtonian mechanics, the postulates and values of the variables defining the state of any system are specified, the ordering relations of the system are made determinate. The mere specification, however, in any cultural system of the positions and moments of the persons in that society is not sufficient to specify the ordering relations which define the culture of those persons.[22]

An example of the scientific importance of recognizing this independent variable in logico-meaningful causality is the fact of the continuing tensions between Hindus and Moslems in the Indian subcontinent.

> An example will suffice to make this clear. In many village communities of India, Muslims and Hindus have lived together for centuries. Most of the Muslims are converts from Hinduism; thus racially the peoples are for the most part identical. Hence, the cultural differences between Muslims and Hindus which are so great as to necessitate the present division of the 19th century India into Pakistan and New Delhi's India are not to be explained by physical and genetic differences. The momenta and positions of the bodies of the Hindus and Muslims in any single village hardly account for the differences in their two cultures. The position of Muslims and Hindus is identical since

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[22] F. S. C. Northrop, The Complexity of Legal and Ethical Experience (Boston: Little, Brown and Company, 1959), pp. 105-106.

> both are located in the same village. If one watched both groups walking down the street there might be slight differences in their momenta, but hardly differences sufficient to account for the differences in culture. In fact we would suspect that where differences in momenta between Muslims and Hindus in the same village appeared, these differences would be the effect rather than the cause of the cultural differences. Clearly the cultural ordering relations are not given after the manner in which the ordering relations of natural systems exhibiting their mechanical causation are given.[23]

Northrop's thesis, therefore, essentially affirms that the key variable in human behavior is the meaning or philosophy that a person or persons use in integrating the raw data of experience.

His notion of the meaning of philosophy here refers to an inter-related set of postulates in man's cortex that governs his behavior in society. Is there any evidence that such a set of postulates actually exists and if so, can the content of the postulates vary from man to man and from culture to culture? For Northrop's thesis to be valid both the questions must be answered in the affirmative. If the answer is negative, obviously there are severe limitations to human freedom in politics or in other forms of social interaction.

For an answer, Northrop's theory relies on several relatively recent empirical findings in psychology,

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[23] Ibid., p. 106.

anthropology and cybernetics.[24] Thus as we have noted in our discussion entitled the "Nature of Human Society," Northrop depends on Dr. Lorente de No, the Spanish experimental neurologist who "gave anatomical experimental reasons for believing that the nerve cells in cortical neural nets are ordered in circles as well as throughways,"[25] thus lending support to the thesis that man's ability to symbolize is far more complex than any simple stimulus-response pattern. But apart from medicine, Northrop finds that in cybernetics Von Neuman and Wiener discovered that circular networks or reverberating circuits were capable of memory and therefore of symbolization. Also, Warren S. McCulloch, the psychologist, and others have noted that the retained stimulus or trapped impulse in reverberating circuits is actually equivalent to

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[24]Lorente de No, "La Corteza Cerebral del Ratar," Trab. Lab. Invest. Biol. Univ. Madr., 20, 41-78, 1922. Warren S. McCulloch and Walter Pitts, "How We Know Universals," Bull. of Math. Biophysics, 5, 115-133, 1943; "The Perception of Auditory and Visual Forms," Bull. of Math. Biophysics, 9, 127-147, 1947. Warren S. McCulloch, "A Hierarchy of Values Determined by the Topology of Nervous Nets," Bull. of Math. Biophysics, 7, 90-93, 1945. Arturo Rosenblueth, Norbert Wiener, and Julian Bigelow, "Behavior, Purpose and Teleology," Philosophy of Science, 10, 18-24, 1943. Norbert Wiener, Cybernetics (New York: John Wiley and Sons, 1948).

[25]F. S. C. Northrop, Philosophical Anthropology and Practical Politics (New York: Macmillan Company, 1960), p. 48.

the basic ideas that are trapped in the minds of men. Putting all these findings together Northrop concludes that the integrating aspects of our human nervous system contain a set of trapped symbols which in turn screens all the incoming stimuli from then on, and directs our bodies to react or "behave" in certain ways.

In Northrop's terms, then, the basic answer to the question of "freedom in man" is that man has the inward capacity to choose the basic philosophy, to determine values, to trap in the integrating area of his cortex and to conceptualize the facts that he experiences. It is the form and content of man's philosophical and political symbols which make human causality logico-meaningful, without which "there is only a muscle twitch to stimulus; there is no morality."[26] In creating the basic philosophy in each of us, all sorts of possible alternatives can and do arise. But it is peculiar to our own nature to be able to create these basic philosophies and it is also peculiar to us that these can give meaning to the millions of facts in our experience.

> Only concepts can bring one fact of experience into relation with all other facts. The basic

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[26]F. S. C. Northrop, Reprint of article published in the Christian Register, January, 1954, "A New Approach to Human Nature," p. 4.

> concepts generating the hierarchy of all concepts define a person's or a culture's philosophy.
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> One caution is to be noted. The foregoing conclusion does not mean that the moral life of the individual and the unity of any culture is a passive, purely receptive, mechanical process. With the almost infinite number of stimuli striking any human nervous system through the duration of a human life, the representatives of those stimuli which are basic and capable of being used to define, deduce or anticipate others cannot be discovered by mere receptivity. Different possible candidates for the status of being basic must present themselves and be tried out through trial and error.[27]

There is, therefore, according to Northrop no purely "economic" determinism which gives us our ideological orientation. No economic fact alone directly determines our behavior. There is always the ideological screening process that all facts have to go through before they can determine our behavior. Northrop's position then does amount to a theoretical argument for man's intellectual freedom and moral responsibility as a fact and not just as an ideal. In a later chapter we shall pursue individual man's responsibility in connection with Northrop's jurisprudence.

But man's freedom demonstrates itself in two distinct levels which are important. The first level is that of the creation of "cultural" facts. Here Northrop's nature-culture dichotomy should be kept in mind. Nature does not

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[27] Ibid.

automatically give rise to cultural values. Thus as noted in India within the same geographic and economic setting one can create Islamic cultural facts and Hindu cultural facts. Man's artifacts are of "his own" making. Economic, political and social facts are not pure facts, they are more truly value-facts, that is, facts which are created by particular value or ideological systems. Therefore, whether the Soviets are eliminating the large farmers in Soviet Russia, or the United States Government is attempting to retaliate against foreign governments with economic sanctions for the appropriation of American "private" property, cultural and ideological man qua man is really demonstrating his freedom to build his artifacts on the fruits of his speculation, erroneous as his speculation may be. However, it should be noted again that Northrop's theory does attempt to separate erroneous theories from correct theories.

Besides freedom at the cultural level there is yet another level of importance. This second level deals with man as an individual. In the case of individual man in most instances the trapped values of his culture do significantly determine his political and social behavior. This is again, not economic determinism but cultural determinism at work. Thus even the "individualist" in economics and society is

demonstrating fragments of the philosophy of the "Wealth of Nations" and/or Herbert Spencer's "Social Statics." A legislator's concern which may be genuine, over the rights of Mrs. Murphy and her boarding house vis-a-vis the public accommodations section of the proposed Civil Rights Bill, can according to Northrop's theory be traced back to Lockean assertions about property.

The constitution of our mind, both "cultural" and "individual" is therefore a synthesis of our cultural values. Culture and society make elaborate attempts to inculcate in us their particular value system by trapping in our cortex the basic epistemological tools necessary to direct our behavior in a culturally accepted manner. The entire process of education in a gradual and subtle manner teaches us these cultural values. Culture itself is primarily the grouping of men with similar ideological orientations.

> Since there is a common culture only when there is a common set of universals held by at least a majority of the people in the society in question, we now see why religious and secular education, beginning in the mother's lap at childhood and carried on to maturity, are present in and a necessity of any culture.[28]

Since cultural institutions do preserve the basic

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[28]F. S. C. Northrop, A New Approach to Human Nature, p. 4.

intellectual roots of man's life, is not man then purely cultural bound? Are men not completely molded by the norms of their culture? Are men not therefore incapable actually of being anything other than their culture makes them? In answering these vital questions Northrop shows his Platonic influence and persuasion clearly. Basically he argues that most laymen in their daily preoccupations, and even the professional in his field of academic specialization, are not really busy examining the forms of their culture; in this sense they are culture bound and "determined." But some rare individuals do demonstrate creativity. They are

> creative in the second sense--achieved only by the sages of any culture--of discovering, expressing and conveying this philosophy. Thus man creates not merely all the artifacts which are culture, but also all the diverse mentalities and philosophies which guide him in the creation of the artifacts.[29]

Therefore, the challenge and the possibility of re-creating the political and social assumptions of our times are always before us. The task of course can be actually performed only by someone with the capacity and perseverance of a Newton, a Marx or an Einstein. Then there are also the problems of effectively institutionalizing the new set of assumptions in the place of the old ones as is evident in the

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[29] Ibid.

civil rights struggle especially in the South today. Here, too, creativeness in a practical sense, i.e., that is within the reach of many persons, is important.

This does not mean that Northrop is anti-democratic or that he is urging that Newtons and Einsteins be elevated into positions as "guardians" of society. He is simply taking note of the fact that the creative abilities of people vary and that political systems can ill afford to ignore this fact. As is noted in our later discussion, however, Northrop's own political ideals put certain "scientific" standards and limitations which creative people must meet before their ideas are to be implemented. Also, ideally Northrop sees the democratic legislative process in his system as the institution in which policy making must take place provided the content of the legislation meets these same "scientific" standards and limitations. The creative persons nowhere in Northrop's theory are supposed to represent or speak for the preferences of others.[30]

Since this kind of creativity is very rare, society in order to pass on to better assumptions must keep open the

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[30]Chapter VIII, "Science and Ideal Values" elaborates on this in greater detail. This point was again confirmed by a telephone conversation with Professor Northrop on 5-27-1964.

avenues of intellectual inquiry. This of course presupposes a particular "ideal" set of institutions and will be discussed further in connection with Northrop's ideas concerning the "good" state.

Although only the sages can recreate the intellectual foundations of one's culture, this does not necessarily condemn the layman to a menial existence. One misunderstands Northrop's entire philosophy if one assumes that Northrop would like to create a society where only the sages truly govern. Northrop's attempt to create an ideal cosmopolis is a far cry from Plato's Republic. One example of erroneously identifying Northrop's philosophy exactly with Platonism in this respect occurs in the writing of a professional philosopher, Professor Horace L. Friess of Columbia University. He states that:

> The thought of gaining more intelligent control of culture has indeed lured many philosophers from the days of Plato to our own. The kinds and the amount of knowledge available have grown tremendously, but their employment for so complex an end is perhaps more difficult to oversee than ever. One suspects that even so elaborate an attempt as the recent one by F. S. C. Northrop (1893-) to find the key to cultures in the logic of their sciences generalizes far too simply, and invites a modern version of control by philosopher-kings.[31]

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[31] V. Ferm (ed.), A History of Political Systems (New York: The Philosophical Library, 1950), p. 595.

The possibility of man's conscious trapping of his basic universals is always there for Northrop. Northrop, therefore, is speaking in normative terms based on the fact that freedom is possible. This does not mean that freedom as it is possible is an actual social fact. It is a natural fact and if societies and political institutions are not built on propositions based on this natural fact obviously the freedom of man can be easily crushed by the juggernauts of cultural institutions, as exemplified by "primitivism." If social philosophies continue to assume that Man's ideologies are primarily reflections of responses to stimuli in the external world, and if man is considered to be under the dominion of automatic responses to pleasure and pain, the march of God through history, an economically determined dialectic or Hobbesian and Newtonian mechanical forces or "natural" laws like "supply and demand," then the natural fact of human freedom can be obliterated by the cultural artifacts and Leviathans created by erroneous political and social theories. Yet these theories even in their error are complex metaphysical and epistemological systems. To suggest, therefore, that intellectual care is needed to examine where our theories went wrong is hardly the same as arguing for societies controlled by philosopher-kings.

The Rationality of Man

The foregoing is Northrop's approach to the problem of human freedom. But oftentimes discussions of human freedom are interrelated with the question of the rationality of man. Special pleaders for individual liberty, e. g., often assume in different degrees the proposition that man is basically a "rational" being. John Stuart Mill, for instance, in moving away from his mechanical utilitarian heritage, argued indirectly for the rationality of man.[32] Kant's well known assertion that certain rational notions such as the categorical imperative as the basis of reason are known a priori and as part of our very nature is another example of this. Also, many arguments for the existence of a natural law, as in Thomism, are based on the assumption that there is some inherent human reason which if allowed free play can discover rational laws in nature.

Although F. S. C. Northrop is also a special pleader for individual freedom and dignity, he does not assume that man is "rational" by nature. Nor does he assume, like Nietzsche, that man is "irrational" by nature. All attempts to

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[32]For a full discussion of Mill's departure from Utilitarian irrationalism see G. H. Sabine, A History of Political Theory, 3rd Edition (New York: Holt, Rinehart and Winston, Inc., 1961), pp. 707-709.

define man in terms of "nominalistic" ethical adjectives "good," "bad," "rational" or "irrational," unless they are related terms in a rigorously formulated deductive theory, consist of asking an irrelevant set of questions from Northrop's point of view. The meaning of ethical adjectives can be derived only from the total set of propositions of which they are parts. Therefore Northrop, the empiricist, again refers to the objective evidence (as he uses this term) available, in order to discuss any aspect of human nature. Reverting to the theory of trapped universals he based his discussion on the "rationality" of man on the implications of that theory.

The evidence of the theoretical and empirical investigations of the neurologists, psychologists and others referred to before give no indication whatsoever, he claims, that only concepts based on "right reason" or "rational models" are trapped by men. The varieties of ideas or symbols that can be trapped are almost infinite in number. "Rational" or "irrational" being value laden terms can be used descriptively only in connection with the ideas that are trapped rather than merely to the fact that man has flesh, blood, cortex and neurons. For instance, he states

It would be an error to conclude, as some have

> done, that this conception of human nature is false because it is excessively rationalistic. Whether the content of a person's conscious mind or unconscious "trappings" are rationalistic or not depends upon the content [italics mine] of what is trapped.[33]

Stated in another way, the fact that man traps symbols is neither indicative of his rational, irrational, good or bad character. Only his symbols, since they are man made, can be "correct" or "incorrect" according to Northrop. Thus all sorts of ideas, concepts, symbols rational, irrational theoretical or aesthetic can be trapped:

> As psychoanalysis shows, one can trap the epistemic representative of a passion, an emotional disturbance, a sexual feeling, an obsession or any other emotively charged past experience or image as easily, if not more easily, than one can trap the epistemic representative of a fence post, a piece of granite or the mass of an external object which we call the moon.[34]

The consequences for political theory are self-evident. One cannot assume the inherent rationality of man, particularly when the cultural system is itself irrational. The German Nazi ideology which itself arose partly from Fichte's legacy of voluntarism is basically an irrational type of thought. Not even a Gandhi could appeal to the inner "human" conscience or any concern for universal human rights

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[33]F. S. C. Northrop, Philosophical Anthropology, p. 63.

[34]Ibid.

in the inner crevices of a true Nazi mind. Merely "balancing of interests," the legislative process, the Weimar constitution, or merely creating the trappings of democratic institutions could not per se change the trapped impulses in the minds of the majority of Germans in the pre-World War II era.

In his analysis of the German mind Northrop sees Fichte playing a crucial role in its formation. Speaking of Germany before the end of World War II Northrop states:

> To understand the Germans of our time is to realize that their culture was built predominantly on Fichte and Hegel, as Anglo-American culture has rested on Locke, Hume and Aristotle.[35]

In analyzing why Fichte's theory is at least in part responsible for the success of Nazism in pre-war days Northrop makes the following comment:

> Thus upon careful analysis, the freedom turns out, even for Fichte, to be not so much in the will of ordinary human individuals as in a transcendental or superhuman will which alone has freedom and which, in positing the ordinary human individual, at the same time limits that individual by its antithesis, the non-human ego, or nature. In fact, Fichte believes that a contradiction would exist in his theory did he not go on to the absolute will as a synthesis which embraces the human ego and nature, at the same time removing the contradiction between the latter which would exist were they taken as primary in their own

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[35]Northrop, The Meeting of East and West, op. cit., p. 214.

> right. This absolute will is "pure freedom." It alone is unlimited and unconditioned. Human wills, on the other hand, are the mere expression of its activity.[36]

The Nazis were able to build the Nazi state on the cultural base provided for by the Fichtean concept of freedom in Northrop's analysis. Thus, noting the response finally given to the ideology of Nazism, Northrop states

> This popular response was nourished by many items, not the least of which was the identification of morality with the free act of the will and its demands which Kant's Critique of the Practical Reason and the initial stages of Fichte's philosophy emphasized. In fact, the culture of the Nazis may be defined as a Fichtean voluntarism which, rejecting the logic of dialectic appropriated by the communists, is developed along Nietzchean and pseudo-Darwinian, rather than Hegelian, lines.[37]

Similarly, from Northrop's point of view it would be an error to assume that unless Marxist-Leninist epistemology is modified, sheer economic facts, improved living conditions and ergo "mellowing" processes will bring about a fundamentally different Soviet Union from the one that was involved in the Cuban crisis. This should not be interpreted to mean that Northrop is playing a fixed "national-character" game in political analysis. The possibility of change exists in

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[36] Ibid., pp. 210-211.

[37] Ibid., p. 215.

political systems. But political change cannot come about by some sort of natural evolution. Chinese and Indian political systems in the past have had long histories of relatively high cultural, ideological and political stability and without much natural "evolution" taking place.

For democratic theory, therefore, the Northropian lessons are equally clear as they are for other political "isms." Democracy cannot survive without a specific ideological orientation. Legislative processes, judicial systems or presidential power are some of the operational means for implementing particular policies provided the basic "consensus" on the basic ideology is there. Although other analysts, D. Boorstin, for instance, are also very much aware of the role of consensus or ideological "givenness" in democracy, Northrop attempts to analyze the specific nature of democratic ideology. For without this clarity, he claims the consensus can erode away. Even now Northrop feels that in our jurisprudential attitudes towards the Bill of Rights,[38] the "rights" of "minorities" and other vital issues, there is already in the United States the danger of increasing fuzziness about the "primitive" assumptions of democratic

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[38]Such as the Frankfurter-Hand view of the "rights" in the Bill as "admonitions to forbearance" only.

political theory. By merely building overt democratic political "gimmicks" and by pseudo-empirically studying and describing them a democratic system cannot continue to function.

Northrop's attempt to define political reality in terms of the overt behavior of people guided by their covert symbols and ideas leads him to an examination of the actual content of the institution within which so much of our politics takes place. This institution, the "nation" has a particular meaning in Northrop's political theory.

Nations and Political Groups

The terms nations and states are of course well known in classical categories of political science and political theory. Before the rise of behavioral theory traditional political science's core concept has always been the "state" or in certain cases because of national "feeling" the term "nation-state." Northrop's own discussion of the nation-state is deceptively simple, but important. Basically he takes traditional political scientists to task for not constantly reminding themselves of the abstract nature of the concepts "nations" and "states." Immediate experience cannot give us any trustworthy knowledge of nations and states. Nations are

not entities that we know with immediacy as in the case of a sunset. "Nation" and "State" are theories about facts or more clearly they are abstractions from the facts of experience. Political scientists, according to Northrop, often fail to make the important distinction between entities known with immediacy and entities known through theoretical concepts. If this distinction is not made the danger of reification of concepts occurs or "what Whitehead called the fallacy of misplaced concreteness."[39] Then political scientists mistake concepts like "state" and "nation" for concrete physical entities under the guise of "realism."

> Thus when taken by themselves as the elementary concepts in foreign policy or international relations, as is done by Professor Morgenthau and Mr. Kennan, instead of being realistic or scientific concepts such expressions are abstract words that are confused with concrete things.[40]

The fact that many political scientists do confuse the theoretical entity "nation" with some "concrete" fact does not mean that the concept "nation" needs to be abandoned. The situation can be "simply" corrected by clearer "definitions" of the term or terms as the case may be. For "the nation" to become a scientific concept the important components of a

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[39] F. S. C. Northrop, Philosophical Anthropology, p. 76.

[40] Ibid., pp. 75-76.

nation have to be clearly specified. Often what is specified clearly is only the physical components of nations like "natural resources" or "armed forces" together with an intuitive component such as "feeling" of unity. This is not a sufficient description of national political system. Northrop further regards usual working definitions of nations and states as being somewhat similar to knowing chemical compounds only through their relative weights. Just as a chemist could not go far in describing the behavior of interacting chemical compounds if he knew only their weights so also political scientists often go astray in dealing with inter-state, international or even inter-group politics by depending on limited abstractions like "power." By making this theoretical concept "power" the basic ingredient of another theoretical concept like "nation" or "politics" these entities are not clearly defined and yet political scientists continue to use them as concrete entities, thereby again reifying abstractions; certainly the variables of which they are composed are not clearly specified. Professor Hans Morgenthau, Northrop charges, is a particularly good example of this. Thus in attempting to define a nation Morgenthau states:

> A nation as such is obviously not an empirical thing. A nation as such cannot be seen. What can be empirically observed are only the individuals who

> belong to a nation. Hence, a nation is an abstraction from a number of individuals who have certain characteristics in common, and it is these characteristics that make them members of the same nation. Besides being a member of a nation and thinking, feeling, and acting in that capacity, the individual may belong to a church, a social or economic class, a political party, a family, and may think, feel, and act in these capacities.[41]

But Morgenthau's attempt to abstract a clear concept of a nation is rather confused from a Northropian point of view. The major "characteristic" seems to be feeling and yet nowhere does Morgenthau attempt to devise any operational method for testing, measuring or objectively finding "feeling." Nor is this surprising. Morgenthau's major "method" for determining descriptively or normatively any aspect of political reality is "intuition"[42] and "intuition" hardly

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[41]Hans J. Morgenthau, Politics Among Nations, 3rd Edition (New York: Alfred A. Knopf, 1961), p. 101.

[42]The "naive realism" of Morgenthau is evident in the following procedural rules that he provides with respect to the giving of foreign aid:

> However, an analysis of the situation in the recipient country and, more particularly, its projection into the future and the conclusions from the analysis in terms of policy can only in part be arrived at through rational deduction from ascertainable facts. When all the facts have been ascertained, duly analyzed, and conclusions drawn from them, the final judgments and decisions can be derived only from subtle and sophisticated hunches. The best the formulator and executor of a policy of foreign aid can do is to maximize the chances that his hunches turn out to be right. Here as elsewhere in the formulation and conduct of foreign policy, the intuition of the statesman rather than the

gives us trustworthy knowledge of unseen factors.

Because of the vagueness of the usual meaning of the term "nation" Northrop feels that the task of clearly isolating the key variables of this term is imperative before it can be of any use in the study of politics. Here Northrop is not opposing a non-existent opposition. But the overwhelming majority of textbooks on international politics demonstrate a type of naive realism which amounts to the epistemological assertion that observation and intuition give us objective knowledge of reality.

Northrop's own attempt to treat "nation" as a theoretical entity takes cognizance of such "facts" as that political entities have force, arms, resources, and other tangible realities that "realists" deal with. But on the basis of the scientific theories about the process of human cognition and its relationship to human behavior, Northrop goes on to isolate a commonly held value system as a key characteristic of a nation.

> Stated as briefly as possible, a "nation" is any group of concrete, particular human beings who possess in the hierarchically ordered neural nets of their

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knowledge of the expert will carry the day. [Italics mine] Hans Morgenthau, "Preface to a Political Theory of Foreign Aid," Why Foreign Aid? Robert A. Goldwin, Editor (Chicago: Rand McNally, 1963), p. 89.

> brains a similar set of elementary trapped impulses (which are the physiological epistemic correlates of consciously or unconsciously memorized elementary ideas and postulates) for firing or inhibiting their motor neurons and thereby causing a similar cognitive behavioristic living law response to any given stimulus.[43] [Italics mine]

Keeping in mind our previous discussion of the findings of McCullough and others it becomes obvious that Northrop is depending heavily on the concept of trapped universals for arriving at the construct, a "nation." Basic philosophies or rather elementary epistemological symbols when commonly held by a group of individuals gives the group its concrete identity, as well as the stimulus for its dynamics. Although basic philosophies are often characterized as "value systems" some important distinctions need to be made in order to avoid any misunderstanding of Northrop's thesis in the problem of defining a nation. What Northrop attempts to isolate is not a sum total of all the particular values that cultures, groups and nations hold. He is not dealing with all the range of attitudes or preferences that a person or people may have on topics as varied as capital punishment, income tax or the "best" ice cream flavor. The concern is directed more at the primitive concepts, the epistemological systems the methods

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[43] F. S. C. Northrop, Philosophical Anthropology, p. 77.

of knowing which in turn determines to a significant extent how we "think" about the particular problem of fact or value that we may be faced with.

To illustrate the differences between those who are aware only of the role of values and Northrop, who attempts an empirical analysis of the role of values as well as the substantive content of value systems, a brief comparison of Morgenthau and Northrop should suffice.[44]

Morgenthau, for his part, takes cognizance of the fact that value systems or national characters to play some role in the behavior of nations. He states that

> Of the three human factors of a qualitative nature which have a bearing on national power, national character and national morale stand out both for their elusiveness from the point of view of rational prognosis and for their permanent and often decisive influence upon the weight a nation is able to put into the scales of international politics.[45]

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[44]Again Morgenthau is picked as an example because of his influence in the field. If one only examines the works of many writers who deal with nations as actors in the political arena the influence of Morgenthau becomes more and more evident. An elaborate bibliography of international relations texts is not provided, but for the present the examples of writers like Liska, Organski, Hartmans, and Stoessinger are cases in point. In their approach to the conceptual problems of "nations" and "national power" they often reassert Morgenthau's theses. Even when they dissent their genuflection towards Morgenthau is shown by the fact that their dissents are couched in Morgenthau's terms. They disagree with him more than they venture into independent theorizations of their own.

[45]Morgenthau, Politics Among Nations, p. 126.

He admits with Northrop that "these qualities set one nation apart from others, and they show a high degree of resiliency to change."[46]

But unlike Northrop, Morgenthau does not attempt a systematic analysis of the origins of particular value systems. The latter explains that

> We are not concerned here with the question of what factors are responsible for the development of a national character. We are only interested in the fact-contestable but (it seems to us) incontestable, especially in view of the anthropological concept of the "culture pattern"-that certain qualities of intellect and character occur more frequently and are more highly valued in one nation than in another.[47]

Also unlike Northrop, Morgenthau is particularistic in his approach in that the latter attempts to discus fragmentary qualities of national character.

> The "elementary force and persistence" of the Russians, the individual initiative and inventiveness of the Americans, the undogmatic commonsense of the British, the discipline and thoroughness of the Germans are some of the qualities which will manifest themselves, for better or for worse, in all the individual and collective activities in which the members of a nation may engage.[48]

This kind of fragmentary description of "qualities"

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[46] Ibid., p. 127.

[47] Ibid., p. 126.

[48] Ibid., pp. 130-131.

is not what Northrop tries to emphasize. At the risk of being repetitious and yet to prevent error in understanding, it needs to be re-stated that Northrop is searching for the elementary, primitive and inter-related set of primary values which determine the secondary ones as well as affecting certain aspects of human behavior. The difference between a primary and secondary value is that the former "is elementary, primitive or basic if it is an idea that is used to define other ideas but is not itself defined in terms of other ideas."[49]

Clearly groups are formed around sets of core "interests" but as Northrop states clearly and some social psychologists[50] seem to indicate these interests consist of shared norms whose properties will vary from group to group and are not limited to any single principle such as "economic interest." Although much of human activity consists of inter-group relations Northrop approaches the problem from a somewhat different approach than most "empirical" minded social psychologists. By training and by the nature of their discipline

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[49]F. S. C. Northrop, Philosophical Anthropology, p. 79.

[50]Intergroup Relations and Leadership, Muzafer Sherif, Editor (New York: John Wiley & Sons, Inc., 1962), pp. 4-5.

social psychologists are more concerned with the process of inter-action between groups rather than in the kind of epistemological analysis of basic norms that Northrop is contemplating. Also, social psychologists have been primarily active more in the study of small social groups[51] than in larger units like national entities. When an analysis of larger units is attempted it often consists of generalizations based on the findings of small group research. Therefore Northrop's attempt to treat national entities as behavioral units with common normative properties differs from the "intuitive" approach of Morgenthau and others as well as from the empirical small group approach of some social psychologists. Also attempts to present statistically the characteristics of groups are different in their approach from what Northrop has in mind. Variables like age, economic class, occupation, education may be helpful in the inductive natural-history stage of social science. But to be truly an objective body of knowledge, political science has to move on to more disciplined and deductively formulated theories about variables.

The validity of Northrop's findings as well as an evaluation of his methodology is treated elsewhere. For the

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[51] Ibid., pp. 13-14.

present, therefore, we see clearly that Northrop is claiming that any attempt to study or speculate about the politics of groups must first clearly and without ambiguity define the key variable or variables that go into the making of a political entity. Northrop's isolation of the "ideological factor," such as dialectical materialism and the evolutionary theory of nature and culture in Soviet Russia, in political behavior seems to be a step in this direction. He feels that objective methods are at hand by which we can specify accurately and deductively the ideological variables or properties of a nation.

The methods of studying values and ideological structures concerns us in detail elsewhere. In broad general terms Northrop's methods differ considerably from most of the behavioral treatments of ideology, consensus and value systems in that these treatments are usually far too introspective and therefore, naive realistic in their approaches. Northrop's search for the public mind leads him towards the artifacts[52] of culture in which the public mind or the national ideology expresses itself. Subtle and complex as the basic value structures may be from the point of view of the political

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[52]Political institutions would be good examples.

analyst without the clear specifications of these, the meaning of the entity "nation" in domestic or international politics will be left in a sadly incomplete and even misleading state.

Thus far three major concerns of traditional political theory were broadly treated from a Northropian point of view: the nature of man, freedom and the meaning of a nation. In essence he sees man as essentially immersed in the continuum of nature. But at the same time man structures nature and therefore is an ideological creature. One does not have to end in solipsism to assert that the cognitive processes of man play a key role in his awareness of nature. Nature is not a collection of phenomena that speaks for itself. The implications for political theory of Northrop's position here are far-flung as indicated.

In the first place our knowledge of politics is connected with our knowledge of nature, simply because man knows nature in different ways depending on the particular philosophy of science that is used. Objective nature is outside us and so is politics and man understands them through symbolization. Political theorists in their speculative efforts have to specify clearly their epistemology or their theory of knowledge; otherwise they are exposing their speculation to

the most serious misunderstanding.

In the second place any discussion of political man assumes also a particular understanding of the meaning of human freedom. We have attempted then to examine Northrop's attempt to construct a factual description of human freedom and possibility in the light of the findings of some social and natural scientists about the actual neural structure of the human mind. We shall explore the political and legal implications of this in subsequent chapters. But for the present the theory of trapped symbols casts a new light on the old dialogue between the positivists and non-positivists in political theory.

Finally we have attempted to understand Northrop's approach to political groups and entities in general and the nation in particular. This will set the stage for our subsequent discussion of the ideal nation, the nature of law and rights and finally the practical conducting of domestic and international politics.

CHAPTER VII

A QUEST FOR LAW

Students of politics have traditionally recognized and are also aware at the present time[1] that the subject matter of law and the substance of politics cannot be arbitrarily separated, from either a practical standpoint or from a philosophical point of view.

The jurisprudence of F. S. C. Northrop is also based on the premise that the study of politics is intimately related to the study of law at several levels of scholarship. Both law and politics are sub-systems of the cultural patterns of society. Both deal with human norms. Finally, both are methods of social control by which there "is an ordering of human beings with respect to one another and to nature."[2] Law and politics both deal substantially with our public

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[1]See Arnold Brecht, Political Theory, op. cit., pp. 136-138.

[2]Northrop, The Complexity of Legal and Ethical Experience, op, cit., p. 11.

selves,[3] and yet they deal with personal and private ethics as well. As Northrop puts it

> . . . legal experience combines within itself the ideal and the actual in a way that is not true either for natural science or for personal morality and religion. Precisely because this is the case one must expect, . . . that an analysis of legal or political experience must take one to the sciences, social and natural, or what is, on the one hand, and to personal morality and to religion, on the other hand.[4]

The separation of law and politics in Northrop's theory is therefore a matter of degree rather than of kind. Whereas law is generally the order in human relations or the "rules of society," politics is more particularly the method and the process by which the rules of the legal system are actively maintained and sometimes changed. Northrop's jurisprudential interest leads him to conceive of law in such terms that it will be more truly a tool of comparative analysis of the "rules" or public norms of any culture, western or non-western, "primitive" or "modern." His concern for a truly objective concept of law even for descriptive purposes can be seen in his skepticism of any theory of law which sees the element of force as being the crucial factor in law. Thus Northrop does not agree with Professor E. Adamson Hoebel's

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[3] Ibid., p. 4.

[4] Ibid.

theory of law, wherein force is regarded as the "natural" means for implementing rules. Hoebel sees law as being basically normative in character as does Northrop. That is, like Northrop, he sees the legal system in normative value terms. He says,

> . . . selectivity in the building of cultures is done in accordance with a number of basic postulates, existential and normative. Social control is exercised to guide the learning process; it rewards success in adaptation to the norms and expectancies. It penalizes failure in adaptation and deviation from the norms and expectancies. Law is an aspect of social control.[5]

Thus far Professor Hoebel's ideas seem to be valid to Northrop. But as indicated, Hoebel goes further and sees force as a "universal" constant in all legal systems. He argues:

> Whatever the idealist may desire or the nationalist fear, force and the threat of force remain the ultimate power in the implementation of law between nations, as they do in law within the nation or tribe.[6]

At this point Northrop feels that Hoebel's dependence on force constitutes a shift from universality to a legal theory

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[5]E. Adamson Hoebel, Man in the Primitive World (New York: McGraw Hill Book Company, 1958), p. 481.

[6]Ibid., p. 485. Also see E. Adamson Hoebel, The Law of Primitive Man: A Study in Comparative Legal Dynamics (Cambridge: Harvard University Press, 1954).

which is too particular and culture bound in its applicability. Thus Northrop examines Hoebel's differences with the views of another anthropologist, Malinowski, and makes the following observation which gives the flavor of his own position:

> What is the thesis of Malinowski, based on his study of the Trobriand Islanders, which Professor Hoebel criticizes with touches of feeling? It is that in Malinowski's book on these people, "the reader is definitely given to believe that law operates without the aid of physical force, although it does bind behavior."[15] The writer must confess that the evidence given by Malinowski seems convincing. Moreover, Professor Hoebel's own material in his chapters on other primitive peoples supports the Malinowski thesis that in some cases, at least, force is not the source of legal sanction. In the case of the Ashanti, to give but one example, Professor Hoebel writes that "the thought that his ancestors are watching him . . . is a very potent sanction of morality."[16] Many similar examples occur in Professor Hoebel's data.[7]

Northrop's own search for "science" and "objectivity" in law shows itself in both the descriptive and prescriptive aspects of legal theory. However, in order to examine his unique jurisprudence at these two levels it will be helpful to see briefly some of the implications of his theory against the background of some of the major well known schools of law.

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[7]Northrop, The Complexity of Legal and Ethical Experience, p. 98.

Legal Schools and Northrop's "Logical Realism"

Northrop discusses his own works in relation not only to Western legal theories but Oriental legal ones as well. In view of our present purposes the immediate discussion will attempt to examine specifically only well known Western schools, and will refer to Oriental theories from time to time in largely general terms. The primary purpose here is to examine Northrop's jurisprudence first by emphasizing what it is not, in order to discuss the substantive and positive content of his ideal legal system in the next chapter.

Positivism. Positivism in the philosophy of law appears in several forms and systems. Although, generally speaking, positivists find considerable agreement in the assertions that law and ethics are separate fields and that law is a "creation" of man through some authoritative institution such as the state,[8] there are varying positions within the "school." The most important theories of legal positivism include two which are usually labeled as the "analytical" and

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[8]For a somewhat fuller discussion, see W. Friedman, Legal Theory (Toronto: The Carswell Company, 1960), pp. 205-208.

the "pure theory" schools of law.

The analytical school, or as it is sometimes labeled, the "imperative conception" of law, sees the existence of political authority armed with the weapon of violence as being basic to the administration of justice. This school, according to the general consensus among scholars,[9] was given its first clear statement by John Austin, although the theories of Hobbes and Bentham contributed to its rise. The legacy Austin has left results in varying interpretations of positivism but Professor Patterson notes that "ordinarily" all these positions tend to place the greatest emphasis on force or "enforcement"[10] as crucial for an understanding of how law works.

F. S. C. Northrop does not deny the role of force in many cases in achieving compliance with law. But what he does object to is the posture of positivism as the sole "objective" explanatory system of the phenomenon known as law. Northrop attempts to point out that Austinian positivism is in fact a culture bound theory since it is a logical culmination of

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[9]See Edwin W. Patterson, Jurisprudence. Men and Ideas of the Law (Brooklyn: The Foundation Press, 1953), pp. 82-92.

[10]Ibid., p. 82.

English and later, American "empiricism." Speaking of positivism Northrop says

> The main representative of this theory of legal values is the British jurist, John Austin. The designation of his legal philosophy as "positivism" is not an accident. It arises from the fact that this is the legal theory of traditional Anglo-American culture and that the philosophy of this culture is British empiricism, which is positivistic in its theory of scientific knowledge. Cultural values are positivistic in character when the meaning of the words "good" or "valuable" is given as a particular, inductively through the senses. This excessive emphasis on induction has the consequence also of making each science an independent science.[11]

Austinian theory neglects to note the possibility of methods of law "enforcement" which do not depend primarily on force. Certainly the theory is not sufficiently broad enough to relate the legal system to the sources and sanctions of law, which lie outside the Anglo-American "state" or in the absence of a "state" such as a tribal society or a caste oriented policy. Northrop repeatedly urges his readers to note that "positivism" is a normative theory about law, rather than just an "accurate" description of all concrete legal experience. Yet since the theory has been so well assimilated into the fabric of American legal training and jurisprudence, he feels that far too many people fail to see clearly the

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[11]Northrop, The Complexity of Legal and Ethical Experience, op. cit., pp. 44-45.

normative character of law and its cultural roots beyond the sanction of force. For instance, in the attacks on the Supreme Court since the New Deal era and especially in the case of the "Warren Court," critics have accused the court of pursuing at times theoretical and sometimes socio-economic conceptions of justice. Northrop in several passages points out that even prior to the Warren era when the court supposedly stuck to the so-called "strict" conception of law as a command and was deferent to the legislature it was thus being faithful to a specific legal theory, that of Austinian positivism. Normative theory and the administration of justice are therefore at all times inextricably intertwined. Further, he attempts to show that through the influence of Professor Thayer at the Harvard Law School and Dean Swan of the Yale Law School positivism began to be entrenched in the training of young lawyers and judges such as Judge Learned Hand and Justice Frankfurter. The effects of this kind of training consequently can be seen in several areas of recent judicial and legislative experience, according to Northrop. Domestically, it certainly seems to explain the Learned Hand's and Frankfurter's tendency to see the primacy of the legislature's will over any permanent concept of "rights" e. g., in the American bill of rights. That is, Austinian

positivism with its monistic concept of sovereignty in its application to the American milieu tended to see simply the legislature as the basic source of law. In this regard it is interesting to note the following anecdote[12] about Justice Frankfurter. The latter in his teaching days at Harvard Law School would often question his students as to the first thing that they "ought" to do when faced with an important question involving judicial review. When all the "amateur" guesses of his students had been exhausted he would brush aside their answers with a nod and would urge them to read the statute in question. He would then ask again what should be the second step a student of the law should follow and again at the end he would provide the "correct" answer: "Read the Statute." By the time the third round arrived, the students of Frankfurter were of course well trained for answering that the judicial function is basically defined by the legislative act.

It is true, Northrop argues, that the errors of this form of "naive realism" are not great when the decisions of court and legislatures actually reflect the "social" and

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[12]The story was related by Professor Joseph C. Pray, Professor of government at the University of Oklahoma, who was then a graduate student at Harvard and was a witness of Professor Frankfurter's pedagogical technique.

covert norms of the society in question.[13] But when the laws like those which brought about the "noble experiment" of prohibition are completely contrary to cultural patterns they fail to exhibit effectiveness as techniques for social control. In the area of international affairs and foreign policy making, the consequences of positive law thinking is even more disturbing, according to Northrop.

With the increasing interchange of students and experts in law between various countries, the positive law orientation of most law schools is seen as truly outmoded. Since positive law training does not make one sensitive to the existing facts and varying premises of "foreign" legal systems, foreign students trained in the United States or United States experts are likely to engage in many more "noble experiments" in social change and with little likelihood of success. Also, Austinian legal training is, from Northrop's point of view, likely to result, as it often has, in the view that the only law is domestic law. International law, then, often becomes for American Democratic and Republican lawyers alike, as well as politicians with legal

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[13]An example would be the ingrained Lockean concepts of "rights" in the English legislative and judicial institutions despite the overt acceptance at times of the Austinian theory of law.

training, non-existent. One of the tragedies of American foreign policy making has been, according to Northrop, the fact that instead of utilizing the existing international law as one basis for political action, the Planning Board of the State Department has been in the hands of "black-letter-minded lawyers with the mentality of Acheson, Dulles, Herter, Nitze and Bowie, or theorizing power politicians such as Mr. Kennan."[14]

Northrop's criticism of positivism is not limited to that of the Austinian School. The school of thought headed by Hans Kelsen with his concept of "The Pure Theory of Law"[15] is in many ways a more sophisticated attempt at creating a jurisprudence which attempts to separate law from other elements of social control than is the Austinian School. Professor Edgar Bodenheimer, in noting this, has stated

> Kelsen's doctrine is perhaps the most consistent expression of positivism in legal theory. For it is characteristic of legal positivism that it contemplates the form of law rather than its moral and social content, confines itself to the law as it is without regard to its justness or unjustness, and endeavors to free legal theory from all qualifications or value judgments of a moral, political, social or

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[14]Northrop, Philosophical Anthropology, op. cit., p. 227.

[15]See Hans Kelsen, "The Pure Theory of Law and Analytical Jurisprudence," 55 Harvard Law Review 44, 1941.

economic nature.[16]

Still, Northrop sees the Kelsenian theory as being inadequate on most counts (although adequate in some areas). He finds the strongest appeal of "pure theory" lies in its search for some basis for the validity of law other than force alone. But Northrop finds major unresolved inconsistencies in Kelsen's conceptual system. On the one hand Kelsen is concerned with law as merely the body of positive rules in political society. Therefore the "pure theory" is in one sense largely relativistic in character. The law of Nazi Germany logically in this theory is every bit as actual[17] and valid as a positive system of legal order, as is the American constitutional system, even though in the realm of "private" ethics it might be an "unwise" one or even "immoral." Therefore, as Bodenheimer notes, according to Kelsen "any social goal whatsoever may be pursued through the instrumentality of

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[16]Edgar Bodenheimer, Jurisprudence. The Philosophy and Method of the Law (Cambridge: Harvard University Press, 1962), pp. 101-102.

[17]Speaking of "legal norms" Kelsen has stated the following: "These are not valid by virtue of their content. Any content whatsoever can be legal: there is no human behaviour which could not function as the content of a legal norm." Hans Kelsen, "The Pure Theory of Law," Part II. The Law Quarterly Review, Vol. 51, July, 1935, pp. 517-518.

the law[18] since the state itself is not conceived in ethical terms. Yet "pure theory" does not deal with only the "is" of human behavior; it also clearly recognizes that the "legal order is a system of norms."[19] But these "oughts" are derived from other "oughts" in a hierarchical system of norms which finally rests on a basic norm or grundnorm.

From Northrop's point of view, Kelsen appears to be very confusing in his description of the concept of the "basic norm" and its relationship to a legal order. For example, on the one hand pure theory is relativistic with respect to domestic law but it appears to modify its relativism with respect to the legal relationship between states. The international legal system approves or disapproves of a state's behavior under the authority of such a customary rule as pacta sunt servanda.[20] Within a state the legal norms are relative to the basic norm within a state. An "effective" communist system is just as legal as an "effective" democratic system and yet a mysterious and seemingly dogmatic grund norm like pacta

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[18]Bodenheimer, op. cit., p. 101.

[19]Hans Kelsen, General Theory of Law and State (Cambridge: Harvard University Press, 1946), p. 110.

[20]See Charles Fenwick, International Law (New York: Appleton-Century-Crofts, Inc., 1948), pp. 64-65.

sunt servanda does stand guard over the behavior of states with an element of "oughtness" asserted as a result of "faith" under the disguise of a "hypothesis" on the part of positivists. The realm of "is" and the realm of "ought" are hopelessly confused. Thus, Northrop observes

> Lauterpacht and Kelsen sought, therefore, the type of content for the jural postulate or grundnorm which a positivistic philosophy of law can provide, Lauterpacht offers the proposition, "The will of the international community must be obeyed."[9] Kelsen comes forth with the grundnorm, "The states ought to behave as they have customarily behaved."[10]
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> To assert either of these grundnorms is to admit explicitly that the positivistic philosophy of international law can make no contribution to the bringing of disputes, between nations under the rule of law to an extent greater than is, or has been done. A more convincing demonstration of the impotence of legal positivism in international law can hardly be imagined.[21]

The pure theory according to Northrop shows at least one other example of ambivalence. At times Kelsen seems to claim that sociological jurisprudence has nothing to contribute to pure law and yet he often opens the door surreptitiously to sociological methods and factors. Thus Kelsen himself at one point speaks of the sociology of law in the following terms:

> This only is certain, that such legal-sociological knowledge has nothing to do with the norms of the law

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[21] Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 65.

as specific contents.[22]

Yet in another passage he seems to indicate the need for non-legal methods for judging the validity of legal systems. He asserts that

> . . . a government which has come to power by revolution or coup d'etat should equally be recognized as a valid government in the sense of international law, provided that it is in a position to secure a substantial observation of the norms which it has set up. Positive international law thus elevates the principle of efficacy to the rank of a legal principle. This principle it is which determines the basic norm of the individual State's legal order.[23] [Italics provided.]

Although Kelsen does not state it directly, "efficacy" or "substantial observance" does seem finally to rest on existing religious, philosophical and political values which Kelsen lumps under the category of "custom." Thus the search for the principle of "efficacy" contains intimations of sociological jurisprudence and as one scholar notes: "How this minimum of effectiveness is to be measured Kelsen does not say, nor could he so without going deep into questions of political and sociological reality."[24] "Efficacy" is a far more complex factor than Kelsen indicates the case to be. If by "efficacy"

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[22]Hans Kelsen, "The Pure Theory of Law," The Law Quarterly Review, Vol. 50 (October, 1934), p. 480.

[23]Ibid., p. 520.

[24]W. Friedmann, Legal Theory, op. cit., p. 231.

is meant effectiveness, standards for measuring degrees of compliance and the reasons for doing so seem to be called for, and here we are indeed turning to sociology as a base.

Our discussion of the theories of Austin and Kelsen does not exhaust all the possibilities in positivism, but it does help illustrate Northrop's jursiprudence in relation to this important school of thought, if only in a negative way. Similarly a brief analysis of Northrop's views in the context of the pragmatic school of law will help illuminate other aspects of his jurisprudence.

Pragmatism

Pragmatism in legal theory like many other "isms" cannot be easily characterized since it has many different versions and shows itself in varying forms. Speaking of pragmatism Professor Patterson has stated

> The "founders" of pragmatism were individualists, and recognized no authority over their ideas. Like all philosophic rebels, they agreed better on what they opposed than on what they believed. They did not so much reject traditional philosophic beliefs as deem them inadequate. Pragmatism, or parts of it can still be used to supplement other philosophies.[25]

Because of the various versions of pragmatism, our

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[25]Patterson, Jurisprudence, op. cit., p. 476.

task primarily is to examine Northrop's view of law in comparison and contrast with the major themes or persisting tendencies in the jurisprudence of some major pragmatists, e. g., Dewey.

John Dewey basically saw law as a problem solving process rather than simply a set of rules enforced by custom or force. Unlike the positivists, Dewey and others pay especially great attention to the societal factors in "pure" law. But law to Dewey is not merely a reflection of custom; "it involves an element which is additive and in a sense, as viewed from the standpoint of prior custom, creative.[26] Northrop would be in complete agreement with Dewey and others on this point. Northrop, like Dewey, is very conscious of the "evaluative" character of legal decisions. Therefore Northrop and Dewey are of one mind regarding the impossibility of any value-free approach to the solution of legal problems. Also, given the clash and confusion of values in law and politics, Northrop is very much aware of the value of the pragmatists' focus on "problematicism."[27]

The most significant difference between Northrop's

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[26] Quoted by Patterson, Jurisprudence, op. cit., p. 229.

[27] Patterson, Jurisprudence, op. cit., p. 467.

jurisprudence and that of most pragmatists is on the question of the "correct" method to be used in "solving" a problem or showing the way out of the problematic situation. Northrop is high in his praise of Dewey's statements to the effect that "valuation can be an empirical process" and that it is possible to be scientific about ethics.[28] But Northrop feels that Dewey did not fully develop the full implications of his "scientific" method, at least in the area of long-range values and goals. Dewey's skepticism of natural law theories, while partly justified, led him to a position where his "ultimates" are placed in the context of inquiry, as is his idea of "truth."[29] Legal values for Dewey arise from the need for solving the problem at hand. The values are to be picked on the basis of what "science" shows the possible consequences may be. In summarizing Dewey's statements on this point Professor Murphy states:

> In his insistence that any standard of judgment is to be evaluated in terms of the consequences of that standard when acted upon, Dewey uses the term "consequences" in a special sense. He means those consequences which are recognized to follow as

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[28] Ibid., p. 495.

[29] Jay Wesley Murphy, "John Dewey--A Philosophy of Law for Democracy," Vanderbilt Law Review (December, 1960), p. 299.

> revealed by the operations of an experimental situation.[30]

While this approach uses "science" in an attempt to escape ethical relativism at the problem solving, pragmatic and operational level, Northrop maintains that pragmatism in law displays ethical relativism and also abandons science at the crucial stage of constructing a theory which would judge the success of "operations." Thus a crisis occurs in the process of evaluating the "consequences" according to Northrop. Are the consequences to be valued on the basis of "science," "intuition" (hunches) or some other criteria? If the criterion for judgment is the ability of values to solve "problems" this is unsatisfactory from the point of view of Northrop's legal theory. Northrop describes pragmatism's search for problem solving in the following terms:

> At bottom, this theory of cultural values makes the solution of the problem in what Dewey calls "the problematic situation" the criterion of the good. Or, to put the matter more practically, it makes the bringing to equilibrium of the diverse competing elements in the social situation the criterion of the good and of cultural value.[31]

Northrop's dissatisfaction with problem solving as a

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[30] Ibid., p. 300.

[31] Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 46.

basis for values arises for at least two different reasons. The first is that pragmatism is unclear as to the method for finding the scientifically "ideal" solution. He states

> The answer to this question as given by Dewey himself in his Human Nature and Conduct is that only that solution is a "true" solution which results from sensitivity to, rather than dictatorial blotting out of, all factors and interests in the problematic situation. This amounts, however, to the admission (a) that all values are not in process and (b) that there must be at least one constant non-instrumental norm even in an instrumental philosophy of cultural norms, the non-instrumental norm of objective sensitivity to every factor in the existential situation.[32] [Italics provided.]

In Northrop's view Dewey falls short of explaining clearly how "objective sensitivity" is to be achieved. In contrast Northrop feels that "objectivity" is possible both in describing legal norms as well as evaluating them.

A second line of argument that Northrop often uses consists of pointing out that pragmatists abandon their scientific persuasion by depending "intuitively" (through hunches) on what could happen in the "long run"[33] for evaluating norms. Also "really" to test the "operational" validity of legal theories by the pragmatic method Northrop claims

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[32] Ibid., p. 47.

[33] Northrop, Philosophical Anthropology, op. cit., p. 101.

one would "really" have to turn over the guidance of legal and political systems for a considerable period of time to communists, fascists, "socialists," anarchists and others. It is interesting to note that Professor Murphy in this connection states:

> Dewey observed that "it is astonishing and depressing that so much of the energy of mankind has gone into fighting for (with weapons of the flech as well as of the spirit) the truth of creeds, religious, moral and political, as distinct from what has gone into effort to try creeds by putting them to the test of acting upon them."[37] A system whereby all tenets, goods, creeds, formulas, methods were hypotheses and actively recognized and used with full recognition of this fact would mean that they (tenets, creeds) cease to be final and men would be insistent to put creeds to this test of action.[34]

Unlike the problems of non-normative subjects the peculiarities of value problems cannot be solved completely under operational and experimental situations according to Professor Northrop. We have to search for a reliable method which will tell us ahead of time whether certain value systems are worth implementing or not. Otherwise far too much chaos can occur, particularly if an "erroneous" theory is allowed full play in human affairs. As he puts it:

> Suppose . . . that one tests the Communistic theory in this <u>pragmatic manner</u>, as many "open-minded" Asians are now inclined to do, by giving

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[34]Murphy, <u>op. cit.</u>, p. 302.

> the Communists a chance to try their Communistic experiment in one's nation. If this pragmatic experiment is to be a real one, the Communists would have to be given complete control. Then, however, all experimentation might very well be over, since, if you, the private citizen, found that the Communist theory did not work for you, it would in all likelihood be you rather than the theory that would be liquidated as a result of the pragmatic experiment.[35] [Italics provided.]

Northrop himself thinks that there can and must be objective methods both for finding out what the law is, as well as for finding out beforehand what it should be. His own quest for reality in law leads him to sociological jurisprudence, while his search for objective evaluation of goals and consequences leads him to a particular kind of natural law jurisprudence.

Sociological Jurisprudence

Thus, Northrop in his concern for finding out what exactly is the content of a legal system feels that science needs to be used. Therefore his search for describing law is an extension of "his" method of science, which we have

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[35]Northrop, Philosophical Anthropology, op. cit., pp. 101-102. It should be noted that Northrop is using this example primarily as an illustration that without complete experimental conditions pragmatism is scientifically inadequate to judge a normative theory, even according to the standards of pragmatism itself. His own theory is justified primarily through epistemological criteria rather than experimentation.

already examined. The "poverty" of positivism suggests to Northrop that man's legal relationships are determined not simply by the statutes or official actions of the "state" or any political entity with "force" as the major weapon but by factors outside the pale of formal legal decisions. In this regard he is sympathetic to the search for "actual" factors which create and enforce a sense of obligation. The study of these "factors" is often pointed out to be a major feature of the school often vaguely called "sociological jurisprudence."[36]

The school of sociological jurisprudence as such, however, cuts across many different and sometimes conflicting theories about the law. These conflicts often arise out of varying "theoretical generalizations on the interrelation of social forces and legal evolution."[37] Some specify "conflicting interests"[38] or "social interests"[39] or "maximum satisfaction of wants"[40] as the key factor, while others point towards a larger and more "macrocosmic" concept of "society" or

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[36]See Friedman, Legal Theory, op. cit., pp. 194-204.

[37]Ibid., p. 196.

[38]Bodenheimer, Jurisprudence, op. cit., p. 109.

[39]Patterson, Jurisprudence, op. cit., p. 518.

[40]Bodenheimer, Jurisprudence, op. cit., p. 111.

"culture"[41] as the important factor in the "real" laws "behind" the "apparent" positive norms.

While Northrop can be partly placed in the school of sociological jurisprudence his theory should be distinguished clearly from some of the other approaches in this school. Thus, for instance, because of Northrop's skepticism of any theory which claims to be "scientific" and yet depends on an epistemologically "intuitive" concept of felt "wants," he is separated from such figures as Roscoe Pound and Francois Geny, at least according to Professor Bodenheimer.[42] Also, his polemics against "inductive" methods distinguishes his approach from that of Harold Lasswell.[43] Arnold Brecht is partly correct in placing Northrop's jurisprudence in the same category as other theories of a "transpersonalist" character which rely on a concept of Kultur or culture.[44] However,

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[41]Brecht, Political Theory, op. cit., p. 304.

[42]See Bodenheimer, Jurisprudence, op. cit., pp. 108-111.

[43]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 75. Lasswell's wandering between "facts" and "theory" can be termed "naive realistic." For one example of this "wandering" see Harold D. Lasswell, "Strategies of Inquiry: The Rational Use of Observation," The Human Meaning of the Social Sciences, edited by Daniel Lerner (New York: Meridian Books, 1960), pp. 89-113.

[44]Brecht, Political Theory, op. cit., p. 304.

Brecht also states that

> Writers as different as Kohler, Radbruch, Binder, and Alfred Weber of the German sector and Northrop here show a preference for Kultur as the recommendable standard, without however drawing radical conclusions in detail.[45]

Brecht's categorization tends to blur the distinction philosophically between Northrop and others like Kohler who according to Brecht show a persistent Hegelian idealism. Northrop in fact as well as by his own admission is closer to people like Eugen Ehrlich and Underhill Moore rather than the German idealists. Professor Bodenheimer touches on this distinction in the following comment:

> While Kohler's philosophy of law moved on the borderline between sociological jurisprudence and legal idealism, a thoroughly sociological type of legal theory was propounded by the Austrian thinker Eugen Ehrlich (1862-1922). Genuine sociological jurisprudence teaches, in the words of Northrop, that the "positive law cannot be understood apart from the social norms of the living law."[46]

The concept of "living law" is a fairly well elaborated concept, despite Brecht's passing comment to the contrary. In almost all of his books and articles dealing with law Northrop has discussed the concept of "living law" and has done it in detail.

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[45] Ibid., p. 154.

[46] Bodenheimer, Jurisprudence, op. cit., p. 106.

"Living law" as a term was borrowed by Northrop from the terminology of Eugen Ehrlich. Ehrlich regarded the "real" law of any society as being only partly evident in the official pronouncements or positive rules of society. Ehrlich on one occasion has defined the "living law" in the following terms.

> This then is the living law in contradistinction to that which is being enforced in the courts and other tribunals. The living law is the law which dominates life itself even though it has not been posited in legal propositions.[47]

Like Ehrlich, Northrop also regards the actuality of law as being found in the social norms of people rather than in the "positivistic" sanctions of the state. Also, like Ehrlich, Northrop sees the need for regarding the living law as not being simply a set of sensed facts but as being primarily the "inner order"[48] of all the public normative "facts" in any society. The "inner order," since it is "ideological" in character, cannot be found by simple observation alone. Ehrlich constantly urged a careful scrutiny of the "facts" of "life," commerce, customs and usages, and "associations" in society supplemented later by theorization and then by

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[47]Eugen Ehrlich, Fundamental Principles of the Sociology of Law (New York: Russell and Russell, 1902), p. 493.

[48]Ibid., pp. 26-38.

further observation,[49] to arrive at the "inner" relation between facts, which is not directly sensed. According to Ehrlich "a social institution is, however, not a physical, tangible thing like a table or a wardrobe."[50]

Northrop's own "sociological" jurisprudence while accepting the general "gist" of Ehrlich's theory attempts to expand on it and transform it into a more sophisticated and yet rigorous one by prescribing deductive methods to be used. The "facts" of Ehrlich's system were to be found in numerous contexts including wills, marriage customs, contracts, banking practices, the way inventories are kept in businesses, etc. At times Northrop's theory seems to have changed some of Ehrlich's "facts" almost beyond recognition. Thus Northrop regards the living law as being primarily "ideological" in character, i.e., an inherently "logical system of ideas," whereas Ehrlich is so concerned with behavioral data that he is not always clear as to the origins of the "foundation of the legal order of human society."[51] For Northrop the "living law" is one of the systems or forms of cultural order which

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[49] Ibid., pp. 501-506.

[50] See Ibid., p. ix.

[51] Ibid., p. 502.

the epistemology of a culture creates. The living law can be found by "tinkering around" with the legal, social and philosophical texts of a culture until the covert logically related philosophical system is "discovered." It is then to be rigorously stated. Then through epistemic correlations with the institutional facts (to which Ehrlich is referring) and with human behavior the hypothetical living law is verified. In the case of a people without a written language one would patiently have to "tease" out concepts as Kluckhohn did with the Navaho after years of living with them and then, subjecting these concepts to "philosophical" analysis for finding what the relationships between concepts are as the Navaho himself "really" sees them. For the judgment that this is possible, as we have already seen, Northrop depends on a philosophical analysis of the "findings" of some anthropologists, sociologists, psychologists and cyberneticians.

But apart from specifying the basic set of views on science, i.e., "ideology" as the crucial variable of the living law, Northrop has attempted to give sociological jurisprudence far more preciseness in methodology than Ehrlich attempted to do in his lifetime. The work of the Yale sociologist, Underhill Moore, however, clarified for

Northrop[52] some of the unanswered methodological questions about the nature of the "inner order" that the work of Ehrlich had suggested. Moore's efforts were directed at finding the relationship between normative symbols such as traffic parking signs and human behavior. He found according to Northrop, that social scientists must pay attention to the "meaning" of symbols rather than treating symbols as mere stimuli. Still, since our present concern is not directly with the work of Moore,[53] we will attempt to focus our attention on Northrop's own use of sociological jurisprudence.

According to Northrop the problem of how we can get law or what "ought to be" from society or from what "is," can be approached from several different "sociological" levels. One level is that of the physical behavior of people in any social situation. Disciplined observation of people's behavior can give the decision makers in many instances a practical insight regarding the norms or laws that should be applied. Thus, a statistical note-taking or even "intuitive" i.e., naive realistic analysis of the tendencies of students

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[52]See F. S. C. Northrop, "Underhill Moore's Legal Science: Its Nature and Significance," Yale Law Journal (January, 1950), pp. 196-213.

[53]For a list of Moore's work see Northrop, The Complexity of Legal and Ethical Experience, pp. 305-306.

to walk in certain patterns across the campus of the University of Oklahoma will give the engineers and decision makers a better guide in "planning" where sidewalks "ought" to be constructed. Similarly traffic lights, signs and driving lanes can be situated in such a way that the "expectations" of norms are not too far removed from the "actualities" of people's behavior. Since "expectations" are not always one hundred percent identical with "actualities" and discrepancies do exist, one level of approach to the is-ought problem is by reducing the difference between positive expectations and actual behavior. This level, however, is not sufficient, he thinks, for resolving other normative problems fully.

For the "statistical" approach loses precision as it is applied to increasingly larger problems where it is physically impossible to observe directly all the instances of physical behavior such as the "work" of Congress. As we move from the microcosmic campus to the macrocosmic political system we begin to face problems of dealing with entities which are directly unobservable. Therefore, deductively rigorous methods have to be used increasingly. Even for the microcosmic situation deductive methods can avoid the guesswork (as in the early work of Moore) of observation and poll taking. But for larger social situations in any case, deductive methods

are even more essential. Speaking of Underhill Moore's early observational techniques Northrop notes that

> His method of determining the inner order of society even at the present time. T_1 of the system, by observing the spatio-temporal total high-frequency behavior of people in society is unworkable for a total culture. He applied it to simple cultural phenomena such as parking on a restricted block on a street in New Haven, Connecticut. To determine the inner order of the behavior of 400,000,000 Chinese in this manner is out of the question, and to do it for all the different cultures is even more impracticable.[54]

The essence of the deductive method for macrocosmic groups involves the specification of very few variables according to Northrop. Ideology, i.e., a logically related structure of values here is suggested as the major variable. With the help of the ideological variable such as the "naive realism" of Hindu code law one is "saved" the trouble of observing the behavior of every single person in a social situation without sacrificing objectivity. Since some sociologists and anthropologists to a degree do accept the "ideational" or "ideological" approaches of Sorokin and Kluckhohn rather than the "technological" approaches of Marxists, there is hope that sociological jurisprudence will be able to solve part of the problems of what "ought to be the law" by

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[54] Ibid., p. 59.

illustrating the unfulfilled norms of the existing living law. By this method the positive law can be reformed by referring objectively to the overt behavior of people or the ideological living law of the group.

In spite of the achievements and promise of the sociological school, however, Northrop claims that it has not been able to produce objective methods by which the living law itself can be judged and new "scientifically" reliable values can be found. To deal with this problem he turns his attention to his own unique natural law jurisprudence.

Nature and Law

Natural law jurisprudence is probably the oldest school of jurisprudence.[55] The "school," if it can be called one, has had a varied history and this concerns us only incidentally in our present inquiry. In recent years there has tended to be what is often called a "revival of natural law."[56] However, in spite of the persistence and tenacity of this movement, the methods of various natural law theories have

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[55]See discussion of "Eclipses and Revivals of Natural Law Ideas" in Brecht, Political Theory, op, cit., p. 138.

[56]See "The Revival of Natural Law and Value-Oriented Jurisprudence." Bodenheimer, Jurisprudence, op. cit., p. 126.

not always shown a consistently clear "meaning" of the content of natural law. Partially as a result of this anarchy in the various meanings of natural law many contemporary political scientists and legal theorists have regarded the claim of the natural law schools with considerable suspicion.

Northrop can be classified as being within the natural law tradition, since he argues on behalf of the possibility of "reforming" actual law on the basis of criteria which are "objective" and "natural" in character. The particular manner in which he approaches the problems of natural law theory, however, makes him a "strange bedfellow" among most modern day advocates of this system, and certainly among medieval thinkers. Thus, Northrop differs from others often on the methodology, meaning and the content of natural law, and this to such a degree that the usual opponents of natural law cannot easily accuse him of being simply another subjectivist.

To begin with, Northrop himself admits that most natural law theories which claim objectivity are often sophisticated defenses of subjective "value judgements," or culture bound methods of approaching normative questions. Also, he is often critical of the kind of reasoning which argues that since something labeled as "natural law" jurisprudence is a

universal phenomenon in man's cultural experience, there is a single natural law already in existence or that the content of the law or the moral imperative generally is already present in all societies. Thus, he states

> Every major culture in the world in its classical tradition affirms a natural law jurisprudence. This fact alone, however, is not enough to establish the thesis that natural law jurisprudence escapes the relativity of ethical and legal norms.[57]

Since, he insists, different cultures use widely varying epistemologies the content of the "natural law" may be completely different even though they may have superficial resemblances and similar "labels." For instance, modern Catholic natural law thinking is anti-secularistic in character. Secularism in this context is often defined as divorcing government from God.[58] Catholic natural law thinkers at times also see the existence of "natural law" in the religious philosophy of other non-Catholic groups, wherein supposedly there is always a concern with a "higher order," "being" and "God." Yet as Northrop shows, leading Buddhist scholars, including Dr. Suzuki assert "that for the Buddhist tradition moral and

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[57]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 168.

[58]See Edward F. Barrett (ed.), University of Notre Dame Natural Law Institute Proceedings (Notre Dame: University of Notre Dame Press, Vol. V, 1953.

legal rules have nothing to do with God, since Buddhism denies such a being,"[59] as an "intellectualized" entity, a rational "construct" or an anthropomorphic commander.

This persistent tendency to identify "universal norms" with the normative preferences of particular cultures is usually referred to by Northrop as "the culturalistic fallacy." This fallacy is not peculiar to Catholic theologians or Protestant theologians alone. It is a fallacy that is common also among some social scientists who are themselves skeptical of theological natural law. The fallacies of the latter occur when they attempt to determine the normative social theory or what "ought to be" by applying the empirical methods of natural science to social and cultural "facts."[60] A proper distinction between cultural or "second order" facts and natural or "first order" facts which Northrop insists must be made for natural law theory to make sense. He attempts to draw the distinction in the following terms:

> First-order facts are the introspected or sensed raw data, antecedent to all theories and all cultures, given in anyone's experience in any culture. Second-order facts are cultural artifacts: that is, they are

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[59] Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 169.

[60] Ibid., p. 238.

> the result in part at least of human theory of first-order facts.[61]

He also goes on to state in many of his works, speeches and articles that first order facts like planets, electrons or sunshine are the only facts that are incapable of error. They just are. They themselves do not demand an ethical system nor do they indicate what ethics ought to be. However, when men "think" about natural facts and relate facts by propositions they make second order facts. These cultural facts are therefore man-made facts. The General Motors Corporation, the State Department and segregated rest-rooms, e.g., are second-order facts.

When social scientists depend on man-made facts for finding value they are guilty to some extent of question-begging and being tautological in their theories since this depends on the "is" at the cultural level to provide the "ought" at the same level. But the cultural aspects of the behavior of men cannot themselves provide trustworthy bases for determining what cultural behavior ought to be. Still, according to Northrop, many academicians in sociological theory and jurisprudence base their "policy sciences" on just those observed cultural facts. Pound's search for "jural

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[61] Ibid., p. 254.

postulates"[62] or Lasswell's policy orientation[63] are examples of modern attempts to find the "oughts" from the cultural "is."

To avoid the question begging and false basis of natural law, "policy making" needs to find methods that escape ethical relativism and yet are truly "evaluative" in character. The major orientation that escapes relativism is "science" and more accurately "natural science." Therefore the search for an objective natural law must turn to this science according to Northrop. Science, or at least the physical sciences, deal substantially with public objects which do not symbolize. But as we have seen, man's neuro-physical structure enables him to formulate propositions about facts as well as to perceive facts. Therefore, in his very nature facts and propositions about facts are brought together. Since propositions about facts can be in error the questions of "badness" or "goodness" of things arise out of man's consciousness.

All this is not to say that Northrop's natural law theory is one wherein nature, independent of man, contains

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[62]See Patterson, Jurisprudence, p. 516.

[63]See Harold D. Lasswell, "Strategies of Inquiry: The Rational Use of Observation," in The Human Meaning of the Social Sciences, Edited by Daniel Lerner (New York: Meridian Books, 1960), p. 89.

"badness" or "goodness." The stars, the sun and the planets are not in error. Ontologically, they just exist. It is only man who is capable of error because of his ability to symbolize freely the perceived world around him. The focal point of cultural values and the theories of natural sciences are in the cortex of man. Therefore, the essence of Northrop's natural law consists of examining the assumptions about nature on which cultural facts are built and evaluating them in the light of the most objective assumptions, i.e., natural science epistemology, that is available.

Thus, the "living law" of the South which "sees" black men and then puts them in a special class with regard to rights and duties assumes a naive realistic epistemology wherein "observation" supposedly gives "knowledge." Northrop maintains that "naive realism" is an inadequate epistemology with which to "understand" the "facts" of nature. Instead we need to use in value theory an epistemology which has been successful in explaining the "facts" of "nature" and "science." The precise aspect of "science" to which Northrop refers for the standard of evaluation is therefore not the myriad "facts" of science. Electrons can no more give an "ought" than the color of a sunset can give us law. It is speculation which uses the epistemology of science that can show us the way.

Since man's epistemology is his tool for the conceptualization of nature and other men at the same time, man's relationship with other men can also be as objective as his current scientific understanding of nature.

The jurist, therefore, when faced with the problem of choosing between several sets of norms in an actual case can begin by examining the normative theories of which the various norms are parts. His examination of the theories should result in picking that theory which best "explains" or "relates" the objective first order facts of nature. Thus a logically realistic legal theory like Northrop's is superior to the naive realistic patriarchal theory of the "Filmerian South." However, it should be noted at this stage that Northrop at times seems confusing in his attempts to define first order facts. For instance, at times first order facts are limited by definition to "introspected or sensed raw data,"[64] such as the colors of what we call the "sunset" which are known by "experience." At other times he seems to include theoretically conceived objects among first order facts. Thus, he has stated that the fact that "any human being has a nervous system is a first-order psychological

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[64]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 254.

fact."[65] Since we do not directly sense or introspectively know our own nervous systems these must be "constructed" or "postulated" objects. This confusion of terms may, however, be more apparent than real. "First order facts" are both sensed data and "public objects" which are found by verified scientific theories. The general tone of many of Northrop's essays[66] seems to indicate that those facts which natural law deals with are radically empirically sensed data as well as "objective" knowledge based on sensed data. Still the attempt to validate a legal theory in terms of how well it accounts for natural facts therefore certainly seems, at least in theory, to avoid the dependence on the culturally determined aspects of "political" behavior that other value oriented legal theories depend on. But in practice the process of determining whether a "fact" is a cultural or a natural entity is an extremely difficult process, wherein logical analysis is necessary.

Conclusion

Despite this practical problem the jurisprudence of F. S. C. Northrop seems to be the most plausible attempt thus

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[65] Ibid., p. 263.

[66] See discussion in Northrop, Logic of the Sciences and the Humanities, op. cit., pp. 286-287.

far to find a theory which avoids both complete positivism on the one hand and the emphasis on intuitive faith on the other. Also, in spite of its emphasis on man as the maker of norms, Northrop does not assert that man is incapable of finding reliable values in ethics and in law. Instead, just as scientific epistemology demonstrates the natural relationships in physical nature, so also the application of this epistemology to society can show the relationships that "ought" to exist, but often do not, due to the incorrect construction of social symbols. In spite of the broad natural law characteristics of Northrop's jurisprudence he is not a special pleader for a system of values which is to remain "absolute" for all times. As man improves the understanding of his world, new and more adequate theories of nature will emerge. From these developments new laws of nature must displace the inadequate norms of the past. But the displacement must be done with care or else man's old symbols, if treated without delicacy, may force conservative man to cling to his primitive law. Northrop's jurisprudence, therefore, is a subtle combination of the scientific and philosophical "naturalness" of a natural law orientation and the practical concern of sociological jurisprudence. To explore further the nature of Northrop's naturalistic idealism it is necessary

next to examine the substance of his theory of natural law and the related conceptualization about the essential forms and ideals of "his" political system.

CHAPTER VIII

ESSENTIALS OF THE "GOOD" STATE

Despite the occasional appearance of a truce, the debate between "empirically" oriented positivists and non-positivists in American political science is generally an intense and continuing battle. While the non-positivists are in the minority they often are not less contentious than their opponents. Professor Leo Strauss in a recent essay, for instance, has stated his views about the new empiricism with characteristic vigor. Thus, he states

> Only a great fool would call the new political sceince diabolic: it has no attributes peculiar to fallen angels. It is not even Machiavellian, for Machiavelli's teaching was graceful, subtle, and colorful. Nor is it Neronian. Nevertheless one may say of it that it fiddles while Rome burns. It is excused by two facts: it does not know that it fiddles, and it does not know that Rome burns.[1]

Strauss and certain other political theorists in their attack on the new "science," have often failed in fact

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[1]Herbert J. Storing, Editor. Essays on the Scientific Study of Politics (New York: Holt, Rinehart and Winston, Inc.), 1962, p. 327.

to answer the main charges of the logical positivists against the "natural law thesis." Strauss's defense of classical political philosophizing in spite of its literary excellence, does not always state with clarity how the pursuit of values can avoid a purely subjective character. At times, Strauss seems to advocate the pursuit of "nature" rather than "convention."[2] Yet elsewhere, he appears to resist the quest for any science of nature which is not Aristotelian in character.[3]

In contrast to Strauss' strong defense of the importance of political speculation and its "meaningfulness," some relativists are equally strong in their defense of complete skepticism about "objective" values. Hans Kelsen, in an attempt to define relativism, has said

> Philosophical relativism . . . advocates the empirical doctrine that reality exists only within human knowledge, and that, as the object of knowledge, reality is relative to the knowing subject. The absolute, the thing in itself, is beyond human experience; it is inaccessible to human knowledge and therefore unknowable.[4]

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[2]Leo Strauss, "What Is Political Philosophy?" Journal of Politics, Vol. 19, August, 1957, p. 356.

[3]Storing, editor. Essays on the Scientific Study of Politics, op. cit., pp. 308-310.

[4]Hans Kelsen, "Absolutism and Relativism in Philosophy and Politics," American Political Science Review, Vol. XLII, October, 1948, p. 906.

A somewhat more moderate position with respect to values is one taken by non-cognitivists like Professor Felix E. Oppenheim. Rather than seeing value questions purely in the light of the absolutist-relativist dichotomy, Oppenheim sums up the non-cognitivists' distinction between "intrinsic" and "extrinsic" value-judgments in the following terms.

> Since non-cognitivism does not doubt the objectivity of empirical knowledge, it cannot question the cognitive validity of so-called extrinsic value-judgments, for the simple reason that these are not value-judgments at all, but empirical statements to the effect that something is an appropriate means to a certain end.[5]

The approach of F. S. C. Northrop to the problem of value theory in political and legal science is at times similar to each of the varying positions of Strauss, Kelsen and Oppenheim. Yet his uniqueness sets Northrop's value theory apart from all three of the approaches we have touched on. Northrop's awareness of the human need for political philosophy would make him sympathetic to the position of Leo Strauss. But unlike Strauss, Northrop attempts to go to the world of science rather than to the language of "the market place," in search of political philosophy. With Kelsen,

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[5]Felix E. Oppenheim, "The Natural Law Thesis: Affirmation or Denial?" The American Political Science Review, Vol. II, March, 1957, p. 50.

Northrop would be skeptical of any value theory that would claim that its values are "true" for all times. However, unlike Kelsen, Northrop would not settle for ethical relativism. Also, like Oppenheim, Northrop is aware of the possibility of cognitive validity for instrumental or extrinsic values. The latter's natural law thesis attempts to show further that basic political norms can also have cognitive status. Oppenheim, in a polemical argument against the natural law thesis, certainly misunderstands Northrop's own position. Oppenheim states

> Judges, no less than legislators, do indeed make value judgments (e.g., as to which of two conflicting interests is the more important). Certainly, "there is a set of specific values underlying our American legal order,"[3] in the sense that there is a specific set of ethical norms which American judges have traditionally implemented in the absence of relevant statutes or decisions. However, the cognitive validity of these norms cannot be inferred from such practices: nor does the fact that judges do apply these standards rather than others prove that they ought to continue to do so, e.g., Northrop seems to maintain. To argue that something is objectively valuable because it is being valued is to commit the naturalistic fallacy.[6]

As our discussion of Northrop's jurisprudence in the last chapter makes clear, Northrop does not maintain that simply because judges traditionally apply certain standards

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[6]Oppenheim, "Natural Law Thesis: Affirmation or Denial?" op. cit., p. 47.

this morally obligates them to continue to do so. Oppenheim has referred[7] to Northrop's remarks without apparently examining closely the context in which they appear. It is true that Northrop depends on certain existing norms for judging positive legislation. But this is only for "sociological jurisprudence." He himself is well aware that natural law jurisprudence is quite a different legal theory and must supplement sociological evidence. Northrop's "natural law" does not depend on an examination of the techniques by which jurists have traditionally chosen one set of legal norms over others.

The "natural law" thesis of Northrop begins with noting the scientific fact, that men do have basic symbol-carrying neurological structures. Since man exists in nature any theory, natural or otherwise cannot afford to ignore the basic physical nature of man. Additionally, since men use basic symbols for understanding the world around them neither the physical sciences nor the normative sciences can ignore the cognitive nature of man. Man's search for "ultimates," according to Northrop's use of available neurological evidence,

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[7]Oppenheim indicates that his judgment is based on the following article: F. S. C. Northrop, "Ethical Relativism in the Light of Recent Legal Science," The Journal of Philosophy, Vol. LII, No. 23, November 10, 1955, p. 652.

is not purely a matter of "instinctive" preferences but is based on the symbolizing properties of his cortex. As Northrop maintains, and as we have discussed elsewhere, the way the feedback mechanism of the cortex seems to work indicates that there are no a priori categories such as Kant believed existed. Our "primitive" or "ultimate" values can be ordered in a variety of ways. Some of the possible "ways" or categories of knowledge give us an increasingly adequate picture of ourselves, while other methods may be totally inadequate for giving us trustworthy knowledge. Thus, the "logical realism correlated with radical empiricism" gives us trustworthy knowledge while "naive realism" does not.

Since man uses the basic symbols for science as well as for culture, according to Northrop man's scientific ideas are related to his cultural content. Also, since man's scientific premises can be in error, so also can the premises of his normative theories be capable of error. The "facts" of nature themselves are never in error but man's propositions about facts can be erroneous. Finally, to the extent that a political theory asserts or necessitates the postulation of certain "supposedly" existing facts, the theory may be correct or incorrect.

Political ideals in Northrop's theory thus can have

a cognitive status if the epistemological assumptions within ideals are objectively examined. The "empiricists" have tended to examine only the isolated, existential and particular meaning of ideals. Nominalism in the form of naive realism, as Einstein's theory "demonstrates" to Northrop, is an insufficient and immature scientific method by itself. A scientific method for examining the "truth" or "error" of political ideals must be according to Northrop a "mature" scientific method, which goes beyond nominalism and connects the world of observation and the world of theory with "epistemic correlations."

When a culture's legal theory is clearly based on an erroneous sicentific methodology, then Northrop maintains that it is "meaningful" to state that the norms of the culture are actually "false." For instance, the Roman Law system in the 5th century B. C., according to Northrop, assumed as a premise for its patriarchal system, that the ability to procreate is peculiar only to the male. Such a legal system can be cognitively shown to be in error in the light of modern science. Thus, Northrop notes:

> We now know, however, from contemporary experimentally verified genetic theory that the foregoing theory of the relative contributions of the male and the female to the determination of the inherited traits of children is false. Both sexes make their

> contribution to the genetic characteristics of the offspring.[8]

The validation of political and ethical norms must therefore depend on a use of "correct" scientific epistemology. The logical positivists in their analysis of norms tend to use a radical empiricist approach. A positivist like A. J. Ayer, for instance, can see no cognitive meaning in any ethical statement beyond its immediate factual content. Ayer describes the logical positivists' position by stating that

> We begin by admitting that the fundamental ethical concepts are unanalysable, inasmuch as there is no criterion by which one can test the validity of the judgments in which they occur. . . . we say that the reason why they are unanalysable is that they are mere pseudo-concepts. The presence of an ethical symbol in a proposition adds nothing to its factual content.[9]

Ayer's empiricism is an inadequate account of "scientific" method according to Northrop. The deductive theories of the natural sciences assert more than they can immediately and empirically prove. Radical empiricism is not enough to constitute a scientific method for the value-free sciences, let alone for the value-ridden sciences.

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[8]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 265.

[9]A. J. Ayer, Language, Truth and Logic (New York: Dover Publications), p. 107. No date indicated for Dover edition.

The most adequate epistemology of natural science is what Northrop has called "logical realism in epistemic correlation with radical empiricism." This epistemology supposedly gives us an adequate understanding of the universe. Adequacy in this context is judged on the basis of whether the theory accounts for the natural "facts" that "public" knowledge, i. e., science, is aware of. Northrop maintains that his approach to science accounts for the latest "facts" of the Einstein era of relativity in physics as well as the "facts" of nature that man knew before the coming of modern physics, such as the aesthetics of the Orient.

If our political theory is to be in accord with "nature," we cannot rely on only a subjective understanding of what nature is about. It is possible, of course, to be "schizophrenic" in our value orientations and be simultaneously scientific and anti-scientific. There is nothing under the heavens that can compel persons or cultures to have coherent and yet "reliable" value systems. But it is possible to know nature "correctly" and to use our method of knowing nature also to build rules for ourselves and for our society.

It should be continuously kept in mind that Northrop's natural law is not, then, of a nominalistic character. Particular values do not spring up in isolated fashion with a

tag of reliability attached. "Justice" with a single nominalistic referent or "goodness," in a similar fashion does not await us in the nature outside our minds. The "meanings" of "electrons" and other scientific objects are found only after examining complex and rigorous theories which are indirectly verified. Only then does an "electron" become a public object rather than a subjective "tag." Also, as we have noted, natural objects like electrons, stars and planets cannot be "good" or "bad." Consequently, Northrop's natural law orientation leads him to assert that ethical "oughts" do not exist in isolation in nature. Values for Northrop exist in the context of scientific inquiry as they also do to some extent for Dewey and the pragmatists. But, as we have attempted to show previously, Northrop attempts to carry science into the area of ultimate ends as well, beyond the immediate problematic situation.

"Ultimate values" must be understood, then, in the context of the philosophical and scientific system of which they are parts. The particular contents of justice, goodness, aesthetics, ethics and norms have the most reliable meanings within a speculative system using the latest scientific "method." This gives us an approach for searching for values which will be relative to the philosophy of science of our

times, rather than for all times. Therefore the content of the "natural law" will vary as man's knowledge of nature varies. This does not mean, however, that these values are spurious or meaningless. They are as adequate as our understanding of nature will allow them to be. Northrop's version of natural law thus gives little comfort to the positivist and nominalistic "ordinary" language philosophers. But neither does it gladden the hearts of Thomistic natural law philosophers. In both cases, the reasons are essentially similar. Thomists with their Aristotelian epistemology and positivists with their Humean theory of knowledge are both using scientific methods which have been abandoned in the mature sciences.

Natural law thinkers in the older Thomist and religious and philosophical traditions have not in most cases made their peace with the developments in science since the era of St. Thomas Aquinas. As Scott Buchanan notes

> Natural law theory avoids open conflict or criticism of the academic going concerns that are committed to these methods, and it seems unable to comprehend and transcend them. The writings of Lon Fuller show the frustration that results.[10]

Northrop is by any standards an unusual "natural law" thinker.

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[10]Scott Buchanan, Rediscovering Natural Law: Fund for the Republic (Santa Barbara: 1962), p. 43.

That is, he is simultaneously a natural law thinker as well as a figure familiar with the theoretical problems of science. Recognizing that Northrop has attempted to face the "formidable task" of reconciling science and values, Buchanan has also said that:

> F. S. C. Northrop boldly states the outlines of current natural knowledge based on mathematical physics, connecting it with the long mathematical tradition from the Pythagoreans to the present. Still more boldly he allows such natural knowledge to extend itself to the human nervous system. He asserts that the latest neurology and the neurology immediately in prospect supply adequate physiological correlates of the rational human powers familiar in the humanistic tradition.[11]

Also, Buchanan comments on the non-absolutist, and undogmatic character of Northrop's political theory in the following manner:

> At present Northrop makes no claim that the natural law that he sees developing in his hypothetical construction yields anything but hypothetical values, and there is at present a presumption running through his thought that nothing more is needed. One must wait for developments. It is of course possible that such explorations will make discoveries.[12]

Northrop's "objective" values as we have seen are found by using the epistemology of science for venturing into the uncharted areas of new value theory. The general merits

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[11] Ibid.

[12] Ibid.

of his theory in contrast to the subjectivism of many value theories have already been noted. But his theory also seems to raise new problems, particularly for political theorists who would "like" to use his framework or his guidelines for value inquiry.

Our discussion of Northrop's philosophy of science brought out the fact that his conception of science parallels that of Einstein, Margenau, Reichenbach and many others. But it also has serious differences with the theories of Cohen, Nagel, Bridgman and Whitehead. Scientists and philosophers of science are far from unanimous about the current "correct" methodology in physics. Therefore, the task of the political speculator who would like to integrate science and political theory is not an easy one. The political theorist would need to devote a substantial portion of his scholarly efforts towards finding out the "correct" philosophy of science for himself. To some extent he would have to resolve the methodological differences himself, in order to use science for discovering reliable values, unless he is willing to settle for faith in some "authorities" as opposed to others. Also, recent scientific developments have been very rapid in character when compared to previous historical "eras." Therefore, if political values rest on scientific epistemology, values

are likely to be far more in a constant state of flux in our times than they have been, for instance, in the Middle Ages in Europe or in India until the coming of Islam. The task of creating political stability and keeping it that way for some time is going to be immensely more complicated than it has been. Keeping these practical problems in mind we will begin an examination of the results of Northrop's political speculation, based on his conception of "scientific method."

Ideal Values and the "Good" Political System

Although much of Northrop's political theory deals with questions of methodology, he occasionally does indicate what the substance of "natural law" ideals and a state built on these, are likely to be like. Since his views are not stated always in a systematic manner the task of the analyst is indeed a difficult one. As his views on sociological jurisprudence indicate, he is very much aware of the stubborn "living law" facts of existing societies. Therefore the discussion of his political "idealism" or values should be regarded as primarily an attempt at understanding the "good society" through the application of his "modern" scientific epistemology. Thus, too, unlike the pragmatists, Northrop tries to show the "exact" direction long range reform should

take, in order to have guidelines for changing some of the stubborn facts of existing political society.

As noted before, the word "state" has been a term that recent generations of political scientists have used to define the central institution in their discipline. Yet, the word state is not very frequently used by Northrop in his political essays and writings about the ideal political system. When he does use the term it is not usually clearly defined unless he is examining someone else's concept of the state. One suspects on the basis of the tone of some of his remarks that the word state for him refers to all the political institutions which are the products of a particular socio-political theory, which in turn rests on a particular view of nature. The "meaning" of the term state for him varies with the theory involved. Thus he notes that the "Hobbesian state" is a somewhat different state from the "American Lockean Jeffersonian Democratic State" at least to the extent that Lockean and Hobbesian theories indicate the need for somewhat different political institutions.

The ideal "state" or the pattern of political institutions for F. S. C. Northrop must rest according to him on the most recently verified theory of nature and its ensuing political ideology. A valid political ideology, in other

words, must through its epistemology account for all the "facts" of nature. Since the modern theory of nature, according to Northrop includes "logical realism," the new political ideology must also be logically realistic in character. Logical realism of course is a particular "form" or "version" of the "abstract" type of thinking which is more prevalent in the Occident than in the Orient according to Northrop. This abstract kind of thinking, as we have seen, he sometimes calls the "theoretic component" of knowledge about nature. But the ideal society needs also to pay careful attention to "radical empiricism" which is the "aesthetic component" of nature, or put in another way, the part of nature that is known directly as sense data. Thus, Northrop himself states

> That conception of good conduct and the good state is the correct one, valid for everybody, which rests upon the conception of man and nature as determined by immediate apprehension with respect to the aesthetic component and by the methods of natural science with respect to the theoretical component; procedures which, when correctly applied, give the same results for one person that they give for another.[13]

Presumably, such a state is a desirable one since its premises are based on the most current scientific philosophy.

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[13] F. S. C. Northrop, The Meeting of East and West: An Inquiry Concerning World Understanding (New York: The Macmillan Company, 1960), p. 470.

The reason why modern scientific philosophy "ought" to be followed is that all political theories contain assumptions about science and nature anyway, and since we can cognitively know what nature actually is like, we can also have reliable political theory about what "ought" to be in human behavior. Plato's politics was related to his physics, so were Aristotle's social ideas dependent on his "naive realistic" science. Similarly, all the political "isms" of life in turn rest on assumptions about science. This seems to be a form of "natural law" due to the way man uses his cortical symbols to understand everything "outside" him; bugs, bees, sunsets and norms. Since man uses his symbols both for science and for values, Northrop's thesis is that if we shift and modify our symbols in keeping with what philosophers of science have found to be consistent with science in the age of Einstein, we shall have reliable values also.

The world of "fact" and the world of "value" are not two separate ontological schemes. They are actually reconciled in the symbolizing capacity of man, according to Northrop. But man's physical capacity to symbolize is partly unstructured. Consequently what man can do is to structure the symbols and use them in such a way as to have an "adequate" view of nature. Concretely, they must see nature in the

complex light of Einstein's physics rather than the archaic epistemologies of science such as Locke's tabula rasa or Marx's dialectical materialism. If the epistemology of modern science is philosophically and logically analyzed we will have a dependable theory of ideal politics as well. Thus Northrop's own analysis of modern scientific theory leads him to a particular "form" of the "good" state.

The "Legal" Form of the Ideal State

That is, the law of Northrop's state must necessarily be "abstract" and "contractual" in character since the society will not be basically tribal in form on the one hand nor anarchic in nature on the other. Here it is necessary to note the distinction that Northrop makes between a society based on a "law of contract" and a society based on a "law of status."[14] In a law of status society the rights and duties of men are based on a "naive realistic"[15] epistemology. The legal codes are based on "naive" observation or "sensed"

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[14]The terms "law of status" and "law of contract" which are used by Northrop actually occur first in the work of the English historian, Maine. See Henry Maine, Ancient Law (London: John Murray, 1908).

[15]"Naive realism" basically sees ideas and objects in terms of sensed qualities.

categories and they assign rights and duties on the basis of the apparent biological characteristics of the persons involved. Speaking of law of status societies, Northrop says:

> In the countless ancient patriarchal familial and tribal nations, the individual person's religious, moral, legal and political rights, privileges, obligations and duties were defined by one's sex (patriarchal or matriarchal national rule and family headship), the temporal order of one's birth (primogeniture) and most important of all the color of skin of one's tribal ancestors. This is what Sir Henry Maine meant by a law of status society. The living law of all the peoples of the world, before the Stoic Roman lawyers and philosophers discovered Western contractual legal science, was of this character, as is most of the living law of the Africans, Middle Easterners, and Asians today and . . . the Filmerian Christian component of the Old South.[16]

A contractual legal system attempts to avoid some of the erroneous naive realism of status oriented societies. Unlike the statically fixed legal codes of naive realistic societies, contractual law introduces concepts which involve abstract relationships between persons, rather than sensed relationships alone. Contractual law allows society to be more dynamic in character since the referents of its symbols are not fixed permanently as sensed characteristics. The laws of this postulated kind of system "have much greater

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[16]Northrop, Philosophical Anthropology, op. cit., pp. 9-10.

generality"[17] than those of a status bound society. Northrop also sees a definite relationship between the fact that "concepts by postulation" are more frequent in Western science and that contractual law is also Western in character. The technological civilization of the West owes a great deal, according to Northrop, to the "concept by postulation" characteristics of Western law, science and philosophy.

Northrop's "laws" then not only must be abstract and contractual in character, but must be as "imageless as possible. That is, his "state" must make sure that its "laws" do not surreptitiously introduce any sensed "status" concept. Such a state has much to learn from the errors of the American legal system despite its contractual character. The "separate but equal" legal doctrine in the past and the actual and present predicament of Negroes, Puerto Ricans and others in the United States are incompatible with Northrop's theory, since "Negroes" and "Puerto Ricans" are known naive realistically. We "see" the physical appearance of a Negro and then classify him almost in the way Aristotle naive realistically classified flora and fauna.

Northrop's ideal legal system, therefore, must define

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[17]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 188.

basic legal rights and duties without any reference to the sensed differences between men. Since the color, the race, the caste, the family and the physical characteristics of man are examples of sensed attributes of man, they cannot provide the basis for the legal system. The goals of the legal system cannot be those of fulfilling the wishes or the desires of naive realistic man. The usual restrictions against unequal legal treatment for race, color, previous condition of servitude and religion in the constitutions of many modern "secular" states are examples of Northrop's kind of contractual law.

At this point one may wonder why Northrop is so concerned about discussing laws of contract, since they are so prevalent in Indian, United States, and other constitutions. The answer to this hypothetical query is that Northrop is attempting to show that the postulates of contractual law do at times meet the standards of logically realistic epistemology and therefore to that extent are "scientifically" reliable foundations for law, but they also must be institutionalized.

Legal terms in the Northrop system will exist in any case in the form of incomplete symbols. This means that each term or word or category will not have a direct naive realistic

or empirical referent. The meanings are not single nominalistic ones. The meanings of legal terms in contractual law vary according to the purpose, goals, and the ends of particular legal systems. The incomplete symbols of Northrop's law such as "man," "nation," "national interest," "rights" and "legal obligation" cannot have the same simple meanings that "common sense" and dictionary definitions tend to give them. Then, Northrop writes:

> . . . an incomplete symbol has no meaning by itself. Its meaning is to be found, consequently only by examining the formal properties or the syntax of the basic premises of the theoretically constructed system in which it occurs. Consequently, as Regius Professor H. L. A. Hart has noted,[20] it is an error to ask, as most traditional legal theorists have done, for a definition of such legal words.[18]

The above quotation describes what Northrop's terms are not. It is also necessary to describe them more positively. Legal terms, Northrop insists, must be of such a nature that they reflect the Stoic-Roman concept of "universal man" or more precisely "any man whatsoever." Since the Stoic concept of "any man" does not have an immediately sensed referrent it meets the standards of logical realism and is logically compatible with it. What this means

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[18]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 287.

practically can be illustrated by one example. If the state has a law to the effect that "persons are entitled to a high school education" that state will be ethically good to the extent that the word "persons" does not refer to Caucasian or Negro men or women, since these are primarily sensed classifications and are therefore naive realistic and false scientifically. Another example is that if the state decides that chicken stealing is a crime it cannot punish a Negro chicken thief by one standard and a Caucasian chicken thief by another standard, because once again the difference between the two thieves is based on naive perception and "Negro" is a "sensed" category which is incompatible with logical realism.

The substantive "democratic" character of such a legal system should become more and more evident. That is, his "democracy" is not that of a simple majoritarianism but it rests on an invariant and abstract "man-ness" in all men. This egalitarianism does not claim that men in actual sensed qualities are equal but that they must be considered equals in an abstract way, for society to work with abstract laws. It should be remembered that many of the familiar concepts of American law are also similarly abstract, which is a feature of any contractual legal system based on a deductively formulated theory of man; in this case Lockean man. The "University

of Oklahoma" does not get its "right" to sign a contract for equipment from the mere fact that there is a campus with students wandering around on it. Instead the "rights" of the University, to sue, for instance, arise out of its legal character as a "corporation" or more particularly a state owned "corporation" in a contractual legal system. The university therefore is a legally created abstract entity. Also, the United States constitutional concept of "equal protection of the law" does not define its meaning in terms of the rights of black persons or white persons. If it did so, it would be falling into the naive realistic trap. Theoretically this protection is available to "any person," if one is to remain faithful to the deductive and theoretical concept of man. Since Lockean-Jeffersonian theory is a deductive theory it does call for abstract and "theoretical" concepts of "man," "rights" and "law." Thus the fact that these concepts occur in the American constitution is not regarded as an accident by Northrop.

Northrop's state can have several different goal values as we shall see in detail in the next chapter. But whatever these values may be such as industrialization, aesthetics, entertainment or social harmony, the legal order must make sure that the process for attaining these goals

does not distinguish between persons in naive realistic racial, religious or even "economic" terms. The goal values and the substance of laws as well, must be compatible with concepts by postulation which are required by scientific methods. To do this the legal system must make its laws applicable to everyone in form as well as in content. Thus, a law stating that whosoever has high cheekbones and straight coarse black hair cannot buy liquor without a permit may appear to be universal in form. The goal value in this case may be that of reducing the incidence of alcoholism. But since the content of the law is not really aimed at alcoholism per se but classifies persons who are defined in terms of sensed qualities and racial characteristics (probably American Indian) the norm does not meet the standards of concepts by postulation. If the same law is modified to the extent that the racial criteria are substituted by "incomplete symbols" such as "minors," "chronic alcoholics" the situation is improved,[19] since these symbols have rather indirectly sensed referrents just as electrons do.

In our use of such ordinary language and examples, however, there is always the danger of misrepresentation of

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[19] It might be noted that this amounts to a "scientific" justification for much of the work of the Warren court in defining "equal protection."

Northrop's ideas. Thus Northrop himself supplements his own ordinary language and illustrations with the language of symbolic logic to express the key to the requirement for valid or "scientific" law in the state. He puts this as follows:

> For any person p, for any object of intrinsic (goal value as distinct from instrumental value) normative judgment x and for any substantive content s of either personal conduct or the living or positive law, to say that s of x is morally good and legally just is equivalent to saying that:
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> (i) x is in accord with a concept by postulation contractually constructed, determinate law L, which is universal in the sense that the law holds for all persons, i.e., is preceded by, to use the language of symbolic logic, the universal quantifier (p), where (p)means "for any person whatever."
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> (ii) The substantive content s of this universal law (p) L is such that if its substantive content s confers specified rights, privileges and duties upon one person, or one group of people p, then any other person or group of persons whatever must enjoy the same specified intrinsic normative rights, privileges and duties; that is, not merely the law as a whole must be preceded by the universal quantifier (p) but also the substantive content s within the law must be accompanied by a second universal quantifier (p).[20]

It is clear that Northrop's general legal theory here does bear some resemblance to Kantian jurisprudence and Northrop himself notes this from time to time. Thus the latter's "intrinsic-extrinsic" terminology smacks of Kantianism. The discussion of an "intrinsic" norm as a primitive norm or end and an "extrinsic" norm as an instrumental norm actually

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[20]Northrop, The Complexity, op. cit., pp. 275-276.

contains echoes of Kant. Also the requirement of "universality" for both norms parallels the following description of Kant's jurisprudence by Huntington Cairns:

> A hypothetical imperative is a principle of conduct on which we act, not because of its intrinsic merits, but because of something else, such as an end which we wish to achieve. A categorical imperative we accept for its own merits and not as a means to something else. Thus he arrived as his famouc conception that there is only one categorical imperative, namely: Act only on that maxim which will enable you at the same time to will that it be a universal law. Kant followed this with a second formula to determine the end of the moral law: Act so that in your own person as well as in the person of every other you are treating mankind also as an end, never merely as a means.[21]

There are, however, some differences between Northrop's jurisprudence and Kant's. The most fundamental difference is in epistemology. The Kantian concept of a priori does not appear in Northrop's epistemology. Since man's symbolizing tools, i.e., his cortical neurons and the way the brain associates different impulses can be used in a variety of ways as shown previously, the Kantian concept of categorical a priori is modified to a hypothetical a priori. In other words, Northrop sees man as a discoverer of varieties of ethical systems whereas Kant tends to see the moral order

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[21] Huntington Cairns, Legal Philosophy from Plato to Hegel (Baltimore: The Johns Hopkins Press, 1949), pp. 392-393.

as being actually outside the "creative" abilities of man.

Another difference between Kant and Northrop is the Kantian vagueness on the question of whether the content of legislation rather than only the outward form must be universally applicable or not. Kant, according to Northrop, seems at times to be skeptical with respect to possibilities of scientifically evaluating the lagislature's will. Thus, Cairns describes the Kantian position here in the following manner:

> In its dignity, the will of the sovereign legislator, in respect of what constitutes the external mine and thine, is to be regarded as irresistible; and the judicial sentence of the supreme judge is to be regarded as irreversible, being beyond appeal.[3] Kant's view of the blamelessness of the legislative power involves a direct denial of the ancient conception of natural law as a form of higher law.[22]

Northrop, in contrast to Kant's ideal state transforms Kantian private categorical ethics into a standard for public law. Thus, the general legal form of the state has to be applicable to "any man" whatsoever. The institution of hereditary slavery, for instance, could not exist in Northrop's state, ethically or politically. Kant, on the other hand, could probably disapprove of slavery in private

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[22]Huntington Cairns, Legal Philosophy from Plato to Hegel, op. cit., p. 444.

ethics but would be hesitant in criticizing it as a public political institution (although ethically he insisted that man must not be treated as means). In contrast Northrop attempts to reconcile private ethics with public and scientific morality. Thus in the current milieu of controversy in the United States over desegregation the Kantian would "know" only subjectively and ethically that segregation is evil. Northrop, on the other hand, is saying that segregation is ethically evil because it is scientifically wrong since it rests on naive realistic foundations. Therefore, political morality in the segregation issue is not a matter of "faith" alone but a "correct" conception of the nature of things as well. Thus, for Northrop a law which through generality declares "segregation" to be the law of the land is being "universalistic" and "scientific" only in outward form but not in substantive content.

The ideal legal system, in summary, is basically deductive, logically realistic, "universalistic," and Stoic-Roman in character. The bare outlines of the system that we have sketched has not yet been given a substantive character, although we have seen how Northrop in theory would approach substantive questions. This legal theory is in a sense "self-evident" in character, like the "natural rights" of

Jeffersonianism. The "self-evident" characteristic arises from the fact that the legal theory is deductive in nature. Therefore, to find out what is meant by a "right" in such a system, we cannot proceed by looking for a "right" in sensed nature as some political sicentists[23] tend to do. If we look for a natural law or right in "empirically" observed nature such as in the "tendency" towards "self-preservation," we are liable to fall into the trap of "naive realism" and therefore as we have shown before, of relativistic subjectivism. Then we will have Jones' natural right based on his own observation of nature and Smith may have a different natural right based on Smith's own "sincere" observation.

But the fact that a legal term in the ideal legal system does not have an immediate referrent in sensed nature does not mean that it is cognitively meaningless. To find the meaning of "justice," we need to look at the deductive legal theory Northrop has in mind in which "justice" is defined in relation to other entities of the theory. Existentially, by itself "justice" is an incomplete symbol, just as much as an "electron" is. "Justice" does not greet us during a walk in the woods and neither does an "electron." The fact

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[23]See Harry V. Jaffa, "Comment on Oppenheim." American Political Science Review, Vol. LI, March, 1957, pp. 54-55.

that "natural rights" for Northrop are "self-evident" means only that their meanings are tautologically true, i.e., they follow from the basic premises of the theory. The fact that they are tautologically derived does not, however, make them meaningless, since epistemological analysis can show whether the "method" for arriving at value is reliable or not. An example should help clarify this position. Let us assume that we have two normative theories which deal with "justice" and that one theory is the Hindu theory of caste and the second is Northrop's legal theory. "Justice" in Hindu caste-theory often consists of the enforcement of caste rules. But since caste rules are based on biological differences including color, they constitute an "erroneous" conception of nature as modern science shows it to be. "Justice" ideally for Northrop may be defined tautologically as "equal protection of the law" which is tautologically related to the concept of "abstract, universal man." The fact that this concept of "justice" rests on a logically realistic theory which is the theory used to define concepts in modern science makes it more reliable than the naive realistic caste theory of "justice."

The caste theory does not use the concept of "any man" but only refers to "Brahmin man" or "Sudra man." Northrop's concept of man refers on the other hand to an abstract

constant in "man" which is only theoretically known. Just as in simple arithmetic one assumes that the numbers 1, 2, 3, 4, 5 have a basic constant without which we could not deal with the variables, so also white man, black man, healthy man, sick man all have an abstract "man-ness" in them, in a mathematically oriented theory like Northrop's. We do not have to feel this man-ness. Instead the "meaning" of this "man" can be understood only in terms of the other concepts in Northrop's theory such as "rights" and "consent." However, expressed in the language of "common-sense," Northrop's concept of man involves the argument that there is something in man which is not directly perceived, but which makes him co-equal with all other men in spite of their sensed differences. Such a notion of man is "valid" partly because it is a concept that is not defined in terms of the erroneously and naive realistically "observed" qualities. Naive realism, as we have seen, is an erroneous epistemology since it depends on observation. As Northrop has attempted to show, "observation" amounts to guesswork in science. Therefore, in normative ethics, the implication is that because "naive realistically" we see black men does not necessarily and scientifically mean that we can inductively conclude that "black men are inferior," "black men are bad" or "black men are good." Observation can

tell us that there is the blackness of some men and the "redness" of others, but cannot show the relatedness of these categories to ethics.

Thus, Northrop's laws are not based on "observation," neither are they synthetic propositions, i.e., they are not propositions necessarily required by our "nature." Rather, they are analytic in character, i.e., they are related logically in a theory which is hypothetical to the extent that it is compatible with what we know of nature thus far. Also, the analytic legal propositions are meaningful to anyone, i.e., publicly or inter-subjectively, to the extent that anyone who understands mathematics and logic can find out their "meaning" by examining the theory. What is meant by "justice" appears in the theory. No guesswork or "inner-eye" is necessary.

But this discussion of the "ideal" law thus far is primarily about the formal aspects of Northrop's legal theory. In order to delineate further the features of his thought we must turn to some of the other aspects of its theoretical foundations.

"Consent" in Politics

The deductive nature of the previously stated legal theory cannot practically speaking, alone make the naturalistic

system work. To make the contractual system work there must be some form of a "contract" or "consent" according to Northrop's theory. Northrop's most definitive and concise statement on the need for "consent" in his system is as follows:

> Being postulationally and contractually constructed, and hence merely hypothetical, the validity of any (p) L in which (p) s must rest on free implicit or explicit consent of the parties concerned.[24] [Italics mine.]

Consent in "implicit" or "explicit" form is important in Northrop's state. Just as a deductive theory is indirectly verified by inductively obtained "facts," so also legal and ethical theory must have its indirect referrents in the minds of men. Also, Northrop states that the requirement of consent

> . . . tells us that for-me-ness or consent is essential. This, let it be recalled, is a tautologically true or self-evident proposition of the law of contract, the reason being that, until consent is given, what is put into the contract by the contracting parties is merely a fanciful or hypothetical "might be," it is not an obligatory for-me-binding imperative.[25]

Implicit consent is not necessarily an active expression of approval since only "descriptive sociological and philosophical anthropological jurisprudence can tell us whether"[26]

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[24]Northrop, The Complexity, op. cit., p. 276.

[25]Ibid., p. 292.

[26]Ibid., p. 293.

consent exists or not. This version of the meaning of consent is the most easily understandable. If a law says "Repeal prohibition for everybody" and this norm seems to be in accord with the "living law" of the majority, they are likely to confirm the practical wisdom of the legislation, by not protesting against the law, by buying liquor legally or by crowding the beer halls on "freedom's" night.

"Implicit" consent is therefore the consent people show by their objectively observable behavior. "Explicit" consent on the other hand, seems to be more "active" in character. An example of "explicit" consent occurs in the "legislative" or lawmaking process when the majority's will, provided it is "valid," is able to "bind" the citizenry to the observance of the law. Then "any dissenter or minority group has the legal obligation to be measured by merely majority approved statutes of the legislature"[27] provided they are universally quantifiable.

The problem that one faces with the majoritarian consent to "good" laws is the problem of the dissenter and his "obligation" to abide by the statute which has the approval of the majority. Northrop shows his characteristic honesty in

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[27] Ibid., p. 298.

recognizing this problem. He states:

> The problem is how, in such a theory, to pass from the majority assent to a statute to the obligation of all-dissenters and assenters alike to accept the statute.[28]

Here, Northrop recognizes that empirically speaking there is no necessary connection between a majority's consent and the minority's obligation. His "justification" depends on two major arguments. The first is that if the content of the good law is applicable to "anyone whatsoever" then every single legal person will be bound by it and the law will not be arbitrary since it is universal in character. The second argument that Northrop presents is that since a "good" statute is "good" or "true" for the majority that

> . . . the criterion of legal obligation solves the problem of legal induction in legal science, precisely the same way in which Frege and Bertrand Russell[31] solved the problem of mathematical induction in mathematical science. In both instances the problem consists in passing from what is true for some to what holds for all.[29]

The first argument is <u>relatively</u> clear since it is clearly analytic in nature, i.e., it follows from Northrop's deductive hypothetical theory. But the second argument is likely to be confusing and controversial. An example will

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[28] <u>Ibid</u>., p. 298.

[29] <u>Ibid</u>.

help illustrate the genuine difficulty that Northrop faces here. Let us suppose that there is a modern Socrates and a modern Aristotle each with a legislative proposal that is universal in form and also in content. This is possible, since as Northrop himself admits, "science" occasionally has two sets of theories which give "adequate" explanation of the same set of facts. If Aristotle is able to achieve the "consent" of the majority, Socrates as a dissenter is "bound" by the Aristotelian law.

It may very well be that the new Socrates' theory "explains" or accounts for every single "fact" that is now known to exist, as well as does the theory of Aristotle. The insistence on obedience to the Aristotelian position simply because the "majority" wants it certainly would seem to be a tragedy from an intellectual and libertarian viewpoint. Part of the answer to this dilemma of consent and majoritarian tyranny appears to lie in the spirit of toleration which conceivably arises from the awareness by people in the ideal state that normative theories are not valid for all time. They are tentative and always subject to the modification imposed by the dynamism of science.

However, toleration is not an <u>absolute</u> nominalistic "value" in the political theory of F. S. C. Northrop. The

role of toleration operates in a way which is different from the idea of toleration in the Lockean theory which is so prevalent in the American social system. In the political theory of the early Locke "toleration" as Northrop persuasively shows[30] arises from Locke's view of human nature. Locke's concept of minds as isolated mental substances which were unrelated to each other naturally led him to the conclusion that no mental substance had the monopoly of "truth" and therefore could not impose its view of "truth" on others without their consent. Since Locke's view of mental substances is erroneous,[31] a valid theory of toleration cannot be based on it. Northrop is very critical of the tendency in American politics to view toleration in the light of Lockean principles. One consequence of this is the absence of reliable standards even among learned jurists like Justice Frankfurter for adjudicating between conflicting opinions about the "good." Thus, the good tends to become identified for Frankfurter, seemingly and simply with the majority's "will."

Locke's concept of toleration, then, like his other concepts in political theory, are related to the premises of

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[30]Northrop, The Meeting of East and West, op. cit., pp. 81-86.

[31]See Ibid.

his philosophy of science. This philosophy postulated a "three termed relationship" between "man" and the "nature" around him according to Northrop's analysis of Locke.[32] The philosophy of Locke asserts that these relationships exist between three factors in nature. One factor is the "mental substance" in each atomistic individual. The second is the physical matter of Newtonian physics and nature. The last factor is composed of the sensed qualities that we perceive.

Since mental substances are not physically related or tied in with each other, Locke proceeded to argue that the ideas of one mental substance are as "good" as the ideas of another mental substance. The absence of any method by which the validity of the "opinions" of atomistic man could be judged made toleration an absolute necessity in Locke's political theory. This theory according to Northrop needs to be modified in the view of Einstein's epistemology.

This new epistemology sees the relationship between

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[32]Northrop's analysis of Locke and his effect on American ideology is an incisive one but it is far from being the only analysis. For a summary of other views see Bernard Wishy, "John Locke and the Spirit of 76," The American Past: Conflicting Interpretations of the Great Issues, Vol. 1. Edited by Sidney Fine and Gerald S. Brown (New York: The Macmillan Company, 1961), p. 108. Wishy, rather inaccurately, sees Northrop (among others) as accepting "Locke's works as a leading philosophic justification for modern liberalism."

man and nature as a "two termed relation." These two terms are, as we have seen, the theoretic or postulated and the aesthetic or sensed components of reality. Man is not atomistic, therefore, since he is actually related to the continuum of nature by these two components.[33] The institutions of the new state must then rest on a new theory of toleration. Ideally, toleration by the judiciary, for instance, does not have to be shown to meet every opinion and every "subjective" interest of each man. Positively speaking, toleration needs to be shown, once again ideally, only to the varieties of values which actually postulate the "theoretic" component of things using logical realism. The avenues of inquiry for new deductively formulated values for man must be kept open in the legislative process and in other institutionalized "behavior" of man, such as in the area of "education." In summary, toleration ideally means that man and legislators have the freedom to speculate, i.e., to discover new aspects of the theoretic nature of things. But this does not mean that "toleration" is the basic formula that judges must use in resolving a "problematic situation" defined in terms of a

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[33] See Northrop, "Concerning the Philosophical Consequences of the Theory of Relativity," Journal of Philosophy, Vol. XXVII, April 10, 1930, pp. 197-210.

"clash of interests." To recognize ideally a "clash of interests" is to fall into the Lockean error of postulating atomistic man with his atomistic "will" as a cardinal legal absolute.

Thus the Lockean notion of atomistic man must be modified in the light of modern science which sees man as a focal point for the theoretic component of things and the aesthetic component of things. In making this point Northrop argues that,

> The answer to the basic problem underlying the ideological issues of these times is, therefore, as follows: the aesthetic, intuitive, purely empirically given component in man and nature is related to the theoretically designated and indirectly verified component, not as traditional modern Western science and philosophy supposed, by a three termed relation of appearance but instead by the two termed relation of epistemic correlation.[34]

The "theoretic" component of law, science and politics is, therefore, speculatively discovered, as Northrop so often insists. This gives the "form" of our laws and political theories less than an air of finality and infallibility. Since our most sacred political assumptions can be in error no less than the physics of Aristotle, society must insure that the quest for new ideas, values, and theories remains

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[34]Northrop, The Meeting of East and West, op. cit., p. 443.

as part of the essence of the "scientific" state. The scientific state, therefore, is far from an institution of static ideals, since "science" itself constantly searches for new theories, hypotheses and constructs.

Rather, the state is conceived in "pluralistic" terms by Northrop, in the sense that within the institutionalized life of man varieties of speculation must not only be tolerated but encouraged. The essentially democratic nature of the ideal state thus becomes evident since it is only within a democratic state that the most active search for new social ideals as well as scientific theories can be continuously carried on. Thus, "the principle of pluralism in its bearing upon the open society . . . . must be kept in mind." Still it should be noted again, however, that "pluralism" and "democracy" in Northrop's theory are not precisely the same in meaning as many contemporary theories of democracy make them, where the reconciliation of subjective economic and social interests is regarded as one of the political functions of an "interest" oriented "pluralistic" society.

Rather, "pluralism" in ideas is one of the desirable "values" together with "universality" in the substance and procedure of legislation, as well as "consent" implicitly demonstrated or explicitly expressed. These values, according

to Northrop, are logical extensions of his philosophy of science.

However, quite apart from their formal scientific validity, political scientists may be concerned and rightly so about the types of institutional apparatus that would, ideally at least, bring these values into fruition.

Intimations of Institutions

The political scientist who by training has been primarily concerned with the descriptive aspects of the study of political institutions is likely to be disappointed in his search for the detailed blueprint of political institutions in the writing of Northrop. For the latter, in the speculative search for the political and social theory of tomorrow, has not paid a great deal of attention to the detailed problems and complexities of a "reformed" political society. This does not mean, however, that he is unconcerned about the way institutions operate. In all of his writings dealing with actual societies that already exist he demonstrates a continuing sensitivity to the need for political institutions as vehicles of ideals.

Important as institutions are, to Northrop, they are simply instruments by which ideals are actualized. The

failure of institutions according to his theory is usually, therefore, only an aspect of a basic failure in laying the groundwork or the basic ideological foundations. That is, institutions are embodies "forms" and ideals. Consequently one of the pre-requisites of reform is being clearly aware, on the basis of scientific epistemology, of the ideological direction in which reform must take place.

The new ideology, like any ideology, in the sense that Northrop uses the term, will need a set of institutions to help actualize the ideals. Institutions are the "operations" and "epistemic correlations" of man's social and political experience and are necessary in somewhat the same manner that "operations" and "experimental situations" are necessary in the natural sciences. Just as "operations" are meaningless, according to Northrop, without the existence of a related scientific theory, so also institutions and their "procedures," "functions," "structure" or "behavior" are meaningless unless one examines them as embodiments of ideals. Once again it is the "inner order" of the "facts" of social and political institutions that is crucially important for understanding the dynamics of society.

Also, institutions bridge the gaps between the theories on the one hand and existing social facts on the other

as "epistemic correlations" connect the "constructs" with the "radically empirical." The warp and woof of institutions then is to some extent due to the existing stubborn facts of the older "living law." The United States Congress today is possibly a good example of this. It is one institution among many through which the Lockean conception of "universal" rights with some qualifications which we will note in the next chapter can through experimentation displace the "traditional" values of the American South. The recent election of the new Prime Minister of India also provides a somewhat oversimplified example of how institutions can be the meeting grounds of the old and the new. After Pandit Nehru's death the Congress Party which plays the Western parliamentary role of the "majority party" proceeded to pick its leader in a most un-Western manner. The new leader was "unanimously" elected despite the fact that the new leader Lal Bahadur Shastri did not even enter the "power struggle" actively on his own behalf, according to the available evidence.[35]

Because of the fact that institutions do have to operate under existing conditions, Northrop deliberately neglects to describe the detailed structure of the institutions

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[35]See The Hindu Weekly Review, Madras, June, 1964, p. 3.

in the new society. In the process of changing from the old to the new, he implies, institutions will develop detailed characteristics that cannot be and should not be artificially and dogmatically postulated in detail beforehand.

Besides the allowance for existing facts, there is yet another reason for the incomplete sketching by Northrop of "ideal" institutions. The nature of the new scientific society as we have seen is essentially that of a "contractual" democracy. Northrop maintains[36] that in an ideal contractual democracy the detailed patterns of institutions must be worked out through the continuing pragmatic and contractual process, in the light, of course, of the correct epistemological system. In other words, the pragmatic "trial and error" to have meaning must refer to the standards imposed by logical realism and radical empiricism and their particularized values of "universality," "consent" etc. Just as in a contract the "meanings" are assigned by the contractual parties so also in the institutional context whether to have an Interstate Commerce Commission or not and the attendant details thereof must be worked out contractually through some sort of legislative

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[36] Telephone conversation with author, 6-7-1964. One might add that Northrop is displaying a philosopher's concern both for (a) the need for new values in society, and also, (b) that we never know enough to postulate a system of order for all times.

process, whatever its "label" might happen to be.

To expect that the details of institutions will be worked out contractually may seem as though Northrop anticipates extraordinary performances on the part of ordinary men. Actually, however, ordinary men provide the very necessary "consent" to and restraint on the "authoritative allocation of values" in the society, new or old, as we have already noted elsewhere in this chapter. But this does not mean that the efforts of creative persons who are fewer in number will go unnoticed and unused.

The person of unusual talent and of a speculative bent of mind will also be important and necessary in the process of institution building as indeed he will be in the search for new intrinsic and instrumental values. But talented persons should under Northrop's system by no means form an elite of "guardians" with the monopoly of violence power at their command. Ideally "talent" and "consent" will be complementary features rather than antagonistic elements. How such a feature is to be institutionalized is once again left by Northrop to be solved pragmatically. There seems to be an assumption in his theory that if the present "interest" group orientation and the naive realistic habits of people are changed, society will tend to accept the blending of

speculation of the talented with the "consent" of the many. At least, he argues that such a democratic theory,

> . . . avoids the error present in contemporary democracy of producing quantitative conformity at the expense of variety, important chance variations, and creative individual originality. The expert insures the creative advance, the empirical verifiability and the quality which comes from thinking through the paradoxical problem present in any law which is made by, yet measures men. The many free people, any one of whom may become an expert provide the assent without which the law suggested by the scientific experts would be a law of tyrants. The many provide the assent, also, without which the law of the community would fail to carry moral or legal obligation for its subjects.[37]

Thus, the details of institutions and their workings are not to be worked out beforehand but are to be developed in the contractual process of constant experimentation. The United States, for instance, although it falls short of Northrop's ideals in several areas is a partial example of a contractual state where the theory of Jefferson and Locke did not specify the details of the necessary institutions. They were to be and still are being worked out later. Similarly, the Soviet Union, which is also an imperfect but contractual state[38] has experimentally developed its institutions with

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[37] F. S. C. Northrop, Book Review: "Sovereignty: An Inquiry Into the Political Good, by Bertrand de Jouvenel," Yale Law Journal, Vol. 67, June, 1958, p. 1315.

[38] The contractual character arises out of two characteristics (1) the "law" of the U. S. S. R. attempts to be

Marxist-Leninist goal values in mind. In contrast to these status bound naive realistic societies tend to have institutions which are not as extensively developed through constant experimentation.

As our preceding discussion shows, Northrop's preoccupation with the "inner order" of institutions results in an almost deliberate neglect of concretizing the detailed structures of institutions. In other words his illustrations of how institutions "should" be structured are more negative than positive. Where he does suggest some positive institutions they are sketched in terms of the "functions" that they are to perform rather than their structures. In his constructive comments, the paradox is that he implies that certain institutions are necessary and yet these institutions are in name at least similar to the existing American legislative-judicial-executive patterns.

However, each of his "institutions" are to fulfill functions which are quite different from the ones they actually perform at the present time in the United States. Thus

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universalistic at least in form (2) there is a type of implicit consent partly due to the pre-Leninist education and values of Kantian-Hegelian-Marxist philosophy according to Northrop. For a detailed discussion see Philosophical Anthropology, pp. 258-280.

certain institutions are necessary to perform the important function of policy making or legislation. The legislative process ideally, however, is a mixture of the "creative advance"[39] in values together with the "explicit consent" of at least the "majority." Thus, Northrop's concept of the ideal legislative process is quite different from the competitive interest group system in which contemporary democratic theory about policy making so often advocates. Speaking with disapproval of much of his recent democratic theory Professor Duncan has argued that

> This holds that, if the structure of the struggle to secure the wants (now called interests) can be made sufficiently pluralistic and fluid, a democratic and relatively peaceful society is possible. The task of the political leader here is to compromise the interest conflicts through promising a bit more to each than he can deliver but to give some satisfaction to each. If the conflict becomes too dangerous, he may, through his exercise of the state authority in the form of the centralized violence power, simply force acquiescence.[40]

In contrast to the dominance of the function of reconciliation of "interests," the legislative process ideally for Northrop is a speculative scientific search for values

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[39]Northrop, "Sovereignty: An Inquiry Into the Political Good," op. cit., p. 1315.

[40]John Paul Duncan, "Res Public Quam Bonum, Res Publica Quan Liberum," Oklahoma Law Review, August, 1964, Vol. XVII, No. 3,

which overcomes "the paradoxical problem present in any law which is made by, yet measures man." This truly calls for the creation of new values rather than the reconciliation of existing values and "interests" which often pass for "natural" facts. The task of speculation calls for the contributions of the "best minds" possible rather than the talents of the "compromiser." What presents Northrop's theory from being a facsimile of Plato's is the everpresent need for "consent" in Northrop's theory. In such a theoretical system even the brilliant innovator must obtain the "implicit" and "explicit" consent of people through the contractual legislative process before speculation can become law.

Northrop claims that such a policy making process is neither undemocratic, nor anti-intellectual. Thus, he argues:

> The very essence of popular acceptance of Einstein's relativity theory and of quantum mechanics is that the majority of men who give their consent to these theories do not independently make the observations, the experiments and the logical deductions from axiomatically constructed postulates which are necessary to confirm these theories. Instead, they depend upon experts and upon experts checking the experts. In short, the many are brought to their assent by "the summons of a man" or a few men. No one would say that this procedure in natural science is undemocratic. To make the norms of social science cognitive in this sense is no more undemocratic.[41]

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[41]Northrop, "Sovereignty: An Inquiry Into the Political Good," op. cit., pp. 1314-1315.

To ensure further that neither the intellectuals nor any "tyrannical" majority can legislate into existence values which violate the scientific epistemological theory and consequent standards, Northrop urges the creation of a judicial institution or a system of courts. The task of the courts, too, are not to be conceived in terms of satisfying "interests" and "wants" but the major function of the judiciary ideally is to ensure that the substance and form of legislation meet the standards of "universality." The court ideally then is not to legislate directly and positively but is to exercise the "negative" function of ensuring that naive realistically or subjectively formulated laws are not made binding. Thus the courts are to be guided by the specific epistemology that we have discussed above rather than the positivism of Justice Learned Hand and Frankfurter or the pragmatism of Justice Holmes.

Finally, the new state will also need to fulfill the function of "administration" or "execution." This, too, must be understood in the terms of Northrop's theory rather than in contemporary American terms alone. As will be developed in the next chapter, the ideal state is not necessarily a "far country" or a distant utopia. Thus, the new state is to be a highly industrialized and technical society, although to

be sure "technology" is to be supplemented by other "aesthetic" values. Nevertheless, the management of the industrial complex will call for the twin skills of technical competence and "moral" concern. Since ideally the new society will not be based on continuing antagonisms between the "private" interests of business and labor, or industry and agriculture, or rural and urban populations, the imagination necessary to apply experimentally legislative policy will become crucially important in the administrative process.

The technological society, then, will need this experimental attitude and policy on the part of administrators both for the moving of mountains as well as for dealing with men. The administrators must be able to apply the legislature's directives about building roads, given the engineering problems that are inherent in building roads in particular areas. But also, the administration must be sophisticated enough in "sociological jurisprudence" and "philosophical anthropology" to understand the framework of tacit and implicit consent and the "living laws" of various areas, within which they must operate. Too, moral concern must be infused throughout the administrative process to insure that human beings remain as ends in themselves. Thus, ideally, the administrator must serve the "public purpose" of the new

democratic state and not the gods of "efficiency" and cost accountancy" alone.

Here we have briefly introduced the term "public purpose." To discuss the substantive content of "public purpose" it is necessary, however, to examine some of the actual values that the new state "ought" to implement.

CHAPTER IX

SUBSTANTIVE ENDS AND PRACTICAL POLITICS

Thus far, Northrop's ideal state has been discussed at two levels: (1) the ideal legal "form," and (2) the general institutional pattern. Since Northrop is primarily a philosopher rather than a political scientist, he often stops short of concretizing some of his ideal values. But on two points he is relatively specific about the values which are to be implemented "ideally," provided, as we have seen, these values have received the "consent" given "explicitly" or "implicitly" by the people within a state. The first value is "technology" and the second one "aesthetic sensitivity." These are counterparts of the "theoretic" or "postulated" and the "aesthetic" or the "sensed" component of the natural world. The implication is that since these "components" or values are "out there" in nature anyway all we have to do is "discover" various aspects of them and make them our "own" by "consenting" to them, and that we "should" do so.

Technology. This "abstract" noun has various possible meanings. For Northrop, however, the term not only means "machines," "industry," "know-how" but also the epistemology which has ceased to depend on sense data and has moved on to "concepts by postulation." Such a definition implies, or at least Northrop himself makes much of the fact, that the rise of science and industry to a considerable extent is the culmination of the development of Western mathematical thinking which from the Greeks to the present age of Einstein shows an increasing awareness of "non-sensed" nature that non-Western cultures supposedly did not possess. Thus, he notes

> Students of the history of mathematics (Cohen and Drabkin, 1948) confirm also that, while many people previous to the ancient Greeks had discovered isolated propositions of Euclid, such as the Pythagorean theorem, it was the Greeks who first grasped the idea of proving these otherwise isolated findings by deducing them rigorously from a very small number of axiomatically constructed entities and relations and then using this way of thinking and knowing to understand man and nature empirically.[1]

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[1] F. S. C. Northrop, "Man's Relation to the Earth in Its Bearing on His Aesthetic, Ethical, and Legal Values," William L. Thomas, Jr. (ed.), Man's Role in Changing the Face of the Earth (University of Chicago Press, 1956), p. 1053. Although Northrop's views in comparative philosophy do not concern us directly it should be noted that Northrop's thesis, that Western philosophy and mathematics basically involve postulation while Oriental philosophy does not, is a controversial one.

Although modern technology is primarily Western in character according to Northrop, he would make it into a desirable value for the trans-cultural ideal state, i.e., political systems can ill afford to ignore technology. Technology should not and indeed it cannot just happen but it requires the conscious development of "concepts by postulation" in the minds of men. This of course will place great demands on the educational system in any state.

The basic argument that Northrop seems to follow is that "technology" in the sense of an industrial civilization is <u>part</u> of the "good" life. He clearly affirms that a society based on "aesthetics" or "concepts by intuition" alone where the sensed beauty of nature is a primary value cannot physically survive. Aesthetic civilizations, in other words, are liable to destroy the basis for physical survival. In a simplified but incisive manner Northrop makes the following comment:

> But the ethics and aesthetics of a non-technological society have their paradox also. Notwithstanding the affection of its folk for trees and all other creatures of "Mother Earth," its people, owing to their emphasis on family values, tend to produce more people than their instruments or their natural resources enable them to provide for. The consequence is, notwithstanding their affection for trees, that they eat the green twigs of the trees in order to live. In this way China has become denuded of its forests, and the rich top soil of its "Mother Earth" has been washed

> into the sea. The result is, not merely that millions upon millions of its trees have been destroyed, never to be replaced, thereby violating the cosmic equilibrium, but also that millions of its people die each year by starvation. The story of the non-technological civilization of India is similar. Owing to prolific breeding and for want of food, its people have turned hundreds of thousands of square miles of its once-forested or food-producing territory, extending from south of the Ganges Valley to the southern portion of the peninsula, into almost a desert. Egypt, where the situation and the cure are even more hopeless, tells the same story.[2]

Since modern "technology" is a "value" which arises out of the "correct" scientific method, particularly the technology of the "atomic" age, Northrop seems to indicate that this is a "reliable" value for a culture to adopt. A nominalist or a value-relativist may well note here that Northrop seems to imply that there is one value that is supreme "Man ought to survive!" Taken as an existential value this cannot be "proven." But as we have seen, Northrop maintains that existential, and isolated ethical values have no "meaning" per se unless they are related in a system with other values which follow from the use of a given epistemological system.

Northrop's lack of antagonism to "technology" makes his ideal state within the realm of possibility in our present

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[2] Ibid., pp. 1064-1065.

industrial age. Yet to him sheer industry is not enough. Other political, moral and ethical questions are important, too, in connection with industry, particularly at a time when

> . . . manufacturers of calculating machines are already at the major breakthrough point in their research at which these teleological mechanisms are being transformed from merely calculating into "creatively imaginative" problem solving machines.[3]

Thus, his ideal state is not only far removed from a mythical, agricultural paradise. It is a highly technical society which has the real political problem of using its technical instruments "properly." "Proper" use involves the integration of man's "natural" knowledge and his cultural behavior. Consequently students of politics in such a situation must become cognizant of major developments in science and technology in order to realize the advantages and dangers inherent in the machine age. The arena of politics must include an awareness and conscious "guidance" of the technological instruments of our times. The study of politics itself must be reconciled with the study of science, i.e., specifically, modern political science students "ought" to know the natural sciences as well. As Northrop notes

> Since the time of Kant, the culturally artifactual humanities, including ethics, religion, law, and

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[3]Northrop, Man, Nature and God, op. cit., p. 53.

> politics, have been treated autonomously, as if their "facts" were the same as those of the natural sciences. (Many cultural anthropologists still illustrate this same state of mind.) Then, as happened historically, the distinction arises between the Naturwissenschaften and the equally independent or autonomous Geistenwissenschaften, ie., sciences of culture, society and the humanities. Forthwith, it becomes impossible for modern man to get his moral, legal, political, or religious evaluative judgments into any meaningful working relation with his naturalistic beliefs or his nervous system and his body, since, on this "theory" they have no connection.[4]

Yet Northrop does not argue for society to be turned over to today's version of "scientists" since they, like members of other disciplines, are "specialized" in their abilities and unaware of the relationship between science and normative knowledge. Rather, the general tone of Northrop's discussion seems to indicate that an ideal society would have two major methods for the channeling of industry into "proper" purposes. The first method would operate through a citizenry so educated that it would realize the need for controlling the normatively neutral machines of modern industry. Thus the educational process would ensure that industry serves "socially" desirable ends. The second method of channeling industry would be a judicial process structured to guarantee that in the industrial society no one is used as a means.

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[4] Ibid., p. 57.

Although Northrop does not state his political philosophy positively using the "labels" that political scientists are accustomed to use, his political theory in its "pragmatic" attack on human problems contains certain ingredients of a "democratic socialism," or at least "New Deal" philosophy. However, these particular terms must be understood within the context of our present discussion since Northrop does not use them himself. Certainly he is far from being a Marxist, particularly since he regards "dialectical materialism" to be an erroneous epistemology.

Technology and Public Purpose. Thus there are several reasons for believing that Northrop in his gentle New England manner is something of an American version of a more thoughtful and scholarly member of the Fabian Society. His search for a "public purpose" is veiled in numerous passages and in a variety of ways.

In the first place, Northrop's theory of any culture is a theory of a public culture, one that has a (ideological) purpose of its own. Cultural meanings generally hold for almost everyone, at least with a few exceptions. To put it in his own words,

> To know oneself is to realize that one is more than oneself. Hence, to be selfish is to be false to oneself. The reason is that communication between

> human beings is a major part of what it means to be a human being.
>
> Without it, and the commitments to a common contract that it makes possible, there would be no commerce; nor would there be a family, a church, a legal, and political nation, or, . . . a culture. Only in the case of the creative scientist, philosopher, saint or artist of rare genius does the individual make the marital customs, the church, the university, the fine arts, or the legal and political community, instead of the customs, church, nation, and other cultural artifacts making him or her. In short, one is what others are.[5]

In the second place the entire legal system of Northrop's ideal state in <u>form</u> and in <u>substance</u> requires (1) consent and (2) meanings and contents of legislation that are valid for everyone. Once again, therefore, if technology is to exist in such a state it must become an instrument that is useful, meaningful, valid, purposeful for any man whatsoever. Stated positively, this seems to call for a technology that serves a <u>public purpose</u>. That is, the ideal state cannot have technology that is used for the benefit of private individuals or self-interested groups of private individuals only.

Further proof of Northrop's public purpose or "socialism" is given in his views on Locke. While Northrop accepts the Lockean emphasis on the contractual basis of government and the general theory of individual rights and equality, his

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[5]Northrop, <u>Logic</u>, p. 49.

rejection of the Lockean mental-physical dualism (as a result of Einstein's epistemology) has one consequence which is important to his idea of a truly "public" technology. It will be recalled that Northrop's understanding of Locke's justification of "property" is as follows:

> Man, as a mental substance, by means of his body and other physical objects of nature, cuts down the forests, tills the soil, grows his crops, and builds his home. Other mental substances, with their native freedom and perhaps their more indolent bodies, note this accomplishment and, finding it easier to combine and steal the neighbor's home and crops and perhaps even to destroy his physical body, than to develop and construct their own, take the individual man's property. This is the reason why the modern free and independent man gives up some of his ideal and actual native liberty to submit himself to conventionally prescribed laws of the state.[6]

Since the property that each mental substance appropriates through the work of the physical forces becomes its "own" property becomes a completely "private" entity. However, since Northrop rejects the dualism in Locke and its "mental substance" in the light of modern physics the "privateness" of property also vanishes with it. This does not mean that property must be in the hands of the "dictatorship of the proletariat." What this amounts to is that "property" should remain an entity "really" owned by no one in particular but it can be used as the "scientific" legislative process

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[6]Northrop, Meeting of East and West, op. cit., p. 95.

with its "public" morality determined. Therefore property could be used by other agencies or groups of individual than "formal government" provided that the technological instruments, land and other physical aspects of property are used in a manner that is within the standards of the Bill of Rights of the ideal state. This as we have seen applies universalistic standards [the universal quantifier (p)] to the form of legislation in regard to people as well as the content--property. In very concrete terms, much of the content of present television advertising to the extent that it misleads people and uses them as "means" would be seriously questioned and reoriented.

Thus, neither in property nor in technology do a few people have the right to "manipulate" the vast majority of mankind as Northrop seems to hint that they are partly doing at the present time, although he only touches on this "explosive" aspect of today's private technology, noting that modern technology is increasingly expensive and also that military technology is an important aspect of it. Then in speaking of those who manage "communication engineering" he says

> The senders [managers] are a very small class of human beings made up of two closely associated sub classes. The first of these is a very small group,

> since it includes merely the highest echelons of business executives who direct the manufacturing, management, and use of calculating machines and the communication networks. . . . The other closely associated subclass is composed of the highest military decision-makers and heads of similarly "hush-hush" research corporations who, thanks to taxpayers' federal funds put either directly or indirectly via the military at their disposal, are also able to buy and direct the use of these expensive machines.
>
> The receivers [of the messages] are a very large group. These embrace all the rest of mankind.[7]

He briefly indicates that communication techniques have been thus far used far too much for "private" purposes by this small elite as well as other groups including the "publicity" officers of United States presidents, behavioristic psychologists and "Madison Avenue advertising men whose offices are often, for obvious reasons, in the same buildings with the broadcasting corporations."[8]

Although Northrop does not elaborate on these scattered statements involving the concretizing of his ideals, if pursued to their logical conclusions such nations certainly seem to constitute a unique form of "scientific and democratic socialism."[9] Certainly his views on property,

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[7]Northrop, Man, Nature and God, op. cit., pp. 52-53.

[8]Ibid., p. 55.

[9]The term is used here only to illustrate Northrop's theory by way of comparison with present-day political "camps."

technology and the form of the ideal state indicate a preoccupation with "public purpose" that can mean only this political position in terms of logic. And yet except for judicial review he places a great deal of faith in the "common man" particularly since the latter is going to be re-educated (in his ideal state) for "scientific" thinking.[10]

At any rate, one conclusion is clear--the implementation of "public purpose" operates within the public legislative process, although the details of "how" the public purpose is to be served and "instrumental values" connected with it are not worked out specifically in his political theory. Obviously, however, particular methods of institutionalizing "public purpose" would vary depending on various "practical" problems, such as the remainder of the existing ideology and the industrial and agricultural "potential" of any given state.

Yet further evidence of Northrop's scientific and

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[10]Northrop's democratic faith in every man is shown in the following passage: ". . . there is a sense in which any person is an original genius. The degree to which such is the case depends on the extent to which one is "from Missouri," doubting with Descartes all contemporary as well as traditional authority, weighing the evidence for, and the alternative theoretical possibilities with respect to past, present, or future claims upon one's allegiance and faith before further committing oneself." Man, Nature and God, op. cit., p. 50.

democratic socialism[11] appears in the following "synthesis" of the ideal values that "ought" to be implemented:

> A free society, therefore, must do more than allow each person to vote, it must also as far as is possible allow the unique determinate traits of each person to come to fulfillment. Thus, to Anglo-American political freedom to vote and to Marxist economic freedom from want there must be added individual physiological freedom to be oneself.[12] [Italics mine.]

This "physiological freedom to be oneself" that Northrop refers to is best explained by a brief discussion of one final "value" that Northrop proposes for the ideal state. This consists of sensitivity to "aesthetics." He himself notes that the "most important ground of freedom . . . is in the aesthetic component of man's nature."[13]

Aesthetics. To discuss the importance of "aesthetics" in the ideal political system we need not deal in detail with Northrop's philosophy of "aesthetics" and its relevance for art and comparative philosophy.

Reality to Northrop, as we have seen, has two

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[11]He almost deliberately avoids use of any such term possibly because of (1) the suspicion with which the term is regarded in the United States and (2) various theories which are labeled "socialistic" and which have little in common with Northrop's theory.

[12]Northrop, The Meeting of East and West, op. cit., p. 475.

[13]Ibid.

components, the theoretic and the aesthetic. The "aesthetic" component is the sensed and "felt" world around us. In fact, the various scientific methods depend on varying degrees and types of relationships between the theoretically known and what is known through the senses. But as we have also seen, Northrop has attempted to show that modern physics "relates" the "theoretic" and the "aesthetic" through "epistemic correlations" or as it is otherwise known, "co-ordinative definitions" or "rules of correspondence."

Even then, the correct "aesthetic" or "radically empirical" component is not what is "commonly" sensed. The word aesthetic for Northrop means whatever is "immediately apprehended" by us when all cultural categories, classifications, and correlations are taken away. The colors of what we call the "sunset," the wetness of what we call "rain," and the sound of what we call "Niagara Falls" are all examples of aspects of reality that are "aesthetic." For the physical or social scientist the "aesthetic" awareness of the "flashes" or "curves" on radar screens or the bodily movements and behavioral actions of people also are part of the tools of description. But apart from helping people describe reality, the "aesthetic" is important in and for itself. What this implies is that the aesthetic is a "natural" source of beauty

and pleasure.[14] The world of pure "intuition" or the "aesthetic" world is a world of "pure" feeling. Northrop finds only Oriental philosophies as being "truly" understanding of this fact.[15]

In the West although physical and social scientists are aware of the "aesthetic" aspects of reality and appreciate its value for private enjoyment, we have made very little use of pure "aesthetics" in our public institutionalized life. Thus in discussing the influence of Lockean epistemology upon the West and in the United States in particular, Northrop argues:

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[14]Since Northrop's treatment of comparative philosophical analysis of Buddhism and Hinduism as well as the "objective" aspects of "Nirvana" and "Moksha" or ultimate goals in these religions the reader is referred to the following literature as an "introduction."

The Meeting of East and West, op, cit., pp. 312-375.

"The Relation Between Eastern and Western Philosophy," in Radhakrishnan, Comparative Studies in Philosophy Presented in Honour of His Sixtieth Birthday. Edited by W. R. Inge and others (London: Allen and Unwin, 1951), pp. 362-378.

"Toward a Religion with Worldwide Transforming Power," in Conflicts of Power in Modern Culture. Edited by Lyman Bryson and others (New York: Harper and Brothers, 1947), pp. 156-365.

[15]Since Western "fundamentalist" sects who also claim "experience" of God to be a basic fact also mix postulated concepts of "Christ," "salvation," "heaven," etc. they are to be distinguished from Oriental religions in a Northropian analysis.

> In Descartes and Locke's original philosophy and in traditional Non-conformist Protestantism, colors, sounds, and pleasures were mere secondary or tertiary appearances masking the supposedly truly real underlying material and mental substances. Thereby, the materials of art were given a superficial, phenomenal status and were enslaved by means of the use of geometrically defined perspective to the handmaid's task of portraying the clear-cut, geometrically proportioned, three dimensional material object, whether it be the body of a human person in a portrait or the pot with its incidentally colored flowers in a still life.[16]

A discussion of the merits of Northrop's "aesthetic" philosophy is a separate thesis in its own right. But for normative political theory the thesis that there is an aspect of nature that is known with "immediacy" and is important publicly has two major implications. The first implication deals with institutions and the second with the related problem of "human freedom."

The institutionalization of aesthetics according to Northrop must begin in the educational process as does the institutionalization of any "value" in social philosophy and life. Public education should thus insure, especially in the West, that children are taught an epistemology at a very early age, which will cause them to be aware of the fact and importance of this aesthetics. They must be able to learn the

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[16]Northrop, The Meeting of East and West, op. cit., p. 118.

clear distinction between the "brightness" of what is called the moon and appreciate it in and for itself and yet distinguish it from the volcanic, meteoric object scientists call the moon. Far too often in the West according to Northrop the two are fused together in everyday experience. Political and economic instutions must also make sure that this aesthetics is institutionalized in the lives of adult citizens. At one "practical" level this implies that in our public buildings, highways, parks, gardens and rest houses sensitivity must be displayed to the need for rich and moving colors and sounds.

But at a more important theoretical level Northrop's theory implies that modern political society must insure that by using technology for a "social" purpose man is released from merely earning his daily bread, thereby enabling him to pursue purely aesthetic and artistic pursuits. These may vary from watching the sunset to the creation of new music.

Once again, therefore, Northrop displays his own unique "socialism"; a socialism that is not only industrial and technical but one that is very much conscious of aesthetics in that society must not provide "leisure" for only the few but for the many. Thus, he argues:

For as the masters of modern scientific theory

> make it possible more and more to lift the labor of the world from man to the machine and the waterfall, and thereby to meet the more material needs of mankind with fewer and fewer workmen, it thereby releases in society an increasing proportion of men who can give their time to the investigation of the theoretic component, continuously improving the conception of it and the scientific technology which flows from it, and to the artistic pursuit, portrayal, and analogical use of the aesthetic component.[17]

There are of course practical difficulties of constructing an economic theory for implementing Northrop's "ideal." He himself does not suggest a detailed economic theory but since he regards economics as an "instrumental" science which "presumes" certain values, he thinks that a starting point would be to shift the presuppositions of economics towards a broader concept of the nature of man. Thus speaking of unemployment in the United States Northrop claims:

> All these considerations suggest that one of the major causes of failure to solve the problem of unemployment and of poverty in a land of scientific ability and of plenty is that we have been conceiving of the economic problem in entirely too restrictedly economic terms. Thus, perhaps instead of economics being the key to the humanities, the humanities are, in part at least, the key to the solution of the problems of economics. For it well may be that it is only because we have had too narrow an economic idea of the good, and consequently have not brought forth the demands for creative work in art in both of its functions, in empirically verified scientific, philosophical, and theological theory, and in the teaching,

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[17] Ibid., pp. 495-496.

> preaching, and artistic conveying of such trustworthy theory, that the buying power has not been placed in the pockets of those not required to tend the machines, which is essential to distribute the goods sufficient for all, which the comparatively few men directing the automatic machinery are able to produce.[18]

Furthermore, he urges that our attention be squarely placed on the necessity and the possibility of automated industrial society where "social purpose" rather than "individual ownership" will be the key criterion for instrumental values and institutions to implement.

But for those who might be fearful of this aim, Northrop also claims that the "radical empiricism" he espouses reinforces democracy in a unique way. Thus as a result of his analysis of oriental philosophies he concludes that the "radically empirical" philosophical systems consistently demonstrate an "intuitively"[19] known (i.e., directly known) equality of identity in man.

> According to this radically empirical theory of first-order facts there is one factor in any radically empirically known natural object or human being which is the same for all, namely the all-embracing, undifferentiated field consciousness in its indeterminate formlessness. Consequently, according to this field theory of first-order facts, all human beings are, in

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[18] Ibid., p. 495.

[19] "Intuition" here means "feeling." As shown in Chapter II, "pure feeling" is a concept by "intuition."

> their elemental, irreducible selves, not merely equal but identical.[20]

Since most major philosophical systems in the West such as Hegelianism, Marxism or Lockean theory do not have "immediate apprehension" as the central epistemological tool it is perhaps difficult to understand what Northrop means. But the task is not hopeless if one keeps in mind that most "radically empirical" philosophy regards reality in a "formless" manner. Thus speaking about the Indian philosopher Shankara who Northrop regards as a radical empiricist, one Indian scholar indirectly throws light on Northrop's thesis in the following manner:

> Shankara repeatedly asserts that discursive intellect cannot grasp Reality. Brahman cannot become the object of perception as it has no form, and it does not lend itself to inference and other means, as it has no characteristic mark.[21]

Still, some concrete examples of the effects of using radical empiricism in actual life will help illustrate Northrop's thesis here. The mediational methods of Gandhi in avoiding the technical, determinate and abstract "rights" and instead simply bringing Indians of various castes and

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[20]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 270.

[21]Chandradhar Sharma, Indian Philosophy: A Critical Survey (London: Rider and Company), p. 276.

backgrounds together qua human beings is one example of an "intuitive" concept of man qua man leading to democracy. Also, the mediation rather than the arbitration device that as the ethically "best method" of solving interpresonal problems in a Chinese or Indian village, or in other Buddhist countries, is another example according to Northrop. He illustrates his point by a personal anecdote from his travels:

> In Buddhist Bangkok in 1950 I found the Chief Justice of its Supreme Court and a former Chief Justice of its next highest court, the Court of Appeals, who ostensibly were applying that most abstract of Western law, the French Continental Code, assuring me that they refused often to hear the case and urged the disputants, if Thais, to settle their differences by themselves in the approved Buddhist manner. In one instance after two such refusals and two failures of the disputants to reach agreement by themselves, the judges declined a third time to proceed in the Western manner, with the result that the intuitive mediational way succeeded.[22]

More specifically he explains the unique "intuitive" feature of this form of mediation as distinguishable from the adversary method in Western legal systems:

> Not only is there no resort to a legal rule; there is also no judge. Even the mediator refuses to give a decision. Instead, the dispute is properly settled when the disputants, using the mediator merely as an emissary, came to mutual agreement in the light of the existential circumstances, past, present, and future.

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[22]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 185.

> The word "future" is used advisedly. In this type of ethics and law there is no irrelevant evidence; not even future possible evidence is neglected. For always the mediator or the adversaries themselves will remind any disputant that it is better to settle for a little less today and preserve tomorrow's goodwill than to obtain more today and lose tomorrow's goodwill.[23]

Furthermore Northrop insists the "intuitive" method spells the difference between the Hindu-Buddhist-Jain-Confucian mediational system and the out of court "settlement" that United States lawyers often provide in divorce cases or pre-court counselling in marital problems. That is, in the case of Western lawyers even when dealing as mediators they often proceed by "determinate" rules upon which basis a lawyer lets his client know what his "legal rights" are. In contrast to this type of mediation Northrop cites the case of Francis Liu, a Chinese lawyer, who was a colleague of his in Yale Law School:

Liu at first was very unsuccessful in building up a law practice in Shangai when he tried Western type of mediation.

> After the new client had described his case, he followed it with the question, "To how much, in the light of the facts, do you think I am entitled under the code?" At first Mr. Liu took this as a straightforward legal question. If he knew the statute most likely in question, he gave the answer; if not he looked it up and then gave the answer. What he

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[23] Ibid.

> observed was that forthwith the client showed no further interest, politely withdrew, and often went out and settled the dispute with the other party for less than the statute provided. This happened sometimes even when the code to which appeal was made was a pre-Western ancient Chinese one.[24]

Liu apparently finally discovered that he was not looking at the questions of his client from a "Confucian" viewpoint. He was really failing the subtle and indirect testing by his clients which were aimed at finding out whether Liu was a "good" lawyer in the ethical Confucian sense.

> From that time on, when the inevitable question came, "To how much am I entitled under the code?" Mr. Liu did not hear it. Instead he countered with another question: "Have you got together with your adversary?" Immediately a look of understanding appeared on the client's face. Mr. Liu had passed the moral examination in the Confucian, and, one may add, Asiatic, meaning of the word "moral." He was proceeding with his client like a peacemaker, not like a litigation maker. Clients felt "This is a man in whose hands one can put one's difficulties with confidence." Forthwith Mr. Liu kept his Chinese clients.[25]

Northrop concludes this anecdote about Liu by noting

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[24]Northrop, Philosophical Anthropology, op. cit., pp. 159-160. Northrop cites an unpublished manuscript by Liu as a supporting source: Liu, Francis (Liu Shih-fang) "Westernized Administration of Justice and Chinese Racial Characteristics," translated by Alfred Wang (New Haven: Yale Law Library).

[25]Ibid.

> He found that when the lawyers of the two parties in a dispute under the classical Chinese procedure fail to bring their clients to agreement between themselves either through a middle man or directly, and the dispute goes to a judge, the judge in turn uses the same procedure. He has interest neither in evidence nor in witnesses, nor in statutes, codes, or precedents. He asks the disputants instead if they have got together, and when they reply, "Yes, many times to no avail," he often answers, "Then go back and try it again."[26]

This anecdote is used by Northrop only in the way of illustrating his basic theory that there is a direct relationship between radical empiricism as an epistemology and an intuitive "fellow feeling," "man-to-manness" and "ultimate compassion" which he regards to be one "type" of democratic ethics and law. True, this law is not the only law in many parts of Asia. But other determinate rules and codes many of which are "naive realistic" in character are due to naive realistic theories or institutions such as the Hindu caste system. Even then the "codes" are often regarded as "second-best" methods of solving legal problems.

In any case what Northrop persistently drives at is that radical empiricism in ethics and in law sees particular men as essentially related to the continuum of men and that this "feeling" (actually an aesthetic experience) is one

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[26] Ibid.

source of democracy. Thus in the ideal society inter-personal relationships will have an intuitive base of this "man-to-manness" or compassion.

Thus Northrop's democracy is not actually based only on a "mathematical" conception of abstract contractual rights but on aesthetic "feeling" as well. Both are needed in order to provide the "epistemic correlations" of an ideal state, with its ideal law and its ideal ethics all of which are "democratic" in character.

By itself the "theoretic" component will create a technically productive but an aesthetically impoverished society. By itself aesthetics will not build dams and automated machinery, nor will it create the technical institutions to fight mass poverty and disease.

The "ideal" state of Northrop is not regarded by him as only a "City of God" or a "pie-in-the sky." Thus the main purpose of this sketch is to look at the "scientific" and "desirable" goals that are theoretically necessary in order that there may be simply guidelines of the direction that politics should move practically. Northrop himself <u>suggests</u> some "practical" methods of implementing his theory as well as some concrete illustrations of what his theory would "mean" to the layman or the political scientist.

Practical Politics

"Practical politics" is a term Northrop himself uses to describe his method of implementing his political theory in the light of existing political "reality" as he sees it. Consequently his "practical politics" should not be construed to mean the same thing as the methods necessary for implementing an interest group theory of politics or a Marxist theory of politics. But it ought to be noted that the term "practical politics" does have "meaning" in the sense that it consists of an attempt to actualize the "ideal" in Northrop's theory.

The process of actualization presupposes two facts. The first is that we have a set of concrete or "meaningful" or "true" ideals which we are attempting to implement. The second is that we have an adequate "scientific" understanding of reality. This, as we have seen in our discussion of "sociological jurisprudence," consists not of specifying the numerous facts of "real" politics but of indicating the "inner order" of all the facts or the theoretical presuuppositions of political and legal systems. Thus, if we are attempting to "reform" the American political system we must make sure before we begin that we isolate the "living law" of the United States which would include the major value

systems and their epistemologies of each section of the country, the North and the South, East and West, and socio-economic strata as well.

After the "ideal" and the "real" values are specified, the procedure of practical politics will involve dealing with and then modifying the institutions within which the old "living law" values are operating. It should be noted again that an institution for Northrop is any instrument that is used for implementing ideals. Institutions, therefore, in a sense are teleological facts or value facts. Thus, the United States stock market is not only the "physical building" but it also is the embodiment to an extent of the prevailing economic living law of the United States. The United States Congress is not only the Capitol Building, the myriads of technical rules, but also the embodiment of Lockean ideals of compromise (except for Lockean "natural rights" which are not to be compromised). Institutions, therefore, provide the arena wherein "fact" meets "value," provided we keep in mind that to a large degree we are talking about cultural "facts" and cultural "values." Just as "procedures," "operations" and "epistemic correlations" relate the theoretical with the aesthetic or sensed aspects of reality in the natural sciences so also institutions "relate" and

"correlate" political and social theories with existing facts. Institutional "life," therefore, is in essence the process of epistemic correlations in man's socio-political knowledge. A temple to the sun-god may then well be the culmination of the epistemic correlation between a particular intuitive philosophy of nature and the physical stones and the available men in a given tribe.[27]

A "practical" theory of politics is one which is successful in dealing with existing institutions. Northrop himself certainly regards his own total theory of politics as being "practical" in this sense. Nowhere does Northrop, in the view of this writer, ignore the theoretical need of dealing with the "raw," "brutal" facts of existing politics. In contrast, Northrop feels that much of today's politics is not very "practical." The Dulles policy in the Aswan Dam affair, ignoring nationalism and the revival of Egyptian values, civil right reform in the South and in the big cities in the United States, the Indo-Pakistani conflicts all have involved "practical" failures because of ignoring the existing values and the "living law" in each of these problematic situations.

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[27]The example is the writer's own but it is believed to be a "faithful" abstraction from Northrop's theory.

Since institutions per se embody ideals which in turn rest on certain primitive or irreducible symbols and epistemologies, political reform must introduct the most reliable and valid values of the time and "institutionalize" these. Northrop's theory of reform through "institutionalization" involves then to an extent what he sometimes calls the "wedge" technique. This process itself basically involves several steps. First the reformers[28] examine the ideal theory and the actual "living law" side by side. Then they are to find the "substances" which are "compatible" i.e., areas of agreement. Next they isolate what is "philosophically incompatible" in each. Finally like a "wedge" (used as an analogy only) the new theory or set of values is "slowly" introduced. The introduction of a new theory involves great demands on the educational techniques of any political system. Northrop here is of course assuming, in the light of his "trapped symbols" theory, that man tends to conserve his existing values. Therefore the "curriculum reform" that professional educators often talk about must be more than adjusting the "number of credits" of this subject

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[28]Who the reformers are will vary from existing society to existing society. Ideally, in a democracy the reformers must come from a wide base within the citizenry--students, teachers, artists, musicians as well as politicians.

and that at least in the United States educators will have to see clearly that institutions, including educational ones are actually based on certain specific ideals more valid to the times. "Progressive Education" and classroom techniques of "adjustment" are isolated but clear examples of the relationship between social fact and value, i.e., Dewey's pragmatism as an ideal is applied to create the "facts" of education. In education, therefore, the wedge technique would include the careful introduction of new values. Conceivably, therefore, in a state run school in India there would be more symbolic logic and less "rationalization" of the caste system.

The process of education, however, as any "educator" knows is not limited to formal schools. The "arts," "communication media" are also instruments of education. Northrop seems to be saying: Wherever there is symbolization in society there, too, is the possibility of educational change. Then, in American society the artist must introduce the aesthetic touch of the orient if Northrop's theory is correct. Indians in their radio music must hear not only the "drone" of Indian music but also must have Western music which has "geometric" forms. At this point it may be noted that some of this mixture of "cultures" is already taking place but not always in the way that Northrop would wish. It is unlikely

that he will regard "rock and roll" and "twist" music as the embodiment of his "theory of forms."

Political institutions as such inevitably play a role in the scheme of social change. But to be successful through them the change must proceed in the epistemologically sophisticated method that he describes. A "concrete" example of how his method would operate to bring social change through politics as illustrated by his discussion of the case of Brown et al. v. Board of Education of Topeka, Shawnee County, Kan., et al.[29] is extremely helpful. This well known and landmark case decided that "in the field of public education the doctrine of 'separate but equal' has no place."[30]

Thus Northrop sees the "meaning" that was given to equal protection in Brown v. Board of Education as one that was in keeping with his own views of "natural law" which we have examined. Briefly, the concept of "any man," "universal man," is the same as the concept of "man" shown in the Brown decision. That is, the "man" in the Brown case as well as in Northrop's "ideal" theory is theoretically known man

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[29] Brown et al. v. Board of Education of Topeka, Shawnee County, Kans., et al. (1954) 347 U. S. 483, 98 L. Ed. 873, 74 S. Ct. 686. Hereafter referred to as either "Brown v. Board of Education" or "the 1954 de-segregation case."

[30] Ibid.

rather than "sensed" man. Since the "theoretically" known "man" is compatible with the epistemology of modern science wherein deductive theory "drops" images it follows that theoretically known man is a conceptualization of man which is reliable.

As Northrop views it, the Brown case can not be "morally" justified by any theory of jurisprudence except by a "natural law" jurisprudence that had a clear conception of ideals. "Subjective" ethics can not very well support the "objectivity" of the norms in the case. Neither can "sociological jurisprudence." The latter can easily show that the norms of the Brown case conflict directly with the normative patterns of the South in particular. But sociological jurisprudence cannot show why the norms of the South "ought" to be changed.[31] To justify the Brown case a philosophy of law to some extent must go beyond the facts of the immediate case, as well as the socio-cultural behavior of southerners to be able to tell them "You are in error!"

Further, positive law jurisprudence of an Austinian or a Kelsenian or a Frankfurter variety could not objectively "require" the Supreme Court to decide the way it did. The

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[31]The socio-psychological fact that segregation hurts people psychologically does not by itself demonstrate "why" people "should" not be hurt psychologically.

statutes which were judged "required" segregation except for the Kansas law which "permitted" segregation.[32] The Supreme Court's new "positive" law thus surely pointed beyond itself, and as Northrop sees it this was a valid "direction" in which the court pointed.

But to be "practically" successful "natural law" must be in part compatible with existing norms. The Brown case was "partly" successful in following the "wedge" technique. In analyzing the comparative merits of Austinian and sociological jurisprudence and their bearing on the Brown case Northrop declares:

> The situation is better, but still unsatisfactory, if one considers this decision from the standpoint of the sociological philosophy of law. An examination of the original living law of this country and of its Southern component enables us, at least, to understand what has happened--namely, the general approval of the decision from the country as a whole and the bitterness with respect to it in the Southern states.[33]

It should be noted that "approval" in this context should be interpreted in the light of Northrop's theory of "consent" which we have examined in the last chapter. Consent can be implicit or explicit, passive or active.

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[32]See first footnote in Brown v. Board of Education.

[33]Northrop, The Complexity of Legal and Ethical Experience, op. cit., p. 40.

Northerners did not have to dance in the streets to express their consent. The fact that they did not protest in any significant numbers when they could have done so is a rough and ready measure of their consent. But the riots in Cleveland, Philadelphia and elsewhere are also "facts" in connection with civil rights and racial problems. However, they are exceptions to the rule in the North. How this may become a major problem, however, will be touched on later.

The "ideological" reason for at least a passive attitude of "consent" to the Brown case is the Lockean factor trapped in the minds of the Northerners. Although other value orientations such as the positive law training of Northern lawyers, the naive realism of many unskilled and uneducated persons among others have supplemented the Northerner's Lockean symbols, the latter values are there in a much stronger fashion in the North than in the South.

> New England was founded in major part by nonconformist Protestants who came to the western hemisphere to escape from the rule of the religious majority in Europe and who, like Jefferson, were heavily under the influence of the philosophy of natural rights and natural law of Locke. With the opening of the frontier, this living law spread to the Middle West and the Far West. It is exceedingly unlikely that legal positivism has seeped down from Thayer to the masses to a sufficient extent to alter this original and basic philosophy of American culture. The coming of Roman Catholics in large numbers brought in a natural law philosophy also.

> These two portions of the living law of the United States constitute a statistical majority of the people. Sociological jurisprudence tells us that when a positive legal decision has such qualitative and quantitative support from the living law it can come into being and be effective. Hence, this legal philosophy enables us to understand why, even though there was no positive federal legislative statute on the matter, the unanimous decision of the United States Supreme Court has occurred without a bitter reaction from the majority of the people.[34]

But the Court is only one institution among many and for the "wedge" to succeed he admits that several additional facts must be noted. The South in Northrop's analysis contains a strong naive realistic factor in its value system.

> In the Southeastern states, however, an additional, quite different living law came into being through the founders of the Virginia Company and their blood and cultural descendants who spread out to the South and Southwest. The English scholar Mr. Peter Laslett has recently shown that this living law derives from the Patriarcha of Sir Robert Filmer, instead of from Locke and Jefferson. According to this patriarchal ethics and law, good government is government by the first families, and a good educational system is one modeled after seventeenth-century Episcopal Oxford and Cambridge--a system in which the best education goes to those carrying the greatest familial and social responsibility, namely sons rather than daughters, the eldest son rather than the younger son because of primogeniture and with few exceptions, the sons of the first families only. Equality of education for all, regardless of status and blood of birth, is foreign to the political, legal and educational ideals of such a society. Jefferson's Lockean democratic egalitarianism modified this aristocratic patriarchal

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[34] Ibid., p. 40.

Filmerian living law of the South, but it never removed it.[35]

The violence that has followed the "new era" of the introduction of the concept of "universal man" in the South is an indication that the Court as it exists as only one institution in the American political context can be only partly effective in "reforming" the living law. This does not mean according to Northrop that morals cannot be legislated. The Sterling Professor of Law at Yale would be least likely to be unappreciative of the role of the courts in American life. Still, the courts must continuously make sure that they do not go too far beyond the Filmerian "living law" of the South in order to be successful "practically." Although Northrop does not develop this thesis he very probably would approve of the courts implementing natural law on the basis of the particular and peculiar customs in a given area, so long as the goals are kept in mind. Thus his theory is to some extent a "gradualistic" theory of reform. Some "practical" politicians and positive law reformers might well attack Northrop's position here as a justification for and rationalization of the status quo. But it should be noted that although the role of positive law in social change is not "clearly" defined

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[35] Ibid., pp. 40-41.

by Northrop he does maintain that the "positive" law must not go too far beyond the existing norms of society, particularly without the cooperation of the non-political institutions of society. To attempt reform through legislative acts alone would be self-defeating. Positive political action is of course necessary for change but the exact relationship between politics and other techniques of social change is not precisely worked out in Northrop's theory. One wonders, however, whether given the intensity of the current Negro "consciousness" of rights whether such a gradualistic theory can prevent anarchy in time.

But the "wedge" technique also requires the use of other institutional activities besides those of the Court. Education, Religion, Presidency, and Congress all must also play the role of appealing to the "little" Jeffersonian component of the "living law" in the South. In an answer to a query from this writer as to an example of how such a method could work Northrop made the following comment:

> You ask what can be done to "prevent the demands for rights from deteriorating into an irrational movement." The only answer seems to be the philosophically anthropological one of educating all parties concerned to look at the desegregation issue in culturally philosophical terms, . . . In short, one must apply first the descriptive method of Philosophical Anthropology and Practical politics. Then

one must turn to the evaluative method. . . .[36]

To illustrate his point further Northrop gives a "personal" example of one way among many as to how this can be done in the South, relative to change in racial relations.

> I may add that some years ago I was asked to address a group in Richmond under the auspices of the Virginia Universities. In this address I used only the descriptive method, but pointed the issue up by asking why the Virginians, who made so much of Jefferson when I taught at the University of Virginia in the early 30's, did not follow Jefferson in this issue with Filmer. The audience was composed of many of the present Virginian First Families. Afterward some of them came up to me and thanked me, saying that this was the first time they ever saw the conflict that was in them. Once it was seen, some of them added that it was clear that Jefferson rather than Filmer is the Virginian we have to believe. My friend Harry Dillard, who is now the Dean of the Law School of the University of Virginia, is such a Jeffersonian Virginian and has been such from the very beginning.[37]

Northrop's theory of "practical" politics thus does not claim to offer a "quick" remedy. As applied to "Civil Rights" it seems to consist of a very intricate "middle road" between two very possible disasters in American politics. One disaster could arise if "progress" in civil rights is too slow to satisfy vigorous elements in the "Rights"

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[36]Personal letter to this writer dated November 20, 1963.

[37]Ibid.

movement. Another disaster could arise from ignoring "sociological jurisprudence" and forcing a militant south to combine together with the more strongly property oriented elements in the North into an "interest" bloc for resisting social change. Governor Wallace's strong showing in Northern primaries in 1964 in spite of his background as a Southerner might well indicate the possibility of an alliance between "property" oriented Lockeans and status oriented Filmerians aimed at "conserving" existing values. The major hope that Northrop holds forth is the appeal to the persisting Jeffersonianism in the various areas of the south and demonstrating the error of the Lockean theory of property everywhere.

Northrop's referemce to the possibility of appealing to "Jeffersonian" theory illustrates one final aspect os his "wedge" theory of practical politics. Old "values" even when unused for a long time and dormant in a "culture area" can be consciously used for building new institutions. That this can be done, according to Northrop, is demonstrated by the coming of the Common Market in Europe. Thus, the major theme of his work in international relations entitled European Union and United States Foreign Policy[38] is that a substantial

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[38]F. S. C. Northrop, European Union and United States Foreign Policy, A Study in Sociological Jurisprudence (New York: Macmillan Company, 1954).

reason for the success thus far of the Common Market is the fact that the underlying norms of the nations involved included old unused Roman Catholic concepts of trans-national and trans-tribal man. These norms have been overwhelmed but not destroyed by the naive realistic theories of national man with his Hobbesian or Machiavellian or Hegelian values.

Gandhi's appeal to the radical empirical aspect of Hinduism, while rejecting the naive realistic caste system is another example of the wedge technique. The "wedge" technique and practical politics have many uses in several areas of "inter-national relations" as well. But since our inquiry has avoided a specific analysis of international relations in order to examine the substantial aspects of Northrop's political theory _per se_ we can only refer the reader for illustrations in this field to the bibliography that is attached to this work.[39]

The major themes of Northrop's "practical politics" as developed here do in any case give a basic view of both political ideals and "political change" as he sees them. His theory of political change springs from the basic assumption

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[39] _The Meeting of East and West_, _The Taming of the Nations_ and _European Union and United States Foreign Policy_ are some of the useful sources, _provided_ one understands Northrop's epistemology.

that the dynamics of a culture is based on its ideas and that in a very "practical" way revolutions begin in the "minds" of men and that if men do not pay attention to "correct" ideas they are often condemned to live by false moral, social and political imperatives, and tragic existential practical results including at times violent political conflict.

CHAPTER X

SUMMARY AND CONCLUSIONS

Since F. S. C. Northrop's philosophy is an attempt to create a comprehensive philosophy of human experience the task of abstracting his "politics," his "jurisprudence," his "anthropology" or his "ethics" is an extremely difficult one.

Thus, few political scientists have examined Northrop's theory in much detail. As the review of the literature on Northrop in our first chapter shows, it is primarily in the field of international relations and to some extent in legal theory that treatments of Northrop's ideas have appeared. Even then, it has been mostly in the form of book reviews. Therefore, our task was conceived to be one of examining his total philosophy and then abstracting his "politics" from it. In this attempt care has been taken to remain as faithful as possible to the original "intent" of Professor Northrop's language and ideas. In some cases this may have resulted in an appearance or a tone of hesitancy with respect

to critical evaluation. The hesitancy was to a considerable extent deliberate since we hold with Bertrand Russell that

> In studying a philosopher, the right attitude is neither reverence nor contempt, but first a kind of hypothetical sympathy, until it is possible to know what it feels like to believe in his theories, and only then a revival of the critical attitude, which should resemble, as far as possible, the state of mind of a person abandoning opinions which he has hitherto held. Contempt interferes with the first part of this process, and reverence with the second.[1]

Before we "revive" our critical attitude a brief demonstration of "hypothetical sympathy" is offered in the way of a summary of Northrop's views on politics. In reading this summary, however, it should be pointed out that without a careful examination of our complete thesis no summary can provide the complete "meaning" of Northrop's political theory.

A Summary

Politics to Northrop is only a part of man's total "experience." But any experience of man because of his neuro-physiological nature is based to a considerable extent on theories, philosophies and symbols which are antecedent to the experience of any man and which then structure and classify the experience of the latter. Experience, then, has no

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[1]Bertrand Russell, A History of Western Philosophy (New York: Simon and Schuster, 1945), p. 39.

existential "meanings." The content of these theories and symbols are, however, not given a priori. They are the creations of man in the form of underlying "patterns" of cultures.

Logically, therefore, a comonly held pattern of ideas gives man a "public" culture and "public" politics. Northrop does not deny that the natural habitat, the availability of water and food and other "economic" factors also contribute to the making of particular political and cultural systems but since these "irreducible" economic factors are "seen" by man in the light of his "ideas" he feels that the social sciences will do well to focus on the "ideas" which like the "program" of the computer or the "feedback mechanisms" of modern automatic weapons "determines" and adjusts man's behavior to external stimuli, natural, social and political.

Man's particular nominalistic, political ideas such as his views on whether accommodations in a motel "ought" to be made available through law to all races are outgrowths or manifestations of his most "basic" symbols or epistemologies. Locke's epistemology involving mental substances, physical substances, and the secondary qualities of colors and sounds is such a "basic" set of symbols. The Hindu Shankara's view that nature is known not through discourse but by apprehension is another. Marx's view of "man" as the product of the

dialectical processes of history is a third. As men use these epistemologies varieties of ideas can emerge. Thus one can be a Trotskyite or Stalinist and still "see" nature "dialectically." In other words the relationship of an epistemology and the ideas that grow from it is in many cases a one-many relationship.

The political consequence of Northrop's theory of ideas is the thesis that politics is simply part of a public and social process of implementing these basic ideas. The "state," then, is simply a set of institutions which order men's relationships to each other in a way that is in keeping with a set of ideas held in common by a group of people. The "state," therefore, does not have the same concrete meaning in all cultures. The "meaning" will vary with the ideology. The Marxist "state" is different from a Buddhist "state." A Lockean contractual "state" is different from a Saudi Arabian "law of status" state. The "state" can be a patriarchal monarch or an American system with a separation of powers. Then "politics" in part is the process by which people with a common ideology go about setting up rules which are considered to be binding. Thus, again politics has variable content in various cultures. If a small tribal patriarch who is the "leader" in a patriarchal law of status society issues a "rule"

that "Today you will all hunt tigers or else you will be ostracized" this is as much a process of politics as the United States Congress after consultation and deliberation making kidnapping a physically punishable offense.

Further, political institutions are the counterpart of "operations"[2] in the natural sciences, provided we keep in mind the difference between the "normative" rule or "ought" producing nature of institutions and "fact" producing characteristics of physical operations. Institutions, therefore, produce a socially desired "ought." Tax laws, criminal laws, court decisions, presidential directives and ordinances are examples of such "oughts" in the area of politics. Unlike "power-oriented" political scientists, Northrop emphasizes the context of philosophical purpose within which power acquires "meaning."

The line of demarcation between "politics" and other social patterns of interaction and behavior is not fixed for all societies and for all cultures. They, too, vary with the content of an ideology. In the United States the arena of politics and the arena of religious activity are separated more efficiently than in other social systems such as Catholic

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[2] Methods of relating ideas to observations.

Spain. Consequently "politics" does not for Northrop have a fixed and concrete subject matter, which is the same for any society.

The foregoing discussion appears to make Northrop a complete relativist with respect to political symbols and meanings. To arrive at such a conclusion is only part of the truth. Although Northrop is quite sensitive to the cultural basis of meanings he does attempt to construct a method by which we can create meanings which are to be "reliable" and "valid" for men anywhere. Briefly, his theory implies that since man's institutions have always reflected his conceptions of nature which are for man his "science," there is the possibility of showing that the conceptions are wrong and erroneous in the light of ever more adequate theories of nature. The most adequate theory of nature is one which accounts for every single verifiable fact of nature that other theories have discovered as well as more "facts" or "new" facts that older theories did not account for. In creating a synthesis of Western science and non-Western aesthetics, Northrop feels that there is such an adequate theory at hand.

This theory he thinks turns out to be a novel "democratic" theory which sees man in terms of "qualities" which are not just directly felt or sensed but also mathematically

"postulated," like the entities in Einstein's physics. Still, the empirically verified, i.e., by direct experience, theories of Shankara and Buddha also give support, in Northrop's view, to such a democratic (in his sense) theory of man. The availability of this theory, however, does not mean that reform will "automatically" happen even in the course of time. The cultural history of man for Northrop is not a process of inevitable evolution, or progress. "Progress" or the implementation of new theories requires first the clear understanding of these theories as well as the old theories which are at least in part erroneous. Also the process of grafting the old to the new requires the active conscious and "thoughtful" efforts of man in the creation and the growth of new institutions.

Northrop's conception of science is a unique combination of (1) Platonism, i.e., deductively obtained universals (2) operationally or pragmatically verified "epistemic correlations" and (3) the raw empiricism of pure "feeling" and sense-awareness. Even for the political theorist who believes in the "is" and the "ought" dichotomy, Northrop's philosophy of science offers the argument that the need for "reliable" political speculation has not ceased to exist. If anything, the complexities of modern experience necessitate

more complex theories than ever before.

Nevertheless, Northrop's system also requires that political theories using the correct "epistemology" be expressed in such symbols that their "meanings" are public, open and unambiguous, and that political theories must be verified indirectly and operationally through sensed data in the descriptive sphere and through "consent" in the prescriptive sphere of politics.

Although this view gives new hope to political thinkers regarding the importance of theories it also places new demands on political science as a whole. If Northrop is correct then today's political science to a considerable extent is a culture bound discipline both descriptively and normatively and to reform political science students of politics have to turn once again for their views on nature to those in the mature sciences who have actually been dealing with nature.

As Northrop sees it, his philosophy can be applicable to all the areas of what we today call politics. Since "ideology" affects all aspects of human behavior there are ideological factors in not only theory, but constitutional law, public administration, public opinion, comparative government, and international relations as well. In each of these areas, especially when "conflicts" are basically between

conflicting "assumptions" the importance of paying attention to his kind of "scientific" analysis becomes imperative according to him. In constitutional law, e.g., the case of Brown v. Board of Education dramatizes the conflicts between jurisprudential theories. Also, in the legislative process in the United States, the conflicts and debates over the current (1964) civil rights bill are inescapably ideological in character and require "his" kind of analysis. That is, the white constituents of Southern legislators often sincerely feel that their Filmerian (according to Northrop) living law is at stake. On the other hand, some New Englanders and Midwesterners, depending on the abstract (not empirical) Lockean and Jeffersonian concept of man, feel that they are doing the "right" thing in supporting the call for civil rights legislation. Still, other Americans because of the confused and confusing relationship in Locke's theory between "human" rights and "property" rights carry their confusion into their political views wherein they feel that the Negro's cause is "just" but they hesitate at destroying "the rights of private property."

In this veritable Babel of tongues and ideologies Northrop claims his theory purports to offer a long range solution: briefly this involves that of retaining whatever

consensus exists regarding Lockean "abstract" concept of rights but rejecting the erroneous assumptions about property throughout the United States and the Filmerian notions of a patriarchal society in the South and then educating students, citizens and politicians as to the truth. Admittedly this is easier said than done, but Northrop maintains that unless the symbols of property and status are replaced with Stoic-Northropian concepts of rights the "economic development" of the South, more general "literacy" everywhere and legislative "balancing of interests" will not do the job by themselves. Only educated bigots and rich bigots will result. "Balancing of interests" and a civil rights bill achieved through "compromise" may temporarily "solve" the crisis but there will be another one tomorrow if we do not become clear about the goals which are beyond pragmatism and which alone tell us whether our trial and error is trial or error.

Northrop's theories also can have certain applications for "comparative government." Focusing our attention on superficial legal comparisons of certain institutions in various countries such as "parties," "legislatures," "courts" or even "decision making" will not give us "real" comparisons since Northrop regards institutions as embodiments of specific sets of "ideas" and "purposes." For Northrop the

"purposes" of an institution are not the same as the "functions" that some scholars in recent comparative government literature suggest as the meaningful categories,[3] such as "communication" or "allocation of goods and services." Purposes are outgrowths of ingrained and usually inarticulated ideologies. Thus, the United States Congress as a "structure" not merely serves the "function" of allocation of values but also does this in the light of a specific Lockean epistemology which requires a particular type of institution in order to obtain "conventions" that are to be binding. Comparative politics, then, must begin with epistemological formulation and sophistication in examining the ideological theories which give "meanings" to "functions," "institutions," "structures" and "interests."

The same is true in international relations wherein Northrop's theory attempts to deal with the "ideological" character of conflict and cooperation. Thus the success of the European common market in this view is due to the hitherto "untapped" but "trapped" notion of Catholic and universal man in the countries of Western Europe. That is, Northrop claims

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[3]See D. F. Aberle and others, "Structure-Function Analysis," in Comparative Politics. Edited by Roy C. Macridis and Bernard E. Brown (Homewood, Illinois: The Dorsey Press, Inc., 1961), p. 67.

that if Protestant East Germany and the United Kingdom belonged to the market the institutions would have to be drastically reshuffled into a looser confederation in order to survive. The "conflicts" of international relations between U.S.-U.S.S.R., India-Pakistan, and other nations are also not merely conflicts of influence, power and interests. They are also "conflicts" arising out of differing cognitive orientations. To "reconcile" conflicting "interests," therefore, Northrop claims that there have to be "compatible" ideologies. Thus unless and until the U.S.S.R. creates a "living law" that does not depend on a "dialectical" view of man and the United States modifies its Filmerian law of the South and the Lockean "property" orientation that exists, the situation will continue to be one of "protracted conflict" within the shadow of "the bomb." Northrop agrees with the "realists" that "power" is important in U.S.-U.S.S.R. relations but only because the naive realism of Leninism respects power. But "power" or "force" alone does not build community. Also, the effectiveness of "power" in areas such as parts of Asia where "power" does not have the same haloed status is diminished. On the other hand, the exercise of power in Asia without accompanying clarity on goal values is partly the "cause" of neutralism in Asia, according to Northrop.

Dealing with a Northropian analysis of international relations is a dissertation in itself and is not within the scope of our present inquiry, but since in the summary we have completed the process of "hypothetical sympathy" that Bertrand Russell requests we will next attempt to re-discover a "critical attitude" towards the politics of F. S. C. Northrop.

A Critique

In an age of specialization F. S. C. Northrop, even as a philosopher, is a remarkable thinker. Pursuing the labyrinths of specialized disciplines with the help of his philosophy is an enriching and rewarding experience and if nothing else, it is its own reward. His own particular effort in approaching the unity and integration of the various modes of human "knowing" is indeed a remarkable feat of scholarship and bears the imprint of a lifetime of devotion to sheer intellectual curiosity. Such an attempt at a re-construction of human thought often seems "un-scientific" because he pushes disciplined thought to its farthest horizons. But there are only a few living scholars who have even attempted such a macro-cosmic view of life and experience. Further, Northrop maintains that such a re-construction is

not merely "philosophy"; it is essential to science as well. His efforts seem to be an answer to the following warning given by Jose Ortega y Gasset:

> . . . science needs from time to time, as a necessary regulator of its own advance, a labour of reconstitution, and, as I have said, this demands an effort towards unification, which grows more and more difficult, involving, as it does, ever-vaster regions of the world of knowledge.[4]

In the thirty years since Ortega y Gasset's comments first appeared, the "regions of the world of knowledge" have expanded even more and with the continued threat of atomic destruction, the need for integrating "natural science" with "social science" seems to be even greater than ever before. Northrop's analysis of the relationship between "scientific ideas" and "social ideas" certainly seems to constitute a major effort to bridge the gap. For the social scientist, however, Northrop's thesis may be a disconcerting one, for he attempts to make us painfully aware of the extent of the "lag" between the philosophies of science on the one hand and the philosophies of culture on the other. The task of evaluating Northrop's total philosophy must truly belong to other philosophers with a similar breadth of experience and scholarship.

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[4]Jose Ortega y Gasset, The Revolt of the Masses (New York: W. W. Norton and Company, 1960), p. 113.

Concerned as we are with "political" philosophy, Northrop's theory of society and politics has perhaps been viewed in far narrower terms than his philosophy deserves.

The complex and difficult language with which Northrop expresses himself very possibly prevents the wider reading of his works by a larger group of political and social scientists than is the case at the present time. It is true that simplicity in language sometimes gives a deceptive simplicity in substance to complex ideas, but one often wishes as well as feels that some of Northrop's theories could very well have been simplified, particularly with the help of detailed examples. Rather than the repetitious use of phrases and terms, more detailed illustrations could have been far more profitably used to "pin down" his conceptions. But this is a complaint that is often made of philosophers.

It is the more substantial contribution to social theory that is really important in his work. Here, his analysis of the "scientific" presuppositions of political and legal theories presents a novel thesis in the literature of political science. That political theories and methods to an extent have metaphysical and epistemological assumptions is not of course new. But what is new is his assertion that these assumptions are based on particular philosophies of

science and that this fact has specific practical political importance. Also, the conclusion that cultures are based on shared philosophies of science is also significant socially and politically. But the most important contribution, perhaps, is his analysis of scientific methods per se and their relevance for the study of politics--a contribution, we think, which points out correctly the methodological weaknesses of much of present political science.

Northrop's argument that most "natural law" thinkers are not always sure what the "nature" in "natural law" actually consists of is an important one. Also significant is his critique of the over-emphasis on inductive data gathering or what Easton called "hyperfactualism." Too, his warnings against too naive a conception of empiricism are noteworthy. To take Hume too seriously, which Hume himself apparently did not, is not only a good tonic for over-intellectualized and abstract speculative political theories but it is a cure that may well kill the patient as well.

For his discussion of "scientific method" alone Northrop deserves the careful attention of students of political science since the discipline is at a stage where the search for "science" and "objectivity" is intense. Since he attempts to deal with the "logic of the sciences" and "the

humanities" as well there is also an added reason for examining his works. Finally, the unique blending of realism, idealism, pragmatism, positivism, serves as a useful model for a convenient integration of labor among social and political scientists without the seemingly endless dissipation of energy over definitions of boundaries and subject matter.

In spite of our general intellectual sympathy and appreciation of Northrop's ideas and for the most part his convincing exposition of them, some unanswered problems and perplexing questions remain.

The first of these is the concept of the "unity" of a culture. Northrop makes a convincing case for paying greater attention to the "ideational" or "ideological" patterns of a culture. Also Kluckhohn's exposition of the "philosophy" of the Navahos gives added support to Northrop's position. However, until Kluckhohn's "conclusions" about the postulates of Navaho philosophy are verified by other investigators using Kluckhohn's methods, his conclusions must be regarded as somewhat tentative. The following comment by an anthropologist and colleague of this writer illustrates the controversial nature of Northrop's and also Kluckhohn's position.

> His [Northrop's] following of Philosophical Anthropology is only one phase of the field. Insight

> on social systems may be gained through the structural approach as done by British social anthropologists. Also, with an anthropological approach one hardly goes into a culture "blind" and attempts to work out the postulates. We know in part the mechanisms of culture and how they work. This gives us a clue to many yet undescribed systems. Northrop neglects the whole scientific approach to culture. Yet it is difficult to attack him or his use of Kluckhohn, etc., because this is another approach. Namely, he has used only one side of the coin for his point of view though that one-side is not completely unchallenged.[5]

Not only are the Kluckhohn findings unproved beyond a doubt as of yet but even if it were true additional difficulties would arise in analyzing a larger or more complex culture than that of the Navaho. This is particularly true, since as Northrop himself notes:

> Operational definitions for testing whether one's descriptive method has designated the correct postulate set in describing any particular nation or culture are yet to be developed by cultural anthropologists.[6]

Also, the McCulloch-Pitts theory upon which Northrop relies, regarding the structure of the mind presents certain difficulties. In the first place it is still a theory and a hypothetical model although Northrop attempts to show that it is a more reliable model than other previous models of

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[5]Dr. Aram Yengoyan, personal note to writer, May 20, 1963.

[6]Northrop, Philosophical Anthropology, op. cit., p. 89.

man's cognitive processes. But even if the model was a physically "true" one it would not necessarily imply that basic symbols and ideas are free creations of the genius of men. As one scholar whose interests include the communication system of the brain notes in the course of a symposium headed by Northrop:

> If our anthropological colleagues want to squeeze the juice out of current neurophysiology for their present purpose, it amounts to little more than this one general principle, that the in-built logic of a brain inevitably conditions its owner's perceptual framework. What I want to guard against is any suggestion that Northrop's point is dependent on current speculative physiology. The McCulloch-Pitts theory, for instance (as I know McCulloch would agree), makes no claim to physiological realism and stands in history as an "existence theorem" rather than a description of the actual brain. It would be a disaster, I think, if anthropologists were to start founding anthropological arguments explicitly on the McCulloch-Pitts theory.[7]

Consequently, the nature of the exact relationship between the content of an idea and its source or origin is far from clear even in the light of Kluckhohn and McCulloch's "findings." Granted that men have a built in logic in their brains and even granting that cultures may have relatively ordered and logically "related" meanings what does not necessarily follow is that these "ideas" have a status that is

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[7]Northrop (ed.), Cross-Cultural Understanding, op. cit., pp. 349-350.

"primitive," "irreducible" and have an independent role to play in human causality. "External" conditions such as travel, higher income, marriage, force, certainly seem to change the basic attitudes of men. At least, to this writer the reasons why some people seem to change their ideas as a result of external conditions while others show persisting and stubborn frames of reference still seem to be shrouded in mystery. It is also far from clear as to what causes people's cortex to dislodge old symbols and trap new ones, at least in the case of political symbols such as "universal man" or "tribal man," "law of contract" and "law of status." Without this clarity the "freedom" of man to trap or untrap his symbols can have only a hypothetical status, at least as far as the evidence Northrop presents seems to indicate.

Turning to another related thesis of Northrop, his emphasis on the need for "objective" methods in describing political reality is commendable. But in the absence of more reliable "operational" methods and theories than those so far developed, political scientists will have to continue to use a "naive realistic" mixture of observation and speculation as Northrop himself seems to use in his own analysis of political ideologies. This, however, should not diminish the need for the continued search for methods of adapting the

procedures of physics to the problems of politics. However, Northrop's own "intuitive" and highly sophisticated gues work is so incisive at times that more conscious and thoughtful use of naive realism may itself provide further advances in our descriptive knowledge of politics, until at least Northrop's ideal method can be further concretized.

In shifting to the prescriptive mode or level of discussion Northrop's essay in political theory gives a novel theory of democracy. Some of the similarities between Northrop's theory and certain aspects of current American ideas and practice may result in the charge by some political scientists that he, too, is culture bound to a considerable extent. Northrop is aware of the possibility of this charge and seems to feel that since his concept of man is a "logically realistic" concept its "meaning" is a "public" one. Yet since "logical realism" itself is the result of the culmination of Western trends in science and mathematics there does not seem to be an "objective" reason why the East "ought" to adopt them except as a means to some ends such as having a "Western" type society. There seem to be in Northrop's normative theory certain subtle existential leaps of faith and nominalistic or particular values such as "man must survive," "technology is good," "human conflict is evil" which

are not made explicit in the theory and which do not appear to have anything to do with an application of Einstein's epistemology.

Finally, Northrop's conception of natural law requires a brief comment. It is true that many natural law theories contain conflicting "subjective" notions of just what nature consists. However, Northrop's own attempt to rest law on a "scientific conception" of nature contains a few "subjective" assertions as well. Thus, his claim that the oriental tendency to see nature with "immediacy" is an "objective" view of the aesthetic component of nature, and is likely to be regarded as a subjective assertion by many Westerners. Again, in spite of Northrop's dependence on the McCullough-Pitts "model" or "theory" about the brain for supporting evidence of his theory of the cognitive nature of man besides "answering" some questions also raises others. Since the theory on the one hand is still a hypothetical explanation, while it "gives" us a new conception of the cognitive abilities of man, to rest new normative political institutions on this temporarily held theory is to risk changing fundamental values on far too little solid evidence. Of equal importance is the fact that among philosophers there seems to be disagreement as to whether Einstein's epistemology

has actually made Whitehead's "naive realism" an inadequate tool for viewing the world around us. This results in a sad lack of unanimity among reputable modern philosophers of science. Consequently the task of finding "reliable" and "scientific" social and political thought is even more complex than Northrop himself admits.

The foregoing discussion has attempted to point out some of the ambiguities in Northrop's political theory. Much of the ambiguity may be due to the distortion of ideas that ordinary language imposes upon us. It may even be due to the misjudgment of Northrop's theory by a reader such as this one. The ambiguities, therefore, may well be more apparent than real. In any case this should not detract from the general work of examining Northrop's social and political theory. For because of his thorough gounding in the philosophy of science, political "scientists" have much to learn from him about the varieties of "scientific methods." Besides this, his speculative theory about political ideals when separated from their aura of scientific "legitimacy" is a bold and novel statement of political ends, pointing towards the road that "ought" to be taken in an era when men all over the world are increasingly demanding that they be fed, sheltered, consulted, and that they be not treated as means only but as ends in themselves.

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