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CHALLENGE TO THE ASSUMPTION OF AN  
INHERENT NATURE TO HUMAN BEINGS

JOSEPH JOHN MIRABITO

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MIRABITO, JOSEPH JOHN

CHINESE AND WESTERN MAN: A CHALLENGE TO THE ASSUMPTION  
OF AN INHERENT NATURE TO HUMAN BEINGS

*University of New Hampshire*

PH.D.

1979

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CHINESE AND WESTERN MAN:  
A CHALLENGE TO THE ASSUMPTION OF AN INHERENT NATURE  
TO HUMAN BEINGS

BY

JOSEPH JOHN MIRABITO  
B.A., Harpur College, 1967  
M.A., University of New Hampshire, 1971

A DISSERTATION

Submitted to the University of New Hampshire  
in Partial Fulfillment of  
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Doctor of Philosophy  
in  
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August, 1979

This thesis has been examined and approved.

*Peter S. Fernald*

Thesis director, Peter S. Fernald  
Associate Professor of Psychology

*R. Valentine Dusek*

R. Valentine Dusek, Assistant Professor of Philosophy

*David E. Leary*

David E. Leary, Assistant Professor of Psychology

*Carleton P. Menge*

Carleton P. Menge, Professor of Education

*William R. Woodward*

William R. Woodward, Assistant Professor of Psychology

*April 26, 1979*

Date

## PREFACE

I present the following material less as discovered Truth and Reality and more as a personal exploration of the relationships within knowledge as I have come to construct and experience them. Thus, this document is more of an invitation to the reader to explore the ways that I, at times quite subjectively, have attempted to construct my world. In this regard, I have always felt that at the heart of the intellectual enterprise there is not to be found a mature, objective adult who carefully scrutinizes the facts and checks each hypothesis with precision, but more likely a child playing with building blocks making one structure, and when that falls, spontaneously beginning the construction of another without a second thought. It is this spirit of "serious play" that I have attempted to cultivate during the construction of this document.

People are becoming increasingly aware of the degree to which we all construct our worlds on the basis of our personal experience. In some small degree, this work represents my own attempt to integrate my world, an attempt to provide answers to questions which have long troubled me. Only my readers can decide if my answers and the synthesis they provide are useful for their purposes.

This work was constructed as a complete system, each part or chapter builds upon the previous chapter's conclusions. To aid the reader in keeping some perspective on this, a summary of the main points of the chapter are presented on the following page of each chapter in a section titled: "OVERVIEW." These sections are not intended to summarize the content of each chapter as much as they are a distillation of the major points as they form a basis for the operation of succeeding chapters. Major conclusions are presented, not the evidence upon which the conclusions are based. For the latter, the reader is directed to the content of the chapter proper.

Chapters IV through VIII relate information about China. This inquiry has relied, in assembling this material, upon secondary sources only. Therefore, these sections will include extensive quotations from known scholars in the area of Chinese studies. The use of long quotations, I think, is justified by the fact that I am limited to secondary sources and I would like to relate as much of the context for the specific quotation as is possible. To establish my case, I feel it necessary to examine in detail recurrent themes in Chinese knowledge. Some readers may, at times, find these chapters a bit ponderous. Given these circumstances, the reader may find the overviews of these chapters helpful in providing continuity to the work as a whole.

This work has taken shape over a number of years. As its structure has evolved and changed, so has the world to which this work will be presented. One of these key changes has been toward a neutrality toward sexual roles. This presents certain difficulties because this work was prepared in a style which relied on the word "man" as its key referent.

Recently the American Psychological Association (1977) has published guidelines for "de-sexing" their professional publications. In the following work, I have tried to adhere to these guidelines as completely as possible. Since much of this manuscript was prepared prior to such an endorsement, the reader is asked to tolerate awkward phrasing at certain points.

Another change that has occurred is the tendency to accept as valid knowledge based on personal experience which can be related in less formal terms. Even in science, it is beginning to be recognized that there is a major personal component in all that the scientist does. Perhaps at the expense of scholarly detachment and scientific objectivity, the use of the first person will predominate throughout this document. This is done less for convenience than as a means of relating a certain quality about the material itself.

In closing, I would like to acknowledge the support others have given me over the years. First and foremost, I would like to thank Dr. Frederick M. Jervis whose intellectual stimulation made the conceptual structure of

this inquiry possible. I would also like to thank Dr. Peter S. Fernald under whose direction the present manuscript was prepared. It was only through Dr. Fernald's courage and support that this manuscript can now be submitted as partial fulfillment for this degree.

I would also like to offer my gratitude to the other members of my doctoral committee, Dr. R. Valentine Dusek, Dr. David E. Leary, Dr. Carleton P. Menge, and Dr. William R. Woodward, who demonstrated sustained interest in this project and offered constructive criticism. Dr. Hung-Min Chiang, while not a member of the doctoral committee, was gracious enough to give of his time to review a version of my manuscript and provided valuable suggestions for improvement, particularly in the sections concerning China.

The technical assistance of Frank O. Smith in proofreading this document and of David LaBianca in preparing the photographic materials is most appreciated.

Last, but certainly not the least, with full Confucian spirit, I wish to acknowledge the support of my parents, Mr. and Mrs. Joseph H. Mirabito, during my entire academic career.

TABLE OF CONTENTS

|  |     |
|--|-----|
| LIST OF TABLES.....  | x   |
| LIST OF ILLUSTRATIONS.....   | xi  |
| ABSTRACT.....  | xii |
| I. INTRODUCTION.....   | 1   |
| ALTERNATIVE DIRECTIONS FOR INQUIRY.....  | 2   |
| LIMITATIONS OF THE CURRENT HUMAN<br>PARADIGM.....                              | 3   |
| OVERVIEW.....  | 14  |
| II. A BASIS FOR FRAMEWORKS AND PSYCHOLOGY'S<br>FRAMEWORK.....                  | 15  |
| A THEORY OF FRAMEWORKS.....  | 15  |
| APPLICATION TO PSYCHOLOGY'S FRAMEWORK OF<br>THE PERSON.....                    | 43  |
| OVERVIEW.....  | 54  |
| III. METHOD.....   | 55  |
| SURVEY OF TRADITIONAL METHODS.....   | 55  |
| THE METHOD OF ALTERNATIVE ASSUMED<br>CONTEXTS.....                             | 62  |
| APPLICATION OF THE METHOD TO THE<br>PROBLEM.....                               | 70  |
| OVERVIEW.....  | 83  |
| IV. ALTERNATIVE ASSUMED CONTEXTS FOR QUESTIONING IN<br>CHINA AND THE WEST..... | 84  |
| ASSUMED CONTEXT FOR KNOWLEDGE IN THE<br>WEST.....                              | 84  |

|       |   |     |
|-------|---|-----|
|       | ASSUMED CONTEXT FOR KNOWLEDGE IN TRADI-<br>TIONAL CHINA.....                  | 100 |
|       | ALTERNATIVE PROCESSES OF QUESTIONING.....                                     | 121 |
|       | OVERVIEW.....   | 127 |
| V.    | CONSEQUENCES IN HUMANKIND'S RELATION TO<br>NATURE.....                        | 128 |
|       | EXPERIENCING NATURE.....  | 128 |
|       | FUNCTIONING TOWARD NATURE.....  | 151 |
|       | OVERVIEW.....   | 176 |
| VI.   | CONSEQUENCES IN HUMAN RELATIONS.....  | 178 |
|       | EXPERIENCING OTHERS.....  | 181 |
|       | FUNCTIONING TOWARD OTHERS.....  | 204 |
|       | OVERVIEW.....   | 240 |
| VII.  | CONSEQUENCES IN RELATION TO SELF.....   | 242 |
|       | EXPERIENCING SELF.....  | 243 |
|       | FUNCTIONING TOWARD SELF.....  | 259 |
|       | OVERVIEW.....   | 281 |
| VIII. | THE UNITY OF THE HUMAN BEING AND THE PROCESS OF<br>QUESTIONING.....           | 283 |
|       | THE UNITY OF THE HUMAN BEING IN CHINA.....                                    | 284 |
|       | THE PROCESS OF QUESTIONING AS THE SOURCE<br>OF UNITY.....                     | 290 |
|       | OVERVIEW.....   | 297 |
| IX.   | IMPLICATIONS FOR THE ASSUMPTION OF AN INHERENT<br>NATURE TO HUMAN BEINGS..... | 298 |
|       | A CHALLENGE TO THE ASSUMPTION OF AN<br>INHERENT NATURE TO HUMAN BEINGS.....   | 298 |

|  |     |
|--|-----|
| ALTERNATIVE INTERPRETATIONS OF THE RESULTS.....                | 307 |
| IN SEARCH OF ORIGINS.....                                      | 312 |
| OVERVIEW.....  | 318 |
| X. GENERATING AND APPLYING AN ALTERNATIVE ASSUMED CONTEXT..... | 319 |
| AN ALTERNATIVE ASSUMED CONTEXT AS A GENERAL PROCESS.....       | 319 |
| APPLICATION TO THE PROBLEM.....                                | 323 |
| APPLICATION TO AN AREA OF PSYCHOLOGY.....                      | 328 |
| OVERVIEW.....  | 333 |
| FUTURE PERSPECTIVES.....                                       | 334 |
| APPENDIX.....  | 338 |
| BIBLIOGRAPHY.....  | 344 |

LIST OF TABLES

1. An Example of the Process of Questioning in  
Traditional Chinese Medicine..... 291

## LIST OF ILLUSTRATIONS

|  |     |
|--|-----|
| 1. Twins-Goblet Gestalt Figure.....  | 17  |
| 2. The Effect of Context on Programming Perception....   | 26  |
| 3. The Duck-Rabbit Figure.....   | 28  |
| 4. The Duck-Rabbit Figure in the Context of Ducks<br>Assumes the Meaning of a Duck.....  | 29  |
| 5. The Duck-Rabbit Figure in the Context of Rabbits<br>Assumes the Meaning of a Rabbit.....  | 30  |
| 6. A Typical Chinese Landscape Painting Illustrating<br>the Integration of Human Beings with Nature.....                                 | 133 |
| 7. The Reciprocal Relation between the Characteristics<br>of the Human Being and the Natural Setting.....                                | 138 |
| 8. The Integration of Architectural Structures with<br>the Horizontal Lines of Nature.....   | 159 |
| 9. An Example of Chinese Portraiture Illustrating the<br>Interest of the Artist in the Subject's Relations<br>to Other Human Beings..... | 195 |
| 10. The Historical Tendency and Shift toward Internal<br>Control in the Major Schools of Chinese Thought....                             | 222 |
| 11. The Self as Embedded in a Network of<br>Relationships to Others which Modulates the<br>Self's Mourning Behavior to the Deceased..... | 227 |
| 12. The Pinna of the Ear Revealing Acupuncture Points<br>as a Microcosm of the Whole of the Body.....                                    | 287 |
| 13. The Derivation of the Questioning in Chinese<br>Medicine from the Assumed Context of Unity.....                                      | 293 |

ABSTRACT

CHINESE AND WESTERN MAN:  
A CHALLENGE TO THE ASSUMPTION OF AN INHERENT NATURE  
TO HUMAN BEINGS

by

JOSEPH JOHN MIRABITO

University of New Hampshire, 1979

This inquiry attempts to challenge the assumption that human beings have an inherent nature. Such a program would appear to be justified by the fact that the current psychological framework of human beings appears to have inherent limitations in its capacity to encompass the human potentials of people as knowers and as the known.

A theory of frameworks is suggested which views the limitations or boundary conditions of a framework as the product of the questions that are asked and the assumed context in which they are asked. From this perspective, an analysis is made of the current limitations of the traditional psychological framework. It is suggested that these limitations are the result of the questions that the psychologist asks which are, in turn, limited by the assumption that human beings have an inherent nature.

A survey is made of traditional methods in respect to their appropriateness for challenging this assumption. Finding these methods inappropriate, the Method of Alternative Assumed Contexts for Questioning is constructed which bases its operation on the generation of alternative assumed contexts, the asking of the same question in each context, and examining the consequences in the alternative frameworks.

Alternative assumed contexts are presented for Traditional China and the West. The assumption of unity is suggested as underlying the Chinese framework, while the inverse assumption of divisibility is presented for the West. These alternative assumed contexts produce a different process of questioning in each framework. These alternative frameworks have consequences in the way human beings experience and function. The traditional Chinese experienced and functioned within a context of unity, and hence tended to unify what is in the West assumed to be divided. Specific examples are given in each of three areas: experience and functioning toward Nature, toward others and toward the self. Finally, the areas themselves are shown to be unified and to be the product of a process of questioning based on unity.

The relation between the process of questioning and the consequent experience and function of people is presented as a challenge to the assumption of an inherent nature to human beings. The results suggest that much of what we view as

"inherent" in human beings is a function of viewing them from a singular process of questioning. Skepticism is expressed about the prospects of constructing a complete framework based on the assumption of an inherent human nature.

The results also generate an alternative assumed context which views human nature as a product of the process of questioning through which it is viewed. This alternative is used as a basis for dealing with the central problem of encompassing human potentials. Within the alternative suggested, human beings, as the known, construct their own potentials from their process of questioning, with these potentials being limited only by the fact that they must remain within some process of questioning. Likewise, the potentials of the human being as a knower are equally contained within this very same process and have the same limitations and potentials as the human being who is known.

## CHAPTER I

### INTRODUCTION

Kuhn (1962) has suggested that the development of scientific knowledge is a discontinuous, revolutionary process, which involves the challenging of traditional modes of operation and the substitution of an entirely new framework. The revolution involves the transcendence of the current paradigm, which has served to guide intellectual activity, in favor of a new paradigm which provides an alternative orientation.

This notion of the revolution of a paradigm as the central process of the development in scientific knowledge challenges traditional biases toward viewing the development of knowledge as a continuous process where knowledge is expanded almost in an atomic manner, where false assertions about the nature of the world are continually and additively replaced by true assertions. Within this view, the paradigm or field of discourse within which the assertions are made is not challenged: only the content of the paradigm, the assertions, are challenged.

Kuhn does make provision for non-paradigmatic change within his model. During non-revolutionary periods, there is "normal science," where the major endeavor is "puzzle solving." Within this period, the paradigm is assumed and

the tools of the paradigm are employed to solve the problem presented. These problems are regarded as capable of being resolved given adequate elaboration of the methodological orientation of the paradigm and the innovative application of these methods.

#### ALTERNATIVE DIRECTIONS FOR INQUIRY

The Kuhnian model has direct implications for any inquiry which has the purpose of changing knowledge. While change does occur within the non-revolutionary phase, the most significant changes occur when the paradigm itself is challenged and the process of revolution stimulated. The piecemeal changes which occur within normal science are important to this process, but not central.

At any one given time, the Kuhnian position requires that each investigator make an evaluation of where efforts should be directed. If it is the investigator's evaluation that the current paradigm is dominant and will be dominant in the future, then efforts would be best directed toward investigations which assume the paradigm as a given and define problems as puzzles which maybe resolved given diligent work. Alternatively, the investigator may make the evaluation that the current paradigm is about to be challenged. Efforts, given this analysis, would best be directed toward investigations which have the purpose of challenging the paradigm.

The responsibility of the investigator within the Kuhnian model is considerably expanded. Problems cannot be merely taken as given. Some evaluation must be made as to the source of the problem: as a puzzle within the paradigm or as an indication of the limitations of the paradigm itself. In this manner, the investigator can be thought of as constructing or defining the problem rather than encountering a problem as something external to one's own process of evaluation.

#### LIMITATIONS OF THE CURRENT HUMAN PARADIGM

This inquiry will be concerned with challenging a central assumption of the current human paradigm which is dominant in contemporary psychology. Since I have assumed this direction for inquiry, it is required that I present some evidence which has led me to make the evaluation that my efforts would be best directed toward an inquiry of this nature.

At the core of my evaluation is the feeling that psychology is rapidly approaching a revolutionary phase in the knowledge of human beings and that the current paradigm will be replaced with an alternative. It follows that some evidence may be presented from contemporary psychology which would indicate that the paradigm is in jeopardy. The remainder of this chapter will review some of the evidence that has suggested to me that my efforts would be best directed toward an inquiry which challenges the current paradigm.

### Limitations in the Knowledge of Others

In our society, one of the most cherished values we hold about people is our belief that people have the potential to act in a democratic fashion. Because of the complete acceptance of our belief in this potential, it becomes a convenient baffle to demonstrate a problem. For as the framework of the person, as currently employed by psychology, is expanded, a limitation is revealed: there is no capacity for the person's democratic potentials. Our democratic image of the person becomes systematically excluded.

Allport (1955) recognized the limitation and the dilemma so produced for psychology when he pointed to the inability of our psychological framework of the person to extend from the laboratory-clinic setting to the ballot box. He writes that modern psychology is in a dilemma created by the gulf that exists between the image of the person that the current framework presents to us and our cherished democratic image:

Up to now the 'behavioral sciences,' including psychology, have not provided us with a picture of man capable of creating or living in a democracy . . . . They have delivered into our hands a psychology of an 'empty organism', pushed by drives and molded by environmental circumstance. What is small and partial, what is external and mechanical, what is early, what is peripheral and opportunistic have received the chief attention of psychological system builders. But the theory of democracy requires also that man possess a measure of rationality, a portion of freedom, a generic conscience, appropriate ideals, and unique value. We cannot defend the ballot box or liberal education, nor advocate free discussion and democratic institutions, unless man has the potential capacity to profit therefrom. (p. 100)

Here we meet the limitation of our framework of the person directly, and the problem is given a concrete form. Nothing can make the problem more explicit than the perplexing cleavage of thought that it forces upon us. Allport writes of this cleavage: "No paradox is more striking than that of the scientist who as a citizen makes one set of psychological assumptions, and in his laboratory and writings makes opposite assumptions respecting the nature of man." (p. 33) What makes this duality necessary is the limitation imposed by a framework which cannot entertain both images of the person within a unified field. This framework's inability to encompass people's potentials as democratic human beings reduces the very character of our democratic image of them.

What makes the above example of limitation of our framework of the person explicit is that most of us endorse this democratic image. However, this example is a special case of a more general limitation. As has become increasingly apparent to some sections of the psychological community, the current framework, given its expansion, reduces not only the democratic potentials of people but, also, their human potentials. I am, of course, referring to the so called "third force" in psychology today, that loose federation of existential and humanistic psychologists. This segment has been particularly vocal in its opinion that our current framework systematically reduces human potentials. Within this group also there is entertained the

belief that the person is always capable of transcending any limitations imposed from without and can exert new potentials beyond the limitations the psychologist assumes they possess.

The movement where the general case has, perhaps, been most explicitly stated is within humanistic psychology. From this perspective, Severin (1965) provides us with this definition of the limitations:

Many psychologists who ask themselves 'what is man?' are less than satisfied with the human image their science has created. It seems too fragmentary, too rigid, too lacking in unity and individuality to reflect adequately the autonomy, spontaneity, and creativity of the real people with whom they deal. (p. v)

This protest is but one of many and could easily be duplicated a hundredfold from the writings within contemporary psychology.

At this point, the framework as the psychologist employs it could be defended by the argument that psychology, as a discipline, is still a young science, our framework is in its infancy, and as such must content itself for the time being with what has been termed by Allport as the "crude and simple" aspects of human beings. It would be suggested that, with the course of time, modifications can be made in the framework to obviate the problem I have presented.

Without becoming ensnared in historical issues, such an argument does not adequately take into account the full extent of the problem as it is embedded in the foundations

of our framework of human beings. What is being contended is that it is the framework itself that is the source of the limitation and the producer of the problem, not its present level of refinement. Our current framework has limitations inherent within itself to deal with the person's potentials regardless of the sophistication of our methodology or the extent of our data collection with which the framework is supported. The problem cannot be obviated by "discovering some new facts" or by "changing an assumption here or there." The problem as made manifest by this limitation is more basic.

Writing from the perspective of existential psychology, May (1960) seems to have become acutely aware of the inherent limitations of our current framework to ever understand a 'living' human being:

There seems to be the following 'law' at work: the more accurately and comprehensively we can describe a given mechanism, the more we lose the existing person. The more absolutely and completely we formulate the forces or drives, the more we are talking about abstractions and not the living human being. For the living person . . . always transcends the given mechanism . . . (p. 18, His italics)

May seems to be ruling out, in principle, the possible extension of our current framework to ever include a person's full existence, by suggesting a 'law' akin to Heisenberg's uncertainty principle in quantum theory, a principle that seems to place limitations not on what we currently know, but on the very capacity of a framework to know.

### Limitations in the Knowledge of Ourselves

As we extend our framework inward, we find the framework limits our own potentials to function and experience as knowers. Technically, the problem is defined in psychology by the problem of reflexivity in theorizing. On one pole, we consider ourselves to be psychologists and knowers, exercising a certain autonomy of action and responding to reason. On the other pole, the object of our theorizing, the person in our framework of knowledge, is alternatively conceived as a creature of motivation, responding deterministically to stimuli. As we turn the latter image of the human being back upon the former image in a reflexive manner, the problem of the limitations of our framework to encompass the potentials of the knower is acutely defined.

We psychologists have been understandably reluctant to deal with the basic problem of reflexivity in knowledge; the fact that the human framework must not only deal with others but also with ourselves as knowers seems to have almost eluded our attention. With the exception of the personal construct theory proposed by Kelly (1963), psychological theorists have not dealt with or made special provision for reflexivity within their theories. While the archives of psychology are full of theoretical formulations of how other men behave, there is little on how we psychologists function as knowers. While elaborate theories have been constructed to account for the behavior of other

people, there is little elaboration on a theory which could account for the behavior of psychological theorists when they generate these complex theories. Psychologists have, it seems, failed to recognize the simple and basic fact that, as Kelly (1963) states, "if the theory is to account for the way in which a man turns, it should also account for the way its author turned when he wrote it." (p. 39)

When we attempt to deal with reflexivity and extend our current framework to the psychologist as a knower, we are again presented with a limitation and the experience of a problem. At the heart of this paradox is a framework which requires that the psychologist, metaphorically, must "speak with a forked tongue." As Maslow (1966) has recognized:

It was as if psychologists then lived by two mutually exclusive sets of rules or as if they spoke two different languages for different purposes. If they were interested in working with animals or with part-processes in human beings, they could be 'experimental and scientific psychologists.' But if they were interested in whole persons (we may add like themselves), these laws and methods were not of much help. (p. 8)

Acutely aware of these limitations, Bannister (1970) has called psychology an "exercise in paradox." He writes:

But in our more solemn moments we seem to prefer the paradoxical view that psychologists are explainers, predictors and experimenters, whereas the organism, God bless him, is a very different kettle of fish. (p. 5)

Bannister goes on to extend our framework of human beings to its ultimate extreme and makes the paradoxical consequences explicit:

If we follow the logic of non-reflexive psychological theories still further we arrive in the middle of the Skinnerian fantasy world in

which we can be convinced that once all the data is safely gathered in then we can control and manipulate men in every detail. We are now faced with the paradox of puppets controlling puppets.  
(p. 8)

The problem of reflexivity and its perplexities generally can be completely avoided by many psychologists because they work within a microtheory within the larger framework. They are not concerned with the universal implications of their assumptions and conclusions. These implications may be safely relegated to the distant future or dismissed as superfluous flights of metaphysical speculation. It is only in the world of fantasy, at present, that the full implications of reflexivity on the psychologist as knower can be examined.

One such exercise in imagination of psychology's future is presented in detail by Skinner in his utopian novel, Walden II. Walden II is the ultimate application of what the psychologist has learned about people to the design of a complete social organization. This, then, represents the articulation of psychology's framework, provided one is a Skinnerian, on the grand scale. In Walden II, human behavior is controlled and manipulated from infancy. Here we have the ultimate application of the framework of person to humankind. It is in this situation also that the problem of the limitations of this framework and the resultant problems of reflexivity again manifest themselves.

For even in this utopian setting, Skinner finds it necessary to defend a non-reflexivity position, for without it the social framework of Walden II would dissolve into a paradox. To use Bannister's description from above, this would be a case of "puppets controlling puppets." Skinner's architect for his utopia, Frazer, freely admits that he could never have been a product of his own utopia. Even in this complete application of the framework, the constructor of the framework must be separated from his creation, if the system is to work. Skinner, through Frazer, acknowledges the problem through a vocal denial of any reflexivity in his knowledge:

Isn't it enough that I've made other men likable and happy and productive? Must I possess the virtues which I've proved to be best suited to a well-ordered society? Must I exhibit the interests and skills and untrammelled spirit which I've learned how to engender in others? Must I wear them all like a damned manikin? After all, emulation isn't the only principle of education--all the saints to the contrary. Must the doctor share the health of his patient? Must the ichthyologist swim like a fish? Must the maker of firecrackers pop? (Skinner, 1965, pp. 249-50)

The limitation of the framework to encompass the knower does not dissolve in the utopian setting but becomes more acute. In this condition, people seem to adhere very stubbornly to the paradoxical position that the person who knows, the person who reinforces, must be separated from and cannot be encompassed within the same framework as are community of people that are designed and reinforced. In examining the utopian setting above, the point can be more directly seen that the problem lies in the foundations of

our framework of the person, not in its present level of articulation. The limitations demonstrated are not a product of our ignorance, but rather are contained in the manner in which we construct knowledge about ourselves.

What has been revealed is an inherent limitation in the capacity of our framework of the person to encompass the human being as a knower similar to the limitations of the mathematical framework presented by Godel's proof which seems to set limits on the ability of the framework to know. As Bronowski (1968) has recognized, there is an essential difficulty in a human framework produced by the "self reference" that underlies it everywhere. Reflexivity and its associated problems run like a deep fissure to the very foundations of psychology's framework of the person. Bronowski concludes that this difficulty cannot be simply resolved by the occasional addition of a new axiom here or there.

Psychology is not unique in experiencing the limitations of its framework of the person. As psychology is related to other social sciences and shares their more general framework, it is possible to detect parallel problems in other social sciences. For example, the same problem of reflexivity can be revealed in sociology.

As Gouldner (1970) has recognized, the sociologist, like the psychologist, functions toward people with a certain duality of purpose, a duality that shares the common mark of non-reflexive theorizing in psychology: the tendency

for the sociologist to regard other people as believing out of need and the sociologist as a knower as believing because of the dictates of logic and reason. Gouldner suggests that there must be developed a reflexive sociology which would view the sociologist and the person being studied within a methodological monism as people comprising not two distinct breeds but one breed of man. The work of Gouldner in sociology runs parallel to the theoretical orientation of Kelly noted above in psychology, in respect to the reflexivity issue.

### OVERVIEW

The work of Kuhn was used to suggest an alternative direction for inquiry. It was suggested that each investigator must make an evaluation of where efforts would be best directed--toward working within the current paradigm or framework or challenging that paradigm or framework.

Evidence was presented which has led this investigator to conclude that efforts are best directed toward challenging psychology's framework of the person. Limitations of this framework of the person were reviewed as they relate to knowledge of others and to psychologists as knowers.

## CHAPTER II

### A BASIS FOR FRAMEWORKS AND PSYCHOLOGY'S FRAMEWORK

It has become apparent to me that an orientation which requires the challenging of psychology's framework of the person, also requires a larger framework within which to accomplish this task. The challenge to any framework assumes at least some knowledge or at least some speculation about how frameworks are structured and function. As a consequence, I have found it necessary to develop some opinions about the dynamics of frameworks.

### A THEORY OF FRAMEWORKS

What initiated my investigations into frameworks was the feeling that the current psychological framework of the person was limited, not by current levels of knowledge, but by something more fundamental within the structure and function of frameworks. This led me to examine the source of the limitations of any framework or of frameworks in general.

#### Questions as Double-edged Swords

Defining a framework is a difficult problem for it is not a thing, but a fundamental relation in knowledge. The key element in defining a framework is the means by which this relation becomes fixed. 'Framework' as the concept is being used here is not a static entity which can be given

definition by enumerating its attributes by a number of declarative sentences. The term framework refers to something more elusive in quality, that is to the manner in which people relate to their knowledge.

Framework has a "global" impact, relating to both thinking and doing: what people think as well as how people behave. A framework is, then, a general interpretive medium for both experience and function. A framework would appear to transcend the meaning of only an axiomatic system. It involves not only thought, but also action. This is what is referred to when I use the term "functional" in describing a framework.

The second term I use to describe a framework is "relation." A framework is not an entity, but a relation between the framework and what is not of the framework. A framework, then, cannot exist fully as an isolated entity. For example, the Newtonian framework could not be fully defined as a framework independent from something beyond the framework. However, in contrast to the framework of relativity, given this relational condition, the Newtonian framework could be defined for what it was. This need for alternatives in defining frameworks will be used to advantage in the following chapters of this inquiry.

Since a framework is a relation, to define a framework one must attempt to uncover the principle by which this relation is fixed. Boundary conditions, by fixing this relation, define frameworks. As an analogy for this

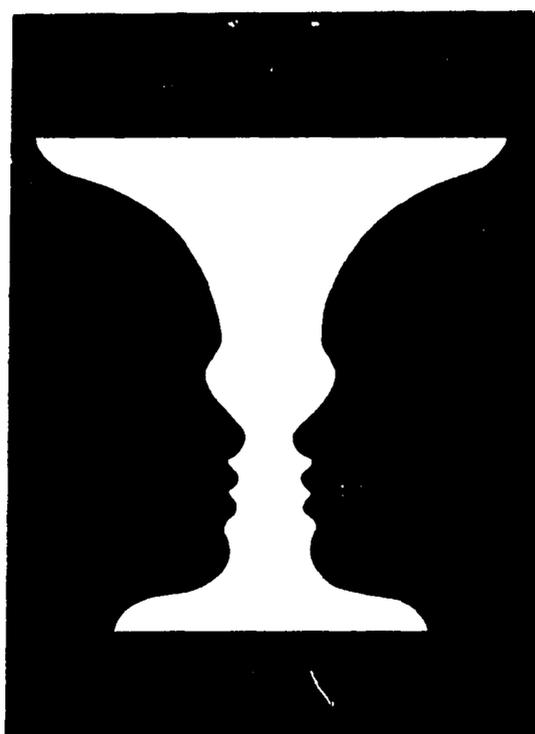


FIGURE 1

TWINS-GOBLET GESTALT FIGURE

mechanism, I can refer to a familiar phenomenon in the psychology of perception, the Gestalt figure. This is more than a pure analogy for a framework is actually a Gestalt phenomenon in itself. In Figure 1, we find a familiar gestalt figure in which the perception can be that of a goblet or the faces of twins. The important point in this example is that the boundary conditions--what we assume to be the boundary between the black and white surfaces--serve to fix the relation between figure and ground defining the framework of what we see. If we consider the black surface to be the ground, the goblet appears. If we consider the white surface to be the ground, the twins appear. Essential to our perception, then, is the relation between figure and ground as revealed by what we assume to be a boundary.

In similar manner, the boundary conditions define a framework by fixing the relation between the framework and what is not the framework. These boundary conditions are a function of our knowledge. For example, it has been demonstrated experimentally that variables presented before the presentation of the stimulus in Figure 1, psychological sets, can affect the final product of the perception. In a similar fashion, the dynamics of one's knowledge affect the boundary conditions for one's framework. It is to an analysis of these dynamics that I now turn.

A point of departure in the search for the boundary conditions for frameworks of knowledge is an observation made by the historian and philosopher of science Stephen

Toulmin (1961), who noted:

The intellectual frame of a man's thought displays itself less in the detailed results he enunciates than in the questions he asks and the assumptions which underlie his theorizing. (pp. 94-95)

This comment is very significant in providing a direction and point of focus. It has been a traditional bias to regard the framework of a person's thought as the product of encounters between the person's knowledge and an external, static limit imposed by the world. According to this view, the limits of a framework of thought, i.e., its boundary conditions, are the result of a process of exhaustion where the knower is the inert recipient of the discovery of these limits.

The importance of Toulmin's comment is that it serves to redirect attention to the boundary conditions as they are set by a dynamic process of interaction which has as its dual point of focus the questions asked and the assumptions entertained. It is from this base that the boundary conditions are set. There is a confrontation between a long standing tradition in Western knowledge which treats knowledge as a response by a static observer to the "questions posed by nature," rather than as a dynamic process by which the knower constructs knowledge through questioning. It is only within the present century, with the development of relativity and quantum theory that this dynamic process of construction has been demonstrated, for in both cases the knowledge of the observer has been shown to have a pronounced effect on the ultimate framework that

comes to be known. To quote the quantum physicist, Werner Heisenberg:

Natural science does not simply describe and explain nature; it is a part of the interplay between nature and ourselves; it describes nature exposed to our method of questioning. (Heisenberg, 1958, p. 81)

It is suggested that the source of the boundary conditions of one's framework of knowledge arise from this dynamic process of questioning. Previously, it has been our bias to regard the limits of a framework of knowledge as being the result of that which is known. The impact of this process of questioning in producing the result has been largely obscured. However, the full impact of the process can be best demonstrated by examining a case where a framework of knowledge is delimited solely by this process, in short, where there is nothing to be known.

Spectorsky (1955) provides us with the opportunity for such a demonstration in his book, The Exurbanites, a sociological study of life in the suburbs of New York City. He describes a "game" current among members of the community he studied which demonstrates my point, sometimes quite embarrassingly.

The format of the "game" runs somewhat like this: One person of the group is chosen to be "It" and is told that the other members of the group will, in his absence, invent a story, and that his task, upon returning, is to guess this story by asking the group questions which can be answered by yes or no. In the "It's" absence, the group is told that no

story will be invented and that the group is to give yes or no answers only on the basis of the last letter of the last word of the question, contingent only on its being a vowel or consonant. Here we have a case where the "It" must construct a system of knowledge where nothing is to be known. Amazingly, the "It," under most circumstances, constructs a coherent tale from the virtually random feedback. The questions that he asks tend to converge to produce a quite compelling and convincing story; so convincing that, Spector'sky reports, it is sometimes very difficult to convince the "It" that there was not a story and that he has constructed it!

In this "game," the almost compulsive, seductive hold of a process of questioning is revealed for what it is, since there is nothing to be known to begin with and the knowledge comes solely from the process itself. What is demonstrated is an effect similar to the principle of closure in Gestalt psychology, the tendency for us to provide closure for a framework of knowledge even when this closure is based on nothing but the continuous feedback to our questioning. There is a tendency for a process of questioning to converge and to limit the field from which we choose questions, based on the questions we have previously answered. It is through this latter process that the boundary conditions for a framework of knowledge are established.

There is a quality, then, in a process of questioning, in the relation of asking questions, obtaining answers, and asking new questions based on those previously answered, which tends to fix a framework and its boundary conditions. The implications of this relation takes us far beyond the limits of this work. In the future, this factor should be taken into account in evaluating the closure of any system of knowledge for this closure may be a premature one, an artifact of one's process of questioning itself.

Questions are truly double-edged swords. They are not only responsible for providing closure to knowledge, but also for opening new vistas for knowledge provided one asks the right questions. In the above, I have concentrated on the role of questions in setting the limits or boundary conditions of knowledge. The inverse relation also requires investigation: asking a different question is instrumental in setting new boundary conditions. It seems simplistic and trite to summarize the above argument by saying that "one only gets answers to the questions one asks," but this is largely the case. To ask different questions is to get different answers, answers which may have the roots of a new framework of knowledge, if you will, new "discoveries" contained within them.

The process of questioning, then, plays an important and quite unheralded dual role in knowledge--that of expanding and limiting the boundaries of that knowledge. Here, again, we run counter to a very forceful bias in

Western knowledge which attributes revolutions in knowledge to the discovery of new information. There is, however, some evidence that asking different questions has played an important role in revolutions in knowledge, for it is through such a redirection in knowledge that we become attuned to the need for constructing new information. The central role of our process of questioning in science has been largely obscured by our biases; however, this dynamic process is the very mainspring of our scientific knowledge as Bronowski (1973) reminds us: "The essence of science: ask an impertinent question, and you are on the way to the pertinent answer." (p. 153)

A hallmark in this matter is a perceptive comment made by Whitehead (Price, 1954) that "the 'silly question' is the first intimation of some totally novel development." (p. 174) In short, some "silly questions," but not all silly questions, are "silly" because they lie beyond our current understanding and belong, as it were, to an as yet undeveloped framework of knowledge which these questions are about to open before us. There is a further goad presented by the "silly" question for the production of an alternative framework based on this "silly question" for as Churchman (1968) has observed: "once you've asked a stupid question, then you have to defend your right to ask it." (pp. viii-ix) This defense generally includes the formulation of a framework where the question is no longer silly or stupid, but is the most significant question.

As a case in point, an examination will be made of the role of "silly questions" in perhaps the most profound revolution in knowledge of the universe in this century, the change from the Newtonian universe to the relativistic universe of Einstein. There is evidence that Einstein's giant leap into a new framework for physical knowledge was as much a product of asking "silly questions" as a product of the discovery of new information. Indeed, much of the information that Einstein used in constructing his theory had been publicly available for decades. I will examine the roots of relativity as they are grounded in the character of the questions Einstein asked.

Wertheimer (1959), who had the opportunity to extensively interview Einstein about the cognitive basis of his development of relativity, has pointed to Einstein's tendency from an early age to ask "silly questions," questions which were in his later years to lead him to alternative framework of physical thought. Wertheimer (1959) writes:

The problem started when Einstein was sixteen years old, a pupil in the Gymnasium . . . . It was then that the great problem really started to trouble him. He was intensely concerned with it for seven years; from the moment, however, that he came to question the customary concept of time, it took him only five weeks to write his paper on relativity . . . . The process started in a way that was not clear, and is therefore difficult to describe--in a certain state of being puzzled. First came such questions as: what if one were to run after a ray of light? What if one were riding on the beam? If one were to run after a ray of light as it travels, would its velocity thereby be decreased? If one were to run fast enough would it no longer move at all? . . . to young Einstein this seemed strange. (p. 214)

These questions that young Einstein asked were, indeed, "silly questions" given the Newtonian framework of his day; yet, it was these very questions that guided him to a new framework. It is easy to see that the questions Einstein was asking, while "silly questions" in the classical framework, were the most significant questions in his new relativistic framework.

Einstein, then, was a man who from his early youth had the capacity to use this process of questioning and the questions he asked to great advantage. Einstein, instead of using the process of questioning to generate new information within the classical framework, manipulated the process itself to open new realms of knowledge in an alternative framework. This was Einstein's gift, as Bronowski (1973) eloquently describes it: "Einstein was a man who could ask immensely simple questions. And what his life showed, and his work, is that when the answers are simple too, then you hear God thinking." (p. 256)

If we turn for a moment to the other great revolution in modern physics, quantum theory, we can find evidence of other thinkers who recognized the all-powerful effects of one's process of questioning. Chief among the authors of this revolution was the physicist Niels Bohr, a man who was quite aware of the need to be extremely careful with one's questions. Bronowski (1973) relates that "He used to begin his lecture courses by saying to his students, 'Every sentence that I utter should be regarded by you not as an

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FIGURE 2

THE EFFECT OF CONTEXT ON PROGRAMMING PERCEPTION  
(AFTER ORNSTEIN, 1972)

assertion but as a question.'" (p. 334) It was this openness to questions, of which this is but an example, which served Bohr admirably in founding a new framework for physics.

#### Questions are Asked in an Assumed Context

This work is committed to a context theory of meaning: that the meaning of a part does not reside in that part alone, but the relation of the part to the whole. Such a view is not alien to psychology; this view has been supported by the Gestalt psychologists who have recognized the effect of the whole on our perception of the part. This conception has been particularly useful in visual perception. Likewise, a large body of experimental evidence has been amassed which demonstrates the role of set as a context on perceived meaning.

For example, Ornstein (1972) has pointed to context effects as a model for the selection process in perception. Ornstein presents the structure in Figure 2 to illustrate the point. The meaning of the central symbol is dependent on the context in which it is assumed to be placed. If the context is numeric, the symbol is perceived as a number. If the context is alphabetic, the symbol is perceived as a letter. Such context or set effects have been the object of experimentation for some time within psychology.

Such relations and principles, however, are not limited to the psychology of set or the psychology of perception. Hanson (1969), for example, extends these principles into

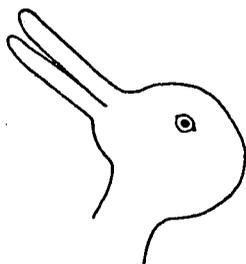


FIGURE 3

THE DUCK-RABBIT FIGURE  
(AFTER HANSON, 1969)

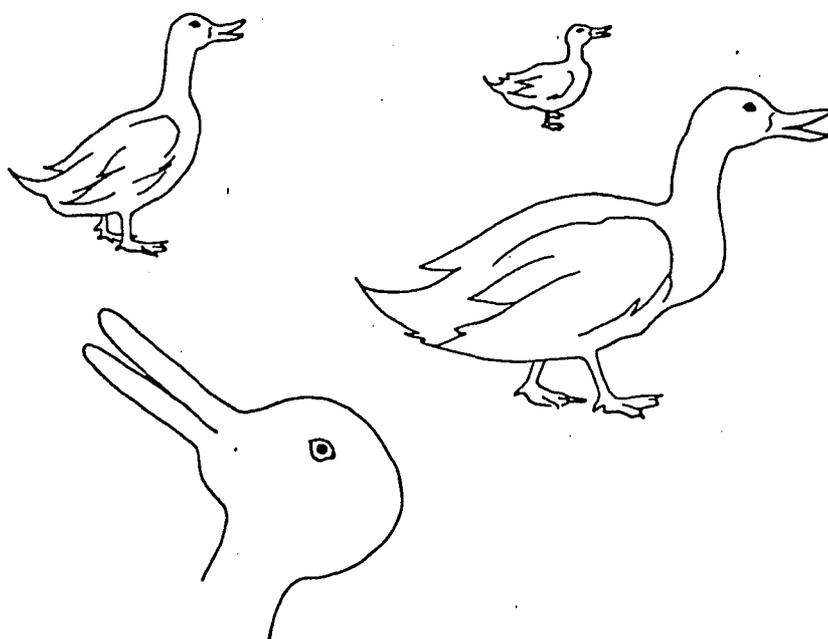


FIGURE 4

THE DUCK-RABBIT FIGURE IN THE CONTEXT OF DUCKS  
ASSUMES THE MEANING OF A DUCK  
(AFTER HANSON, 1969)

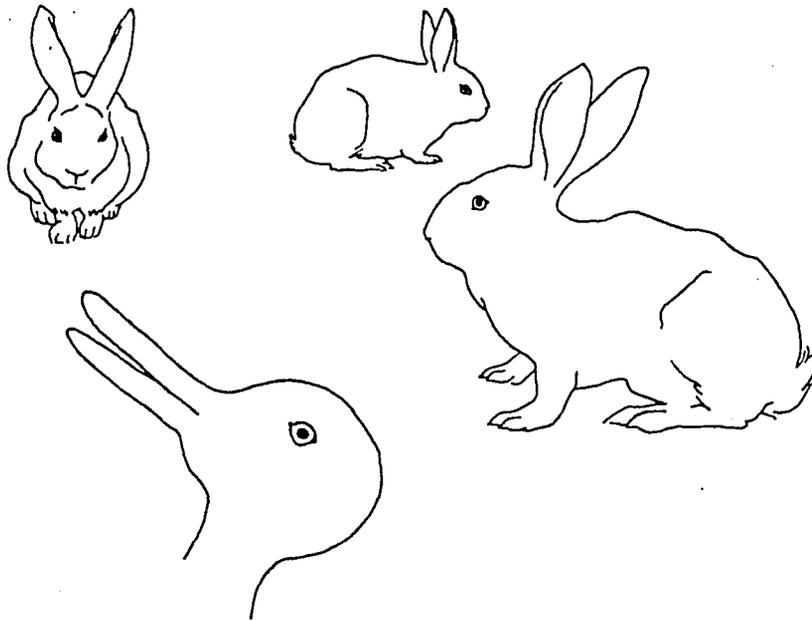


FIGURE 5

THE DUCK-RABBIT FIGURE IN THE CONTEXT OF RABBITS  
ASSUMES THE MEANING OF A RABBIT  
(AFTER HANSON, 1969)

the philosophy of science arguing that "facts" are dependent upon a theoretical context for their meaning and cannot stand alone. "Facts," he argues, are theory laden and cannot be treated in isolation. He gives the example that even the "fact" of the sun's rising can be given alternative meanings dependent on the context of knowledge. The thirteenth century thinker would see the "fact" in the context of the astronomical knowledge of the time as a "sunrise," while the twentieth century astronomer views the same "fact" as a "horizon turn."

Hanson provides us with the following concrete example of the effect of context on meaning. The drawing in Figure 3 when placed in the context shown in Figure 4 is seen as a rabbit and when placed in the context of Figure 5, it appears as a duck. While this example admittedly is simplistic, it demonstrates a very important, and sometimes unnoticed, effect of context on organization of our perceived meaning.

Likewise, within mathematics, Frege (1959) has recognized the principle of context as being of great value in his investigations into the concept of number. He observes that it is only in the context of a proposition that symbols have any meaning. This principle, Frege states, is the key to understanding some rather puzzling problems in mathematics generated by taking terms out of context as identities. Frege sees this principle as having application beyond the domain of mathematics proper.

The degree to which human beings are "context" processors is generally not recognized until an attempt is made to duplicate human processes through the use of a machine. Dreyfus (1972) points to the failure of the glowing predictions of just a decade ago that computers could produce readable translations to come to fruition. The failure is largely dependent on the fact that a word is not just a configuration of sounds and letters, but acquires meaning according to its context in the sentence. It has become increasingly apparent to those working in the field that there is great difficulty in programming a computer to produce such expected meanings from the context in which the word is contained.

Raphael (1976) provides an amusing example of the failure of the computer to appreciate meaning in context. The biblical quotation, "The spirit is willing but the flesh is weak." was translated by computer from English to Russian and back again. The result was: "The wine is agreeable, but the meat has spoiled." (p. 180) Anyone to whom I have ever related this story has had no problem in seeing that the computer was responding to the literal meaning of the words and not the contextual meaning.

Focusing the context principle of meaning on questions, it follows that the questions we ask do not stand in isolation nor do they possess self-sufficient meaning. Questions are not in themselves meaningful or "silly" for that matter; the context makes them so. It is in relation

to this context that the meaning emerges. For example, we noted above, in the case of Einstein and his questioning which led to relativity, that within the context of classical Newtonian theory, the questions the young Einstein asked were, indeed, "silly" questions. Yet, in the context of relativity, these same questions were the most meaningful questions. The context of physical theory, then, played a crucial role in defining the meaning of questions about the nature of light and observer's place in the universe.

Central to a further analysis of the context of questioning is the role of assumptions. 'Assumption,' as the term is normally used in thought, refers only to an axiom or proposition upon which knowledge is based. The term as it is employed here refers to something more basic and global. Assumptions are not just axioms as in geometry, but are also premises in the "geometry for living." Assumptions refer, as do frameworks of which they are elements, to both what we think and what we do. This term is used to refer to the manifold which contains both our thought and action. My meaning is perhaps most closely approximated by Polanyi (1958) in his definition of presuppositions:

When we accept a certain set of pre-suppositions and use them as our interpretative framework, we may be said to dwell in them as we do in our own body. Their uncritical acceptance for the time being consists in a process of assimilation by which we identify ourselves with them. They are not asserted and cannot be asserted, for assertion can be made only within a framework with which we have identified ourselves for the time being; as they are themselves our ultimate framework, they are essentially inarticulable. (p. 60)

It is this "in-dwelling" quality of assumptions which gives us an assumed context for our knowledge. Just as people dwell within their bodies and use them, quite unconsciously, as a basis for their behavior, one uses assumptions and the framework that arises from them as an assumed context for functioning.

The assumed context can be spoken of as an "interpretative framework." One should recognize, however, that the framework a person functions within as an individual is not unique in all aspects to themselves, but that the framework is itself contained within the framework of institutions, these in turn contained in the framework of nations, and, finally, they are all contained in an essential degree by the cosmic assumed context provided by a culture. Assumptions and the process by which they function are transpersonal in their origins, providing the assumed context, not only for the individual but for a culture as well. This dimension is one of degree only, for one can identify the same process all along the dimension from the individual to the culture. Just as the individuals within a culture have assumptions which form the interpretative framework for function, so does an entire culture or epoch have certain assumptions which lead to an interpretative framework.

Lovejoy (1957) has recognized the operation of a common assumed context from the level of the individual to the level of the culture. He writes: "There are, first,

implicit or incompletely explicit assumptions, or more or less unconscious mental habits, operating in the thought of an individual or a generation." (p. 7) Lovejoy goes on to give the example of the pervasiveness of the assumed context of "simplicity" in the age of Enlightenment of the seventeenth and eighteenth centuries which made them ages of esprits simplistes.

In a similar manner, Whitehead (1925) finds that assumptions provide the framework for philosophy and for individual philosophers within an epoch:

When you are criticising the philosophy of an epoch, do not chiefly direct your attention to those intellectual positions which its exponents feel it necessary explicitly to defend. There will be some fundamental assumptions which adherents of all the variant systems within the epoch unconsciously presuppose. Such assumptions appear so obvious that people do not know what they are assuming because no other way of putting things has ever occurred to them. With these assumptions a certain limited number of types of philosophic systems are possible, and this group of systems constitutes the philosophy of the epoch. (p. 69)

This pervasive quality of assumptions and the assumed context that arises from them, dispersing as it does in the hierarchy of levels from the cultural to the individual and back again, has great importance for the approach in this inquiry. It means at any given level, the real basis for the assumed context can best be defined at the most subsuming condition: the cultural level. It is important, then, in defining the global character of assumptions to understand the full dimensionality of this concept.

Assumptions--as they have been defined as an assumed context for knowledge, an interpretative framework--so color the world that it is difficult, if not impossible, for one to recognize the assumptions that one holds. There is great difficulty in making an assumed context explicit when that assumed context lies at the basis of one's functioning. Assumptions and the assumed context to which they give rise must remain in the twilight of awareness, remaining "tacit" to use Polanyi's term. We should note above that both Lovejoy (1957) and Whitehead (1925) use the term "unconscious" to describe the effect of assumptions on their holders. This is the root of Polanyi's pessimistic assessment made above that assumptions cannot be defined because they are the basis by which assertions are made to begin with.

I am reminded of the philosopher's argument that if one could only perceive shades of red, one could not recognize red as a color. It is only when one sees the full spectrum of colors that one is freed from this red-shaded world. Likewise, assumptions so color the world that it is difficult to recognize them within the world they have, themselves, created, until this world is transcended. Assumptions cannot be defined directly. Rather, the problem must be approached obliquely. Whitehead's advice given above not to "chiefly direct your attention to those intellectual positions which its exponents feel it necessary explicitly to defend," is certainly appropriate here.

Attention should be directed, alternatively, to what positions are not defended--that is, to places where the framework itself falls short.

It follows, then, that assumptions and an assumed context can be made most explicit when transcended. When the assumption or assumed context fails, and its influence wanes, the assumption or assumed context can be made most vulnerable to detection. A principle of transcendence can thus be asserted for making assumptions explicit. It follows, also, that when the assumed context is transcended, and shown to produce a paradox, that assumed context is made most explicit. Prior to this condition of transcendence, one is simply using the framework based on this assumption as a tool and does not experience its reality. In applying this principle for making assumptions explicit, one should seek the point where the assumed context generates a paradox.

To provide this principle with substance, an example can be given from psychoanalysis. Freud developed an elaborate theory of human beings; however, he did not and could not make explicit the assumed context upon which it was constructed. A significant part of this assumed context was made explicit when Malinowski (1927) attempted to apply Freudian psychoanalytic theory, in the field, to natives of the Trobriand Islands of the Pacific. It was through Malinowski's experiences with the paradoxes that were generated, that he recognized that Freudian psychoanalytic

theory had assumed the European nuclear family, for the Trobriand Islanders had a different nuclear family structure from the traditional European family.

This difference of assumed context for psychic dynamics produced major differences in the results of the theory--in particular, the form and direction of the Oedipus Complex, of which was directed toward the uncle instead of the father due to differences in the family structure. The important point in this example is that no amount of work within classical psychoanalysis could have made this assumed context explicit; it was only when the context was transcended, when Malinowski attempted to apply the assumed context to the family structure of the Trobriands and met with paradox, that the assumed context of the European family structure became available.

The principle of transcendence can be used to engineer the detection of assumptions and assumed contexts. It is in this respect an indispensable tool which this investigator shall make use of in the following pages. All that remains to bring this section into closure is to demonstrate that the assumed context, as I have defined it, gives meaning and significance to the questions we ask. The relation has been recognized in some quarters of the philosophy of science.

Kuhn (1962), for example, recognized that the vast majority of time in science is spent in what he calls "normal science," where the major activity is "puzzle solving." The paradigm provides these puzzles and defines

for the scientist which questions are meaningful and demand further investigation, and which do not. Clearly, then, during this period, the paradigm in Kuhn's terminology, or assumed context in my own terminology, gives meaning to the questions the scientist asks. It is only during the short and chaotic periods of revolution, during which a different framework is born, that this encapsulating hold of the paradigm on questioning is broken and different questions are entertained. This condition has already been discussed above in terms of the questions that Einstein asked which produced the revolution of relativity.

A sophisticated and concrete example to make this relation even more defined can be taken from the history of mathematics. Mathematicians since the time of the Greeks have asked the question "What is mathematical truth?" The traditional source of the assumed context in which this question has been asked derives from the geometry of the Greeks. Within this geometry, it was assumed that mathematics was a representation of the physical world. The question was given the meaning that that which is mathematically true corresponds to the way the world is. This assumed context endured for centuries and with it an unchanged meaning for the question. In a revolution in mathematics in the 19th century, Euclid's parallel postulate was replaced giving rise to a number of non-Euclidean geometries which were as consistent as the Euclidean, given their assumptions.

The whole assumed context for mathematics was changed by changing this postulate; for could not other mathematical systems be developed which did not correspond directly with the world as it was apprehended? As Kline (1959) indicates, after 1830 mathematicians were given a new freedom to "devote themselves to any ideas which attracted them, however wild and unrelated to the physical world they might appear to be on first sight." (p. 461) This new assumed context produced an alternative meaning for the question. No longer could a proposition be evaluated for its truth solely on its correspondence with the physical world. Whereas in the old context, the question was given the meaning that there must be a correspondence between the mathematical proposition and the physical world; within the new context, the question acquired the meaning that we should look within the propositions themselves as the source of truth. This context initiated the search for truth through consistency, the ability to derive true propositions from a set of axioms. It is important to note that the question did not change, but that its meaning did change within a different assumed context.

#### An Example of the Total Process

To this point in the discussion, the structural aspect of the theory of frameworks has been presented. While some effort has been directed toward identifying the relationships between the parts, the interaction of questions, assumptions, and boundary conditions, the

discussion should not be left at this point. These parts, in actual fact, comprise an integrated whole which may be termed a process of questioning. To a large extent each person is immersed in some process of questioning, making it difficult to transcend the limits of the framework produced by this process. The present discussion would not be complete without an effort to present the total process. An example is provided by Debono (1970), who presents in a book on creativity the following problem:

A man worked in a tall office building. Each morning he got in the lift on the ground floor, pressed the lift button to the tenth floor, got out of the lift and walked up to the fifteenth floor. At night he would get into the lift on the fifteenth floor and get out again on the ground floor. What was the man up to? (p. 95)

Now, assuming that we have someone before us who can answer our questions about the problem, we would proceed to get at the source of this strange behavior by asking questions. Debono suggests some of the questions we might ask: "Was the man an exercise nut?"; "Did he want to talk to someone on the tenth floor?"; "But why didn't he get back on the elevator at the tenth floor to go to the fifteenth?" Many such questions and lines of questioning suggest themselves. Before going on to the next paragraph where the "solution" is given, it might be appropriate to stop for a moment and reflect on some of the possible questions that might be asked.

Now, what we have revealed before us is a concrete example of the dynamic process of questioning. We have been generating a framework of knowledge through our process of questioning (i.e., the questions we have been asking) for the purpose of solving the problem. It follows that all the questions we have asked, the questions we consider significant to ask, are conditioned by an assumed context. These questions are, in a real sense, convergent questions in respect to a particular assumption. It is through the dynamic interrelation of these elements that a process of questioning has emerged placing boundary conditions on our knowledge. What, then, is this assumption? Debono provides us with the assumption and "solution:"

In fact the man acted in this peculiar way because he had no choice. He was a dwarf and could not reach higher than the tenth floor button. The natural assumption is that the man is perfectly normal and it is his behaviour that is abnormal. (Debono, 1970, p. 96)

It was this assumption--that the man was normal and the behavior abnormal--that limited the questions we asked and resulted in a framework which had boundary conditions which precluded a solution. We can see in this example the impact of one's process of questioning on knowledge. Likewise, there is revealed the process of questioning as a dynamic process of interaction and connection, that actually does affect the questions that are asked and what people actually do to solve problems.

## APPLICATION TO PSYCHOLOGY'S FRAMEWORK OF THE PERSON

The theory made explicit above would suggest that the source of the limitations of psychology's framework of the person would be found in the questions psychologists ask, as these questions fix the boundary conditions of the framework. It would be further suggested that a central assumption lies at the core of this questioning and that this assumption is the central delimiting factor.

### The Character of Questioning in Psychology

What questions do psychologists ask about people? Psychology is a very diverse discipline and the questions that are asked are, correspondingly, quite diverse: experimentalists ask questions about human learning and perception, clinicians ask questions about their clients' personalities, and philosophical psychologists ask questions about a person's ultimate nature. The list could go on and on. Murray (1938) provides us with the flavor and diversity of the psychologist's questioning:

Man is today's great problem. What can we know about him and how can it be said in words that have clear meaning? What propels him? With what environmental objects and institutions does he interact and how? What occurrences in his body are not influentially involved? What mutually dependent processes participate in his differentiation and development? What courses of events determine his pleasures and displeasures? and, finally, by what means can he be intentionally transformed? (pp. 47-48)

In this quotation, Murray summarizes the full spectrum of the psychologist's questioning about people. If we look

closely, we can find a few central questions which underlie such diverse areas of psychology as physiological psychology and personality theory.

From these fundamental questions, we could, without great difficulty, proceed to see that any one researcher in psychology within a specific area, for example a specific paradigm in classical conditioning, is really asking only a masked version of one of these fundamental questions, a question which it is believed, if answered, will ultimately lead to the solution of one of the more fundamental questions.

The theory of frameworks would suggest that at the center of this diversity of questioning there is a pivotal question which gives a fixed structure to the entire process of questioning. In short, there is a convergent point of focus, a central question, for the process of questioning in psychology. An insight into what this question may be is provided by Royce (1961):

What is man? And how can we come to know it? These two questions are vital not only to any complete philosophy, but also to some of the most basic problems that the human mind confronts. What is the true reason for our existence? Where did we come from? Why are we here? and Where are we going? Is there a discoverable nature of man as a person with rights and dignity, which can serve as a foundation for our cherished democratic concepts? What is the basis for law? Of human responsibility? Of human rights? Is the notion of freedom compatible with the laws of nature? Does man have a nature which includes the spiritual, and how can this be known? In what does man's ultimate happiness consist? Questions of what man should do can be based only on what man is. (p. 3)

In the above, Royce is suggesting to us that all the questions the psychologist asks and, ultimately, the knowledge that is constructed about people is based on what a human being is. It seems, within this framework, that the key question that one asks is "What is a human being?" If psychologists are in the laboratory or the clinic, they are basically asking this question and their efforts are directed toward providing an answer. It is also clear for the purposes of this inquiry that this question is given such paramount importance, not because of something intrinsic to the question itself, but as a function of the assumed context in which it is asked. Given the logic of the theory of frameworks, there must be at the center of this assumed context an assumption which provides significance to this question.

#### A Perspective on Questioning in Western Knowledge

The search for the assumption at the core of questioning in psychology, in my opinion, must take the discussion beyond the confines of psychology proper and even beyond the social sciences. These disciplines, being a product of the last century, have inherited a process of questioning that has been elaborated for centuries. It was these centuries which saw the elaboration of the philosophical and scientific manifold in which psychology and the other social sciences now function. It would seem to follow that to seek something as basic as the assumed context for questioning within psychology, one is required

to transcend the limits of psychology and the social sciences, and seek the roots of this context in the larger, prior context of Western knowledge.

While I have indicated above that the question "What is the human being?" is central to questioning in psychology, what is the key question for the philosopher or physicist? Perhaps, by examining these questions, we can more closely approach the assumption which underlies Western knowledge.

In respect to physics, Capek (1961) writes of the basic "identity of one problem" within physics, a problem generated and centered around the following mode of questioning:

What is the nature of physical reality and to what extent can it be understood? All specific problems of physics are merely concrete and partial aspects of the same basic question; in truth, if we disregard its naive phrasing, the question which the pre-Socratics tried to answer: 'What is the world made of?' was not essentially different. (p. xvi)

As Capek points out, the source of these questions cannot be found in physics alone, as it could not be found in psychology alone, but the source is more deeply embedded in the Western framework of knowledge which both have inherited, a framework which has not lost its essential form since the time of the Greeks. To reveal its source, we must now turn to the parent discipline of both physics and psychology, that is to philosophy.

What, then, is the key question for the philosopher? For our answer to this, we must follow Capek's observation above and retreat to the dawn of Western thought in

pre-Socratic philosophy. Wilde and Kimmel (1962) characterize the questioning of the Greek philosophers in this fashion:

When the first Greek thinkers experienced with awe and wonder the presence of Being in the cosmos and asked the questions: What constitutes the Being of the things that are? In what and from what do they have their being? What does it mean, to be? By their very asking of the questions they revealed a forward step achieved in the consciousness of Western man . . . . By their questioning and their attempts to answer the questions these early Greeks set in motion the quest which, according to Husserl, has determined the destiny and character of Western culture.  
(p. 10)

Thus, we see that the process of questioning we find in physics and psychology is itself cast in a form produced by the early Greek philosophers. When the physicist asks his central question: "What is the nature of physical reality?" or the psychologist asks his central question: "What is the nature of human beings?", they are both only echoing a tradition of questioning begun at the very beginnings of Western thought when the pre-Socratic philosophers asked the paramount question: "What is the Being of things?" The Western tradition of knowledge, within this perspective, reveals itself as a unified process of questioning.

The question still remains, however, as to the assumption that underlies this similarity in questioning. If the analysis of both processes of questioning and the theory of frameworks is appropriate, one should be able to uncover an assumption which underlies this process of questioning providing significance to these questions.

Guthrie (1950) gives us an insight into what this assumed context was for the pre-Socratics when he writes of them:

They looked for something permanent, persisting through the chaos of apparent change; and, they thought that they could find it by asking the question: 'What is the world made of?' The world as our senses perceive it seems restless and unstable . . . . Philosophy started in the faith that beneath this apparent chaos there exists a hidden permanence and unity, discernible, if not by sense, then by mind. (p. 23)

It seems then the centrality of the question: "What is the world made of?" derives from the prior assumption that there is an inherent nature to the universe, beyond the world of chaotic change, which can be known. It is this assumption that provides the assumed context for Western thought; all further work was to be only an elaboration of this basic assumed context. This assumed context so permeates Western thought that it is difficult to conceive of an alternative. As with any assumption, it was only with the partial transcendence of this context, with the development of organic, process knowledge in the West that the full impact of this assumption on knowledge begins to be recognized.

It is apparent, for example, within the process formulations of Whitehead (1925):

One such assumption underlies the whole philosophy of nature during the modern period. It is embodied in the concept which is supposed to express the most concrete aspect of nature. The Ionian philosophers asked, What is nature made of? The answer is couched in terms of stuff or matter, or material . . . . (p. 69)

We can see within Whitehead's astute comment the full

interrelation which I am seeking to illustrate: the assumption of an inherent nature to the universe, leading to a process of questioning to discover this nature, and finally resulting, as a consequence, in a system of knowledge that focuses on fixed entities or material stuff. This process of questioning, established as it was in the infancy of Western knowledge, has a pronounced effect on the derived knowledge in physics and psychology.

This assumed context provided by the pre-Socratic philosophers has undergone a significant revision in modern times. With the rise of science, recognizing the inhibitory effects of searching for the inherent nature of things in terms of essences in an Aristotelean sense, the modern investigator has transformed the assumed context. One no longer searches for essences in things for "the nature of things, in themselves," but is content to work with appearances, with discovering functional relationships among phenomena. Still, however, the spirit of the assumed context maintains itself through this transformation. The Western investigator still serves the assumption of an inherent nature of things, but this search becomes redirected toward discovering something fixed in the appearance of the universe without the unnecessary metaphysics involved with a search for essence.

This transformation of the assumed context in modern times has produced certain manifest changes in the process of questioning itself. However, these changes are only

manifest, for at root the questioning is in unity with that of the pre-Socratics. Marcuse (1964) has recognized this redirection in theoretical emphasis and its corresponding redirection of the process of questioning from the "metaphysical 'What is.....?' . . . to the functional 'How.....?'" (p. 151) Thus, the scientist who would scoff at searching for the essences of things still does equal service the assumption of an inherent nature by searching for something functionally fixed in the phenomena studied, considered in an empirical, operational sense.

Both the search for essences carried out before the modern era and the search for fixed relations carried out in modern science are motivated by the imagination of the pre-Socratics, with their assumption that there is something to be known that is permanent beyond the chaos of the universe as immediately experienced. Thus, this modern transformation is not a major alteration in the most basic sense, but serves only to increase the acceptability of the original assumed context in an era where metaphysics is not greatly valued.

#### The Assumption of an Inherent Nature to Human Beings

In dealing with the general case of Western knowledge, I have already considered psychology as a special case. However, within this special case, we can see the assumption that human beings have an inherent nature to be known is at the root of the central meaning and significance given to the question "What is a human being?" One interpretation

would be that: the context for questioning that exists in psychology is that human beings are assumed to have an inherent nature that the psychologist can come to know. Given the perspective generated above, this conclusion is hardly an unexpected one.

The profound influence of this assumed context has been recognized for some time by existential psychologists; May (1960) takes a parallel course in criticizing the character of contemporary psychology:

In endeavoring to separate reality into its discrete parts and to formulate abstract laws for these parts, Western science has by and large been essentialist in character; mathematics is the ultimate, pure form of this essentialist approach. In psychology, the endeavor is to see human beings in terms of forces, conditioned reflexes, and so on, illustrate the approach via essences. (p. 16)

Psychology's fixation on one dimension of questioning centering around "What is the human being?" is only symptomatic of a more basic commitment to the assumption that the human being has an inherent nature to be known.

While few psychologists today would consider themselves essentialist in the classical meaning of the term, the search for functional, empirical relationships is equally in the service of the assumption of an inherent nature. As in Western knowledge in general, there has been a manifest transformation of the process of questioning. The contemporary psychologist no longer looks for the essence of the human being in the Aristotelian sense. Nonetheless, as in the case of the physicist, the psychologist still seeks fixed empirical relationships within human nature. Again,

it would be suggested that for these empirical relationships to be coherent over time and space there must be an underlying structure or inherent nature. Thus, the contemporary psychologist is as committed to the assumption of an inherent nature as is the modern physicist to an inherent nature to the physical universe.

It was through physics that psychology originally obtained its assumed context for knowledge. Thus, we find one of the founders of American psychology, William James (1952), readily quoting the physicist Helmholtz to the effect that "the ultimate goal of theoretical physics is to find the last unchanging causes of the processes in Nature." (p. 883) It is not difficult to infer that James is likewise supporting a position that the ultimate goal of theoretical psychology is to find the last unchanging causes of the processes of human beings.

This relationship between physics and psychology is no less true today. Where the physicists have reduced their goals from discovering the underlying structure of matter to discovering functional relationships within a matrix of empirical data, psychologists have followed the same course and no longer search directly for the substance of human beings, but only for functional relationships within empirical data. In a practical sense, in each area, the effect of the assumption of an inherent nature to the object of study and the questions that arise from this assumed context are still most influential.

While the contemporary psychologist may cringe from asking the traditional, metaphysical question "What is a human being?" the psychologist, given his logico-empirical Zeitgeist, still asks the functional question "How does a human being do this?" Both questions are equally indicative of a process of questioning influenced by the assumption of an inherent nature to the person. The latter is just a more conservative version of the former.

The remainder of this inquiry will be directed toward expanding the boundary conditions of psychology's framework of the person by changing the above process of questioning. To accomplish this, the assumption that human beings have an inherent nature which is at the core of this process of questioning will be challenged.

## OVERVIEW

A theory of frameworks was suggested which viewed the boundary conditions of frameworks as a function of the questions asked. The questions that are asked, were, in turn, related to the assumptions or assumed context of the questioner.

This theory was applied to psychology's framework of the person. The central question the psychologist asks is "What is the human being?" This central question for psychology was given perspective by examining this as a special case of the general tendency to ask "What is the world made of?" The latter question was given paramount importance because it was assumed that the world had an inherent nature that could be known.

This insight was applied to psychology where the assumption of an inherent nature to human beings was identified as central to psychology's process of questioning. It was concluded that this inquiry should be directed toward challenging this assumption.

## CHAPTER III

### METHOD

In the present context, the sole criterion for method is its ability to challenge the assumption of an inherent nature to human beings. This criterion should be kept clearly in mind during the following discussion.

#### SURVEY OF TRADITIONAL METHODS

There are any number of "methods" that people use: intuition, religion, tradition. The current survey will be concerned exclusively with two large categories of formal methods, experimental and analytic. These two classes of methods may be most clearly distinguished on the basis of the activities of those who employ them. In short, when one uses one method as opposed to another, one functions in a different manner.

By experimental methods, I refer to methods where the user concentrates on the analysis of data and observation from which the data is derived, with the criterion of validity ascribed to the correspondence between one's propositions and the data. By analytic methods, I refer to methods which center around activities such as logical or semantic analysis with the criterion of validity being linked to the internal consistency of propositions. This classification is to be taken only as one of convenience and

not as suggesting a complete epistemology.

#### Experimental Methods

We begin with experimental methods because they are so central to psychology. The purpose for which experimental methods are used in psychology is to discover the inherent nature of the human being, not to question if this nature exists. They do not evaluate if the human being has an inherent nature, only if the answer given by the psychologist is valid or not. This commitment to the assumption of an inherent nature makes experimental methods inappropriate for challenging psychology's framework of the person.

This can be quite simply illustrated by challenging any experimentalist to construct an experiment or an entire program of research which would produce evidence that the human being does not have an inherent nature. Such a request would undercut the basis of experimentation within psychology. Such a request would negate the very purpose for doing an experiment to begin with: to discover the inherent nature of human being. Contrary to being a suitable method for challenging psychology's framework, experimental methods are the mechanism through which the framework is maintained and refined.

### Analytic Methods

We now turn to the seemingly more promising area of analytic methods. I have considered analytic methods after experimental methods for a purpose. As I have attempted to establish above, experimental methods are inappropriate for the purpose of this inquiry. The total effect of analytic methods within psychology's framework of the person has been to focus knowledge toward experimental methods. Thus, analytic methods, in this ancillary capacity, are themselves inappropriately contingent on the inappropriateness of experimental methods. To understand the ancillary function of analytic methods, it would be best to investigate the historical setting of their introduction within psychology.

Stevens (1939) wrote what has come to be a classic article on the application of analytic methods to the problems of psychology. In this article, he wrote of a common spirit which has developed in which the conception of science was that of fitting a formal system of symbols to empirical observations. He described the confluence of operationism, logical positivism, and logical empiricism within psychology toward this common goal. The purpose of this was a division of labor by which analytic methods as used by the philosopher could be brought into the service of experimental methods by making the latter more efficient:

The philosopher complements the scientist by probing the nature and the rules of this symbolic language. Statements about the empirical domain are called object-sentences; statements about language-forms are syntactical sentences. In any special science, such as psychology, both types of sentences frequently occur, because the

psychologist must tell us not only about his facts, but also how he intends to use his words and symbols . . . . The philosopher, on the other hand, can point out the logical implication of the psychologist's language and help him guard against the vicious combination of these two types of sentences which lead to pseudo-propositions.  
(p. 237)

From this quotation, one begins to appreciate the perceived utility of analytic methods within psychology. This particular paper, coming as it did early in the introduction of philosophical sophistication into psychology and the social sciences, reflects the context in which the social scientist approached analytic methods. The climate was one in which analytic methods were to aid the more efficient functioning of experimental methods, a role Marcuse (1964) describes as therapeutic. Such movements within psychology such as operationism and logical positivism were to have the function of doing therapy on the psychologist's knowledge, such that the psychologist could function as a "better" experimentalist and clearly relate experimental results to others. In this manner, analytic methods became infused with the assumptions and purpose for inquiry of experimental methods.

The mechanism by which analytic methods serve experimental methods deserves closer scrutiny, for it is a case study in the truncation of a process of questioning. Analytic methods, as used traditionally within psychology, tend to legislate what questions can be meaningfully asked, having the effect of focusing the process of questioning toward experimentation and the discovery of an inherent

nature, not toward challenging this assumption. The nature of this therapeutic function is that it attempts to "cure from illusion, deception, obscurities, unsolvable riddles, unanswerable questions, from ghosts and spectres," to quote Marcuse (1964, p. 183, My italics).

I take particular note that analytic methods attempt to remove from attention "unanswerable questions." Chapter II has demonstrated the danger of artificially eliminating certain questions from the realm of legitimate questions. It was noted above, in respect to questions and boundary conditions of knowledge, that it is just these seemingly "unanswerable questions" or "silly questions" as I have called them, that are often the key to challenging assumptions and expanding the boundary conditions for knowledge.

#### The Attempted Flight Beyond Method

Some psychologists have recognized the limitations of the current psychological framework and have also recognized the emptiness of the formal methods outlined above. Their reaction has been to deny advocacy of any method or position about the inherent nature of human beings in the hope that such an uncommitted position will free them from service to the assumption of an inherent nature. The result is often quite the opposite.

One of the major problems in advocating a position of non-commitment is that it is purely negative. The only method that remains from this point of view is a negative

one: a rejection of an inherent nature to human beings or, more accurately, a rejection of the possibility of knowing this inherent nature. This negativism is at best "halfhearted" for it attempts to make a positive assertion about human beings within a negative context.

A paradox arises from the fact that even in complete negation, something positive about human beings is being asserted. For example, we can take the statement of Jourard (1968) as representative of this situation. He writes:

After having tried out psychoanalytic, trait theory, self-theory, and other kinds of theoretical models of man, I have opted for a model that is no model, or is a meta-model. It is one implicit in the philosophical tradition of existential phenomenology (Luijpen). According to this perspective, man is the being such that in his being, his being is in question. (p. 114)

In Jourard's statement, we find an example of the negative reaction which current psychological framework fosters among some. Jourard's answer, like that of many other psychologists, is to reject the framework. But does the traditional framework allow such luxuries? Is Jourard really rejecting all models? Is this in fact a complete negation of the assumption of an inherent nature to human beings? Does anyone have the option of "opting for no model?" To answer these questions and uncover the fallacy of such negative approaches, I will recall the discussion in Chapter II concerning the nature of knowledge, specifically the discussion of the role of assumptions in knowledge. Within this perspective, I defined assumptions as a necessary container for knowledge, concluding that

"assumptions cannot be avoided in constructing knowledge."

This principle is equally applicable to the knowledge of human beings. We do not have the option of having no assumed context for knowledge. While on the surface it may seem plausible to subscribe to a position of non-commitment, some assumed context is indispensable for the knowledge of the human being. As Van Kaam (1965) has recognized:

There is no escape from assumptions in psychology. The psychologist of every school always makes ultimate and absolute judgements about what is called the nature of man and about the way in which man can be understood. (p. 177)

Even a position of open-ended empiricism is not tenable, for, as Van Kaam points out, even this level of research requires some ultimate assumptions about human nature. Thus, the psychologist cannot adhere to a complete negativistic position in respect to human nature. Any framework abhors a vacuum quickly converting the negative position to a positive assertion about people.

Paradoxically, even the most vehement rejection of an inherent nature to people converts to an affirmation of an inherent nature. Paul Tillich (1961), for example, has recognized that any existentialist position ultimately rests upon an essentialist position. He argues that even Sartre's radical departure from essentialism with his famous statement that a person's essence is his existence, in final analysis rests upon an essentialist position. It becomes an affirmation of a human being's essential freedom to transform himself. Even in such an extreme position one

cannot escape reinforcing the assumption of an inherent nature. For even Sartre, in his extreme existentialism and rejection of the traditional framework of the person is affirming a process which is assumed to be inherent in human beings!

#### THE METHOD OF ALTERNATIVE ASSUMED CONTEXTS

In the search for method, as I examined the inappropriateness of current formal methods, it appeared that the key to developing an appropriate methodology rested with an application of the theory of frameworks made explicit in the previous chapter.

My evaluation was that traditional methods are inappropriate because, used for the purpose that I would like, the methods are required to work against the dynamics of the process of questioning. These methods have been constructed to expand a framework based on an assumption that human beings have an inherent nature. It is extremely difficult to see how these methods may be used to challenge this very same assumption and framework. It was with this thought in mind that I began to consider the construction of a method that used to advantage the structure of frameworks and the closure imposed by a process of questioning.

#### Alternative Frameworks and the Criticism of Knowledge

It is not difficult to establish the importance of alternative systems in the criticism of an assumed context. In the viewing of an alternative system, the seemingly

unrelenting and monopolistic hold of a framework of knowledge can be broken. Alternative systems provide a point of reference from which the system can be criticized. Just as it is difficult to make assumptions explicit from within a framework, it is equally difficult to criticize a framework from within the framework. In attempting to do the latter, we are involved in what has been called by Pirsig (1974) a "platform problem." Since we use a framework as the "platform" for action including the action of criticism, one cannot use this same "platform" for the purpose of critically examining the platform. This is the great advantage of the alternative system as a solution to the problem; given an alternative, one has two or more "platforms" upon which to stand. From this vantage point, one is free to pull at the floor boards of either platform.

As an example of the profitable use of alternative systems, I can point to the work of the anthropologist Heyerdahl (1950). In his book Kon-Tiki, he explains that the Pacific area had been divided into two specializations: Polynesian and American anthropology. He recognized, however, that the problems of the Pacific could not be solved from within one of these areas independently. The entire Pacific area had to be considered in its unity, for it is only through viewing the alternative areas together that the full relations can be exposed within the entire area. He writes that to pursue the elaboration of one anthropological area exclusively would be "like doing a

puzzle and only using the pieces of one color." (p. 32)

Here he is pointing to the obvious point of leverage that alternative systems provide; for in viewing the alternatives, questions are generated not only about the systems themselves, but also about the relations between the alternatives. The total effect of viewing alternatives is to expand the power exerted over knowledge, a power that can never be equalled by refining or focusing of a singular system. In Heyerdahl's case, it is highly unlikely that an anthropologist working within the specialization of either Polynesian or American data could have developed the hypothesis that people sailed across the Pacific from one cultural area to another; but, given Heyerdahl's subsuming vantage point of the alternatives viewed together such an idea is more likely to be generated.

Within more systematic realms, this principle of the need for alternative systems for evaluation may be illustrated in both analytic and experimental areas. Within the former, Godel's work as described by Nagel and Newman (1958) has provided a proof that seems to indicate that, within axiomatic systems at least as complicated as elementary arithmetic, the consistency of the system cannot be established from within the system itself. To establish consistency, it is necessary to appeal to rules beyond the system, to a larger system. Godel's proof seems to demonstrate that we cannot have a consistent system and a complete system at the same time. To demonstrate the

consistency of such an axiomatic system, one must appeal to transformation rules which lie beyond the system.

I can find a parallel development in experimental methods. It is possible to discern an evolution in physical thinking from the view that experimental methods simply test the theory against the facts to the view that we are always testing our knowledge within competing, alternative systems. Duhem's argument against the refutability of an isolated hypothesis is certainly an important step in this evolution (Duhem, 1954), as is Popper's recognition that we must decide between at least two systems in evaluating our knowledge (Popper, 1965).

The full fruition of this development occurs in Feyerabend's thesis that a plurality of theories is necessary for the complete evaluation of any empirical system (Feyerabend, 1963). It is not sufficient, he argues, merely to compare one theory with the 'facts,' but factuality can be asserted only when the theory has been confronted with alternatives. (p. 7) Feyerabend gives the scientist responsibility not only to produce information within a theory, but actively to seek alternatives as part of his research program, because it is only within such a confrontation that the factuality of one's information can be established. It is clear, then, that the use of alternative systems for the criticism of knowledge is not an alien process, but central to the development of information, central to the claims of objectivity in

science.

### The Method Described

In the design of a method, two factors should be integrated in my opinion. The method should use to advantage the process of convergence that is typical of questioning within any framework. Also, the method should use to advantage the powerful leverage provided by viewing alternative systems or frameworks. These were the criteria which guided me in the construction of a method. The method that was the result of this process I have called "The Method of Alternative Assumed Contexts for Questioning." In the remainder of this document this method will be referred to by the acronym AACQ.

The logic of the method is quite simple: to avoid the closure imposed by a singular process of questioning, two or more alternative processes of questioning are constructed. In the juxtaposition of one framework of questioning to an alternative, a significant leverage is generated. Likewise, the closure of each process of questioning augments this relief by helping to define clearly the other framework(s). The execution of the method may be segmented into three discrete steps:

#### 1. Elaboration of Alternative Assumed Contexts

An alternative assumed context for questioning is produced by making explicit the assumptions underlying the context under consideration and the derived principles which develop from these assumptions. In making assumptions

explicit, I use to advantage the principle of transcendence described above.

## 2. The Exposure of Alternative Processes of Questioning

In this step, the alternative processes of questioning are exposed as a dynamic process. In each alternative assumed context, the same question is asked and a different meaning generated in each context. This same question, given alternative meanings, becomes the focus for a process of questioning in each framework. In this way, the process of questioning is brought under some control and carefully evaluated in each framework.

## 3. Consequences for Functioning and Experience

The purpose of this step is to complete the alternative systems by demonstrating that the alternative processes of questioning generate alternative consequences. In short, the processes of questioning have certain implications for function and experience: "they make a difference." By defining the relation between the process of questioning and the effects of this process on what is experienced and how one functions, the full impact of the process can be evaluated. This step is accomplished by placing examples of experience and function within the alternative assumed contexts.

Following these three steps, the method has been executed and alternative systems of knowledge are displayed, each in relief of the other. An evaluation of each assumed context can be undertaken using the results of the method as

a basis.

### Linking The Method to Traditional Knowledge

While this may be the first formal statement of the method of AACQ, aspects of the method are not completely alien to traditional modes of thought. For example, many different cultures as well as our own have recognized that asking the same question in different contexts produces different information, and that such an awareness of how questioning functions can be the source of enlightenment.

Here is an example taken from fables of Sufism, a system of Moslem mysticism of the Near East:

A Sufi master was visited by a perplexed Seeker-after-Truth, who said to him:

'I have only one question to ask. Why is it that, wherever I go, I always seem to get different pieces of advice from Sufis?'

The master answered:

'Come with me for a walk through this town, and we shall see what we can discover about this mystery.'

They went into the market-place.

Sufi asked a greengrocer:

'Tell me, what time of prayer is it?'

The Greengrocer said:

'The time for the morning prayer.'

They continued their walk. After some time the Sufi asked a tailor:

'What prayer time is it?'

The tailor answered:

'It is the time of the midday prayer.'

After spending more time in conversation and companionship with the Seeker, the Sufi approached another man, this time a bookbinder.

'What time of prayer is it?'

The man replied:

'It is now the time of the afternoon prayer.'

'Do you want to continue the experiment, or are you now satisfied that virtually the same question can elicit almost totally different answers, all of them corresponding to the current truth?' (Shah, 1971, pp. 6-7)

Along more formal methodological lines, a close parallel to the method is the "thought experiment" used in physics. The "thought experiment," as used by physicists--primarily Einstein and Bohr--presents a contrived situation which brings together essential features of physical thought to reveal conflicts and internal contradictions leading to a fuller understanding of the framework. Unlike an ordinary experiment, the situations in a thought experiment are often impossible or extremely unlikely; for example, in the case of Einstein's masterful use of the thought experiment to demonstrate aspects of relativity theory, one is asked to envision elevators falling through space or trains traveling at the speed of light.

The important point is not the material possibility of the situations, but rather their heuristic value, the insights they provide. Within Einstein's thought experiments, for example, it is not at question if a train can be made to travel at the speed of light, but rather what the implications of this situation are for physical theory. It will be recalled from the discussion in Chapter II concerning Einstein's construction of relativity that he used such thought experiments and the questions they generated to direct his theorizing. Within the thought experiment, then, the content is only of value in terms of the more general process of criticizing knowledge, of demonstrating contradictions in the framework of thought and

of entertaining new frameworks.

Even the positivistic philosopher of science, Ernst Mach, a few years before Einstein's use of the thought experiment in physics, recognized the important role of thought experiments in knowledge. Writing in 1897, he traced the development of the thought experiment from the time of Aristotle. He found a direct continuity with the principles of physical experimentation:

It can be seen that the basic method of the thought experiment is just like that of a physical experiment, namely, the method of variation. By varying the circumstances (continuously, if possible) the range of validity of an idea (expectation) related to these circumstances is increased. Through modification and specialization of the circumstances the idea is modified and specialized . . . . (Mach, 1973, p. 453)

In the method of AACQ, the model of the thought experiment is appropriate. For as with the thought experiment, one systematically uses the method of variation to place the same question in alternative contexts and find the range of validity of the meaning so generated. At this point at least, the method proposed here and the method of the thought experiment are quite similar.

#### APPLICATION OF THE METHOD TO THE PROBLEM

The method of AACQ requires for its operation an alternative to Western knowledge. Finding such an alternative is an increasingly difficult task within Western knowledge; with its superiority in the ability to manipulate the physical world, Western knowledge has tended to overwhelm most alternative cultural systems, reducing

them to merely sources of anthropological data. In addition, the alternative selected should be a viable alternative to Western civilization. One should find within the alternative a majority of criteria one would associate with the term "civilization." It was with these requirements that I began a search for an alternative.

#### Traditional China as an Alternative

In my search for an alternative, I was directed toward finding a pocket of humanity that was isolated from the mainstream of Western thought, to the extent that an alternative framework of thought could develop and serve as the nucleus for an alternative "civilization." As a final test, I would expect that normal Western categories of thought would fail when confronted by this alternative. With these intentions firmly in mind, I surveyed world history and came upon traditional China as most closely meeting the above criteria.

As Latourette (1964) has observed, Chinese civilization has been isolated from the rest of humankind more completely and remotely than any other civilization. This isolation can be largely attributed to geographical factors. Latourette writes: "Cut off from the rest of mankind by oceans, deserts, and mountains, although receiving varied contributions from abroad, they [the Chinese] created a distinct civilization." (p. ix)

The effects of this isolation and the alternative character of Chinese knowledge can be discerned at a very early level of development. For example, while the neolithic culture of China was quite similar even in detail with the neolithic culture in the rest of the world, the elegant civilization of China which flowered from this base was quite unlike any other civilization that developed from this common base in the rest of the world (Luard, 1965). As Creel (1929) has speculated:

If one wishes to make an extreme statement, he might even contend that ancient India, the Mesopotamian world, the Mediterranean world, and Europe shared one system of human thought, while Ancient China presents us with another . . . many ideas which have been thought 'universal' and been referred to the 'psychological unity of mankind' must abdicate this position when the Chinese touchstone is applied. (pp. 2-3)

My intention is to take full advantage of this fractionation of the "psychological unity of mankind" when exposed to the counterexample of the "Chinese touchstone" in a systematic fashion.

However, two problems arise in the use of traditional Chinese civilization as an alternative to the West: defining what is meant by "traditional Chinese civilization," and the contamination and subsequent alteration of this civilization through interaction with the West.

In respect to defining "traditional Chinese civilization," this concept, like "Western civilization," covers a wide diversity of different elements within its

boundaries. Yet within this diversity, over the centuries, there has been a common stream of thought, an identity of purpose, that identifies Western civilization as a unified concept. In Chapter II, I suggested what one dimension of this identity is, to some degree, by presenting a common process of questioning from the time of the pre-Socratic Greeks to contemporary physics and psychology. Likewise, I would suggest that a similar identity can be found in the knowledge of traditional China as a common stream running through Chinese thought.

Fried (1973) has enumerated some of the difficulties implicit in defining traditional China. He argues that such a concept is too simplistic and must rest upon huge generalizations, while overlooking such major variables as time, location and social class. He points to the difficulties in choosing a particular system of knowledge, such as Confucianism, or a particular period of time as a model for traditional China. Fried's arguments and reservations are valid given the purposes of traditional scholarship in this area. Such over-generalized concepts seem to inhibit traditional scholarship where the purpose is to make more and more clear distinctions.

Within this perspective, "traditional China" as a concept is too simplistic. Yet, it is essential that this inquiry and method not share the limitations of traditional inquiries; furthermore, I shall argue below that the purposes of this inquiry are not the same as those of the

Chinese scholar. In using the concept of traditional China within the context of the method, I am only stating that an alternative framework of human beings can be constructed from the information that traditional China offers; no other assertions are being made. I am definitely not asserting that "traditional China" as I am representing it existed as an entity, nor am I stating this concept as a model for all of Chinese thought. My wish is that the reader will bear in mind that the method has the much more modest and severely delimited purpose of challenging the assumption of an inherent nature to human beings. This purpose places a certain distance between this approach and that of traditional Chinese scholarship.

The second problem is, perhaps, more threatening for it would compromise the very alternative character of traditional Chinese knowledge in respect to the West. To begin with, I will make every effort to limit my consideration of traditional China to China prior to 1500, the time when the impact of Western civilization began to alter China in a pronounced manner. I am not suggesting that there was no interaction prior to this date, even as early as prehistoric times. However, I am suggesting that such interactions with the West never produced a major impact on Chinese thought.

Until the sixteenth century, what contacts there were never altered the basic fabric of Chinese civilization. Needham (1954) comes to basically the same conclusion:

. . . there was more intercourse and reaction between the Chinese and their Western and southern neighbours than has often been supposed, but nevertheless . . . the essential style of Chinese thought and culture patterns maintained a remarkable and perennial autonomy. This is the real meaning of the 'isolation' of China; contacts there were, but never abundant enough to affect the characteristic style of the civilization . . . (p. 157)

As a validation of the alternative character, one would expect that Western categories of thought would have difficulty dealing with "things Chinese." The East, in particular China, has always enjoyed a certain mystical quality for Western eyes, summarized most acutely by the adjective 'inscrutable' which has often been applied in this regard. This tends to underline the fact that Western categories of thought do not easily encompass Chinese categories, and quite to the contrary, usually stand in opposition to them. As one scholar in the area has aptly noted (Moore, 1976), undoubtedly from much personal experience and frustration in applying Western categories to China: "a lesson long since learned by China specialists is that, in their application to things Chinese, Western concepts often strain, crack, and break under a host of cultural burdens." (p. 234)

This is not to say that attempts have not been made to subsume Chinese thought within Western categories for these attempts have and are being made. Such attempts, in their very character, tend, through unnecessary complexities, to demonstrate the very opposite of what they are attempting to accomplish; the alternative character of Chinese categories

becomes underscored. One can, for example, attempt to demonstrate a Taoistic logic, but the result is something less than satisfactory--so unsatisfactory that one observer (Wu, 1971), has labeled such attempts as a fallacy, similar to ordering a hamburger in a Chinese restaurant. It can be done, but the result is not too appealing.

Viewing Chinese thought as a component of Western thought or, perhaps, a primitive precursor to Western categories, fails to appreciate the degree to which Chinese thought is a complete and viable alternative to the West. As such, it is most difficult, in fact seemingly impossible, to assume the Western framework without destroying the essential characteristics of the Chinese framework which one is examining. Along this line, Wright (1967) argues:

To attempt to fit Chinese thought into Western philosophic categories tends to do violence both to the nature and to the hierarchy of problems with which Chinese thinkers have been concerned. For example, epistemology is a major focus of interest for Western philosophers; it is subordinate or irrelevant for most Chinese thinkers. (pp. 3-4)

We could, for example, deal with the thought of Confucius within the category of the "epistemology of Confucian thought" but this tends to violate the purposes contained within this thought to begin with by replacing them with Western priorities. Such attempts to violate the alternative character of Chinese thought tend to reveal the purposes and character of Western knowledge more than they shed light on Chinese thought.

The alternative character of traditional China has also been demonstrated by the failure of Western expectations to hold themselves against the Chinese example. As an instance, Fairbank (1957) gives the case of the failure of some Western assumptions about the social order to encompass Chinese society, by pointing to the example of Max Weber's investigation of bureaucracy. Weber was able to encompass Western social systems within a unitary concept of bureaucratic order based on law, but when he was confronted with Chinese social order, according to Fairbank, Weber "naturally had to begin with the absence in China of any 'systematic, substantive, and thorough rationalization of law.'" (p. 4) Weber was required to construct an alternative category of bureaucratic order, demonstrating the unique, alternative character of traditional Chinese social order.

#### The Spirit of this Inquiry into China

The method of AACQ places certain limitations on the purposes this inquiry may pursue, purposes for which inquiry is not generally undertaken in Chinese scholarship. Consequently, it is necessary to make explicit the different approach to China that will be required in the following chapters. I do not see this methodology as being in conflict with traditional scholarship. Each has its own purposes and may serve to complement the other. Indeed, the material that will be presented in the following chapters is the fruit of traditional scholars of China. However, my major concern is not with evaluating this material in

detail, but in attempting to construct new relationships within the material itself through the operation of the method of AACQ.

From the beginning of this inquiry in Chapter I, I defined this approach as challenging frameworks, not adding incrementally to them. Consequently, this approach demands a high degree of generalization which is the intention and spirit of the present inquiry. It is only through the principle of generalization that frameworks can be operated upon. Likewise, the method that has been constructed in this chapter was designed with this latter purpose in mind and has a high degree of tolerance to generalization. The method of AACQ demands a certain license for generalization, a generalization that will lead to the confrontation of the alternatives, the mainspring of the operation of the method. This purpose clearly differentiates the method from that of traditional scholarship which has as its purpose the elaboration of a singular assumed context where specialization and an eye to detail become paramount.

Specialization has certain inherent limitations in dealing with Eastern and Western knowledge. Northrop (1946) recognized this limitation in his classic investigation, The Meeting of East and West, where he made a point of distinguishing his own approach to the East from that of the specialist. In the introductory pages of this volume, Northrop argues that traditional scholarship has certain inherent limitations, because of its specialization, in

defining problems which transcend local areas of concern and affect the total framework.

Some problems can be defined only within the total gestalt of the field. According to Northrop, traditional scholarship, based as it is on meticulous specialization, cannot define certain problems which lie in the relationship between the local parts subjected to specialized study. Making his purpose the identification of the underlying basis of conflict in the world, Northrop feels that a new type of scholarship is required, a scholarship that is based on the general, with the courage to "venture into local domains without all the detailed information of the experts in these domains." (p. 10)

It is only with this license that the whole can be visualized and its problems defined. As Northrop recognized, this new form of scholarship does not have to be antithetical and in conflict with traditional scholarship. It is, rather, a complement of the latter. For as the latter provides specific focus, the former provides a much needed wide-angle view. The method used here requires that one work within the paradigm of the new scholarship. As Northrop suggests, it is only within the interrelations between specialized knowledge that the problem addressed here can be defined and it is only by venturing through these diverse areas that the problem can be operated upon.

Another way of looking at the spirit of this inquiry is to see the parallels between the present approach to traditional approaches in physics and the social sciences. The closest parallel to the method of AACQ within traditional scholarship is the thought experiment. Specifically, then, the application of the method to the problem of challenging the assumption of an inherent nature to human beings can be conceived of as a "thought experiment" in human nature. I am proposing the use of the "method of variation" by examining conceptions of human behavior in the West and in traditional China to discover the "range of validity" of the idea of an inherent nature to human beings.

Following Einstein's use of the thought experiment in physics, my intention in this inquiry is to expose certain contradictions in our framework of human beings. I will construct the material conditions for this thought experiment. However, as in the case of the thought experiment in physics, it is not the context of these material conditions that is of utmost importance nor the exhaustiveness of the scholarly detail; it is rather, the ability to unearth contradictions in the framework. Again, the content, the material presented about traditional China, is subservient to the process in which I am engaged, unearthing basic relations and contradictions in the framework of human beings. Just as a train or elevator was used by Einstein as the material setting to investigate the

implications of physical theory, traditional China can serve as the material setting for the investigation of the implications of thoughts held about what is inherent in human beings.

Still another way of looking at the following discussion of traditional China is to regard the latter concept as an "ideal type" in the sense in which it was used by Max Weber. The concept of ideal type frees the investigator from having to deal with concepts which are only representations of empirical instances and allows the investigator "to illuminate what is peculiar to a given cultural phenomenon." (Edwards, 1967, p. 283)

Thus, within this conceptualization, traditional China as a concept would not be required to represent all the phenomena of Chinese civilization at any one given point in time. Yet, during all periods, with the phenomena that each presents, one can still construct an ideal type which can never be given a complete instance, but yet is still representative of the global cultural phenomena of China. This ideal type is still useful in ordering relationships, even though there is no case where all of the phenomena at any one time could be said to coexist as one whole.

Such an argument from ideal types has been of use in the physical and social sciences. The physicist speaks of the idea of the "perfect vacuum." Sociologists speak of "pure rational bureaucracy" as do economists of the "perfectly competitive market." (Papineau, 1976, p. 137)

In each case, the ideal type helps to integrate and organize existing ideas and to serve as a model for constructing new relationships in future studies.

Finally, the way I look at my approach involves the distinction between knowledge for and knowledge about. The traditional scholar's approach to China has the purpose of constructing knowledge about China as an end in itself. The method of AACQ is constructing knowledge of China for a certain purpose beyond the knowledge itself. In particular, the construction will have the purpose of generating information to challenge the assumption defined by the problem. This distinction is helpful to me in keeping a focus on the ultimate aim of the inquiry and to some degree preventing me from becoming lost in the detail.

I can think of no better way to close this chapter than by quoting the propitious words of Chancellor in the introductory pages of his translation of Wei-Ping's book on Chinese acupuncture. He says of Chinese thought that it is "the result of an indigenous cultural and philosophical idiom, self-developed and isolated from the rest of the world by high mountains and deep oceans. Here is a world of thought unto itself. To penetrate this world, tolerance and intellectual humility are needed." (Wei-Ping, 1962, p. 5)

## OVERVIEW

The two classes of formal methods, experimental and analytic methods, were evaluated as to their appropriateness for the task of challenging the assumption of an inherent nature to human beings. Both methods were found to be inappropriate for this purpose.

The method of AACQ was constructed which attempts to use to advantage the structure of processes of questioning in providing closure for frameworks and the point of leverage provided by alternative frameworks. The basis of the method is to ask the same question in alternative assumed contexts and relating this to the consequences in each framework.

In applying the method to the problem, traditional China was suggested as an alternative to the West. The geographical and intellectual isolation of China from the West was a key factor in producing this condition. The method requires a different approach to the knowledge of traditional China from the approach of traditional scholarship in this area.

## CHAPTER IV

### ALTERNATIVE ASSUMED CONTEXTS FOR QUESTIONING IN CHINA AND THE WEST

In order to make the method functional, I began to examine traditional Chinese knowledge and Western knowledge with an eye to containing them within the economy of parallel and alternative assumed contexts. The key element I was seeking was a single assumption central to the structure of Western knowledge and a complementary assumption central to the structure of knowledge in traditional China.

#### ASSUMED CONTEXT FOR KNOWLEDGE IN THE WEST

The method I employed in attempting to search for the assumed context for Western knowledge was to examine the key traditions of the West. In this context, perhaps structural similarities could be found from which an approach could be made to the assumed context itself.

#### The Assumption of Divisibility in Western Knowledge

The characteristic feature of consciousness in the Western thinker is revealed most directly by the questions with which Western tradition was begun at the time of the pre-Socratic philosophers. Wilde and Kimmel (1962) have characterized this questioning in this manner:

By their very asking of the questions (questions relating to Being) they revealed a forward step

achieved in the consciousness of Western man--his emergence from the naive immediacy of beings in the midst of Being. (p. 10)

The consciousness of Western thinkers commenced, then, to achieve maturity when they began to separate themselves as knowing and questioning beings from the Being of the universe that was to be known. This direction is suggested by the dominant questions they asked, questions of the order: "What is the world made of?" In the background of this scenario in the birth of Western knowledge is the assumption of divisibility, a separation between the knower and known. This assumption was elevated to a point of necessity for the functioning of Western knowledge.

In the following centuries, the assumption was given increasingly central importance, with the final result that all of Western knowledge was to hinge on this assumption. With Parmenides and his Eleatic school of philosophy, the assumption of divisibility became formalized and triumphant over other systems not endorsing divisibility, such as the philosophy of change advocated by Heraclitus. By the fifth century B.C., the assumption of divisibility became firmly embedded in Western knowledge. In Chapter IX, I will examine this crucial period in greater detail.

From this source in early Greek times, the influence of the assumption has penetrated all of Western knowledge. All of our current divisions have their source in the assumption of divisibility. Capra (1975) writes of this development:

The split of this unity began with the Eleatic school, which assumed a Divine Principle standing above all gods and men. This principle was first

identified with the unity of the universe, but was later seen as an intelligent and personal God who stands above the world and directs it. Thus began a trend of thought which led, ultimately, to the separation of spirit and matter and to a dualism which became characteristic of Western philosophy. (p. 20)

I can see in this trend a common process: the original division gave rise to further divisions and these to further still, until the totality of Western knowledge became saturated with division.

At the beginnings of the modern era, we find the philosopher Descartes formalizing divisibility for the modern thinker. Indeed, much of the importance of his work lies in the fact that he addressed himself to the major problems of division. I find, upon examination of his works, a general endorsement of divisibility, specifically the division between mind and matter. The elegance of his philosophy lies in his ability to maintain these divisions and yet unify them.

From the time of Descartes to the present, there is not much to be said in respect to divisibility. The synthesis provided by Descartes is still very much with us, especially in the social sciences. Divisibility has permeated our cultural tradition in the West, to the degree that we are hardly aware of it as a necessary, functional basis for activity.

To illustrate this, I can point to the privileged status of divisibility within the major traditions of the West: religion and science. Defined on the most general

level, these traditions have served as the container for Western thought over the centuries. As religion lost its influence at the end of the middle ages, science quickly rose to fill the vacuum at the dawn of the modern era. While many experience these traditions as separate and different, on one level they both are equally committed to the assumption of divisibility and hold the assumption central to their operation.

Within Western religion, the primal assumption of divisibility reveals itself in the division between God and man. This division is the basis for most Western religions. Even the scholarship of a man like Buber can only unify man with God within an "I-Thou" relation which maintains an essential divisibility.

A major activity within most religions is prayer. Again, the assumption of division is necessary for its operation. To pray, one must assume a division between God and the human world; to do otherwise is to destroy its meaning. As Phillips (1965) remarks, "a conviction that one is talking to oneself is the death of prayer." (p. 41) This recalls the story of the man who, when asked for a justification for believing that he was God, related that one day he was praying and found that he was talking to himself! Clearly, such unifications of the central division of religion reduces this institution to the absurd. The division between God and humankind must be assumed for religion to function.

A parallel development can be made explicit in the other major tradition of the West: science. Science rests firmly on the division between knower and known, observer and observed. Again, the central operation--the experiment rests upon this division. If this division is unified as it is to some extent in modern quantum physics, the experiment becomes problematical. The very purpose of the experiment is to make an independent observation of phenomena. If these phenomena are not independent of the observer, the entire meaning of the experiment is called into question. In this condition, science relinquishes some of its validity.

#### Making the Assumption of Divisibility Explicit

The assumption of divisibility is so rooted in the beginnings of knowledge in the West that it is difficult to perceive the assumption as an assumption at all. Rather, the tendency is to regard the assumption as indispensable to all knowledge. So for us to challenge this assumption or for us to hold it as only an arbitrary proposition is, in one stroke, to challenge the very foundations of knowledge. The encapsulating effect of the assumption then is more far reaching than any other assumption that the Western thinker holds.

For most of us, divisibility is hardly an assumption at all, but a discovery of "truth and reality." Pirsig (1974) speaks of this sacredness of divisibility and the resistance to regarding it as only an assumption:

What is essential to understand at this point [the time of early Greek philosophy] is that until now there was no such thing as mind and matter, subject and object, form and substance. Those divisions are just dialectical inventions that came later. The modern mind sometimes tends to balk at the thought of these dichotomies being inventions and says, 'Well, the divisions were there for the Greeks to discover,' and you have to say, 'where were they? Point to them! And the modern mind gets a little confused and wonders what this is all about anyway, and still believes the divisions were there. (p. 367)

Questioning the assumption of divisibility on its own ground, then, is almost an impossible task. As was noted in Chapter II, the task of making an assumption explicit within the framework of which the assumption is a part is very difficult. With the assumption of divisibility in the West, this situation is further compounded, for the assumption has permeated the entire framework of knowledge from its infancy.

Chapter II was dedicated to the evaluation of the function of assumptions within frameworks. In this context, I noted the powerful "encapsulating" hold assumptions have on one's knowledge. It is this latter characteristic that has prompted some to argue that assumptions cannot be made explicit and must forever remain "tacit." However, it is my conviction that assumptions can be made explicit and I proceeded to delimit a principle by which this goal could be accomplished. The "principle of transcendence" was introduced whereby an assumption can be made explicit within a framework when the assumption is transcended.

Here my purpose is to apply this principle to making the assumption of divisibility explicit in Western knowledge, and, in the next section, to making explicit an alternative assumption in the knowledge of traditional China. In applying this principle, I shall assert that divisibility is a necessary condition for the smooth functioning of Western knowledge, and that when the assumption is threatened, Western knowledge generates a paradox.

There is a tendency to dismiss some of the paradoxes that I am about to present as trivial or nonsensical. However, it must be recalled the significant advantage that paradoxes provide in the understanding of knowledge. Paradoxes, because they are paradoxical to us, have a special status, for they have the valuable position of sitting on the fence at the boundaries of one's knowledge. Paradoxes cannot then be dismissed lightly, simply because they come to us in humble dress. Kasner and Newman (1956) warn:

It cannot be too strongly emphasized that the logical paradoxes are not idle or foolish tricks . . . . The paradoxes are like the fables of La Fontaine which were dressed up to look like innocent stories about a fox and grapes, pebbles and frogs. For just as all ethical and moral concepts were skillfully woven into their fabric, so all of logic and mathematics, of philosophy and speculative thought, is interwoven with the fate of these little jokes. (p. 1952)

The paradoxes that are presented to us reveal something most basic about knowledge, and it is hoped that in this manner they will demonstrate the way in which knowledge is based on

the assumption of divisibility. For as I will demonstrate, when this assumption of divisibility is violated within Western knowledge, a paradox arises.

Our first demonstration is from the field of logic. Both very simple and very ancient, the example dates from the time of the early Greeks in the 4th century B.C., when it was recognized that the simple statement of three words, "I am lying," produces a profound and penetrating paradox. If we accept the statement as true, then the statement refutes itself. If we accept the statement as false, the statement also refutes itself.

In this example, I feel there is a model for all of the examples that are to follow. The basic condition that produces the paradox is the unification of a divisibility; in this case, the divisibility between the speaker and that which is spoken of is collapsed. The result is a failure of knowledge to function further. This particular example has demonstrated its cogency through its longevity, first fascinating the Greeks, then the Schclastic philosophers, only to be revived again by logicians and mathematicians in the last century. This one example, then, gives rise to an entire family of paradoxes which have developed quite independently in widely different areas of Western knowledge.

For example, a similar case obtains in the area of language. Language clearly depends for its force upon a divisibility for it is a "system which can talk about

something outside of itself." Its purpose is to operate within this divisibility, to describe the world. This division is essential to the operation of language for when this division is challenged paradox results. Kilmister (1967) provides a simple example:

```
*****
*
* The sentence in a box on this page is false. *
*
*****
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This example places us in an analogous bind to that in the case of the "liar" above. There is an identity between the language and that which is being described resulting in a paradox.

The general semanticist Korzybski (1958) reminds us that "a word is not the object it represents." (p. 58) and cannot be lest we be propelled into a world of paradoxical self-reflection. Our language must be only a "map" of the "territory" as general semanticists would put it. This division must be maintained as the basis of our linguistic convention lest a paradox of infinite regression develop in which the map must "include, in a reduced scale, the map of the map; the map of the map; and so on, endlessly . . . ." (p. 58) The assumption of divisibility, then, must be maintained for Western languages to function adequately.

If we turn to the next bulwark of Western knowledge, logic, I find a parallel dependence of logic on the assumption of divisibility. Its history is replete with contradictions which arise from the unification of that which has been assumed to be divided. Much of the effort of logicians, particularly in scholastic times, was directed toward systematically removing these contradictions from the basis of logic. The effort was directed toward the discovery of a principle by which such paradoxes could be avoided and the formulation of the fallacy of reason contained within them.

Perhaps the most famous of these logical paradoxes is that of a certain barber in a village described by Kasner and Newman (1956):

The village barber shaves everyone in the village who does not shave himself. (But this principle soon involves him in a dialectical plight . . .) Shall he shave himself? If he does, then he is shaving someone who shaves himself and breaks his own rule. If he does not, besides remaining unshaven, he also breaks his rule by failing to shave a person in the village who does not shave himself. (p. 1950)

One can see in the last example the paradigm of other examples treated above--the unification of a division. In this case the barber is unified with his own principle; with other men the principle can be logically applied without contradiction. Such logical contradictions were known to exist at the basis of logic since antiquity. Scholastic philosophers attempted to formulate principles by which such contradictions could be resolved.

After this time, however, interest in such contradictions diminished until the middle of the nineteenth century, when analogous contradictions began to emerge at the very basis of mathematics. The mathematician Cantor, the founder of modern set theory, generated analogous paradoxes concerning infinite classes. Since set theory is used as a basis for many processes central to mathematics, these paradoxes--or antimonies, as they became known technically--could not be passed over lightly as an interesting oddity in the otherwise consistent pattern of knowledge.

Consequently, in response to this difficulty, and others in which mathematics found itself at the turn of the century, Whitehead and Russell (1957) attempted, in their monumental work, Principia Mathematica, to place mathematics on a firm logical basis. Correspondingly, they found it necessary to deal directly with the confluence of logical and mathematical paradoxes and to provide a principle whereby they could be systematically removed from mathematical logic. It was in this context that they presented several antimonies of which the following is a principle example:

Let  $\underline{w}$  be the class of all those classes which are not members of themselves. Then, whatever class  $\underline{x}$  may be, ' $\underline{x}$  is a  $\underline{w}$ ' is equivalent to ' $\underline{x}$  is not an  $\underline{x}$ .' Hence, giving to  $\underline{x}$  the value  $\underline{w}$ , ' $\underline{w}$  is a  $\underline{w}$ ' is equivalent to ' $\underline{w}$  is not a  $\underline{w}$ .' (Whitehead and Russell, 1957, p. 60)

It is with such paradoxes that the ordinary rules of logical inference seem to fail. Whitehead and Russell suggested the "theory of logical types and degrees" whereby these contradictions can be systematically removed from the basis of mathematical logic. The basis of this theory was that propositions could be divided by type and degree. These antinomies could then be attributed to irregular use of different types of propositions within a single argument. The major thrust of this theory was to insure a divisibility which had been violated in producing such self-contradictions.

Whitehead and Russell attributed the origin of these antinomies to "a vicious circle fallacy." "The vicious circles in question arise from supposing that a collection of objects contains members which can only be defined by means of the collection as a whole." (p. 37) What in effect Whitehead and Russell were suggesting, in my terminology, was that a certain divisibility must be maintained at the basis of mathematical logic to avoid contradiction, and they suggested their theory of types as a means of legislating such a division of propositions.

In any respect, these paradoxes should be viewed as something more than pure speculation or games, for as Chihara (1977) notes, it was through a consideration of these paradoxes that a fruitful exploration of the foundations of mathematics was pursued in the first half of this century. He writes, "It is hard to imagine what form

logic and set theory would have today had the paradoxes not been discovered and taken seriously." (p. 369, His italics)

In the 1930's, the mathematician Godel dealt a telling blow to any attempt to place mathematics on a non-contradictory basis. I have presented aspects of his famous proof above in defense of the assertion that alternative systems are needed for the full evaluation of a system of knowledge. However, this proof also demonstrates that at the basis of any logical system as complex as elementary arithmetic a necessary contradiction arises. Any one mathematical system cannot demonstrate its own consistency; there will always remain certain undecided propositions. We have in this a classic example of the bracketing of a division where the system attempts to demonstrate something about itself. The result of the attempt to turn the system back upon itself is self-contradiction. In short, Godel's proof, in its broadest implications, established that:

It is not possible to demonstrate the non-contradictoriness of a rational system by using only the means offered by the system itself. (Carruccic, 1964, p. 361)

Godel recognized in presenting his argument the similarity between his proof and the paradoxes I have already considered above, particularly the paradox of the "liar." In terms of my purposes, it appears that a certain divisibility between the system and itself must be maintained to insure the full function of axiomatic systems.

In the above discussion of the assumption of divisibility I have focused on the areas of logic and language, areas in which there is an attempt to use precise definition. I concluded that at the basis of the validity of both there is the assumption of divisibility. However, the assumption is a more general precondition for the Western tradition of knowing. Parallel demonstrations can be found in the major traditions of Western knowledge.

For example, from the area of religion, the cyberneticist, Wiener (1964) provides us with a demonstration of the need for a basic assumed divisibility at the center of religion which demands that God be divided from the universe he created. He recounts an age-old question that has troubled many who believe and assert the omnipotence of God:

Can God make a stone so heavy that he cannot lift it? If He cannot, there is a limit to His power, or at least there appears to be; and if He can, this seems to constitute a limitation to His powers too. (p. 6)

This example and the double-bind it produces in our thought can be clearly seen to fit within the paradigm noted above in the case of the liar. In this case, the unification of a basic division in religion between God and the universe results in a paradox.

In the other major tradition of Western knowledge, science, I can illustrate a similar dependence on the assumption of divisibility. As was noted above, the tradition of science is committed to a basic division

between observer and observed. For science to function in its classical manner, this division must not only be assumed but maintained. This need can be demonstrated by examining the paradoxes generated in scientific thought when this division was challenged in the microcosmic world of quantum physics.

It was in the 1920's that the classical division between the observer and observed was bracketed by experimental results, results that seemed to demonstrate that the observer could not be totally isolated from the thing being observed. This unification of the classical division produced such paradoxes in thought as Heisenberg's uncertainty principle whereby two variables could not be known simultaneously--for example, both the position and velocity of an electron. Again, in the example of quantum theory, we find the same paradigmatic development, the unification of a division resulting in a paradox.

In the above discussion, I have endeavored to make explicit the assumption of divisibility in many different areas of Western knowledge. I have attempted to demonstrate in each case that as this assumption is challenged, the system fails to function and results in paradox. Without the assumption of division, the powerful and central bulwarks of Western thought are reduced to self-contradiction. On this basis, I conclude that the assumption of divisibility is a general requirement for the function of Western knowledge.

Bridgman (1959) has recognized the interconnection of the examples I have presented and the general character of Western knowledge's need to assume a division between systems.

The essence of the situation presented by Godel's theorem seems to be that we are here concerned with a system dealing with itself--mathematics attempting to prove something about mathematics. Similar situations present themselves frequently in logic, as when we have the class of all classes, including itself, or contemplate the barber ordered to shave all those who do not shave themselves, including himself, or the map that must contain a map of the map. In all these situations we have systems dealing with themselves, and in all these cases we have paradox or, at best, infinite regression, and therefore difficulty. It is tempting to generalize Godel's theorem to read that whenever we have a system dealing with itself, we may expect to encounter maladjustments and infelicities, if not downright paradox. (p. 7)

In this statement, Bridgman draws all of the examples presented together to reveal the general case of the generation of a paradox within Western knowledge: when previously divided systems are united into one system paradox results.

Nowhere is this principle given more substance than in the case of the theoretical problems surrounding General Systems Theory. The problems arise because the purpose of this theory is to generate the most general system and in the process all of the normal divisions between systems are eliminated. As would be expected, this structural condition produces paradoxes surrounding how systems will be integrated and differentiated. Sadosky (1974) has made explicit no less than six paradoxes that these issues

generate for systems theory.

ASSUMED CONTEXT FOR KNOWLEDGE  
IN TRADITIONAL CHINA

A fruitful way to deal with the assumed context of traditional China is simply to treat it as the inverse of the Western assumed context. Where the assumed context of the West is dominated by the assumption of division, using this logic one would expect the Chinese framework to be permeated by unity. This is the hypothesis that largely directed my efforts in this area.

One could speculate about the possible source of this inverse relation. I could speculate that in some manner unity is "logically" prior to divisibility. While Western thought moved from unity to increasing divisibility, in traditional China we do not find divisibility at the core of the consciousness of the Chinese thinker. Guenon (1972) has suggested that "a man 'Westernizes' himself, whatever may be his race or country, to that extent he ceases to be an Oriental spiritually and intellectually." (p. 16)

From this perspective, the unity implicit in the knowledge of China is not an exceptional case to be accounted for, but it is that Western thinkers have progressively divided themselves from this primal unity. According to Guenon, this is one of the great values of oriental civilization for the Westerner, for the former is the only major cultural system that has retained what the Westerner has long since abandoned.

In contrast to the development of knowledge in the West, the Chinese retained and elaborated knowledge based on an assumption of unity. The knowledge that developed has an "organic" quality, a term often used by scholars in this area, viewing China as they do from the grounds of Western divisibility. This is really the closest approximation the Western terminology permits given its inherent assumption of divisibility.

On another level, the assumption of unity, viewed through Western eyes, appears to reveal an emphasis away from abstraction and toward immediate experience. Again, Western categories of thought seem to fail. For example, the contrast reveals itself most clearly in Northrop's distinction between "theoretic" and "aesthetic" components (Northrop, 1946). Using this classification, Northrop argues that the West is characterized by the theoretic component where Western thinkers attempt to abstract themselves from that which is being known. In firm contrast, the knowledge of the East tends toward the aesthetic component based on an essential intimacy between the knower and that which is known.

In short, the major thesis being presented is that while the Western thinker found it necessary to articulate knowledge on essentially two planes--characterized by a large number of dualisms such as mind-body, subjective-objective, and so forth--the Chinese, from the earliest time, built their knowledge monistically, based on an

essential unity. Like the divisibility of the West, this unity revealed itself very early in the development of the system of knowledge.

Wilhelm (1960) gives an excellent example of this divergence in knowledge in his examination of the I Ching, the Book of Changes, an ancient Chinese text concerning order and change in the universe. He notes that even at this early stage of development (500 B.C.), there was a clear distinction between the concepts of change in China as compared to Greek thought of the same period. Again, the dimension is one of divisibility and unity. Change and the laws of change were conceived by the Greeks to be separate, such that the laws of change were abstracted from the actual movement of things in the universe. Such an abstraction, of course, bases its authority on the assumption of divisibility prevalent in the Greek philosophy of the time. While for the Chinese, given their assumption of unity, these two elements were viewed within the same unity.

Wilhelm notes:

But to the Chinese, as we shall see, the two principles, movement and the unchanging law governing it, are one; they know neither kernel nor husk . . . heart and mind function together undivided. (p. 13)

As Wilhelm suggests, this one division, like most divisions made by Western thinkers, is not valid for the Chinese. As Pirsig (1974) has recognized, the basic divisions were the result of the dialectical process of the Greeks, resulting, in turn, in an entire series of

dichotomies within Western knowledge. Such a dialectical process did not occur among the Chinese of this period and, consequently, their knowing process retained and perpetuated an essential unity.

#### The Assumption of Unity in Chinese Knowledge

The problem in defining the assumption of unity within the traditions of China is that we must approach this alternative framework from the Western framework which has the contradictory assumption of divisibility embedded in it. Most directly, the Western framework produces in us certain expectations that must be produced for definition, while the Chinese framework tends to function along quite different lines. For example, within the Western framework, the more central a concept is, the more important it is to the framework, the more analytically it becomes defined. Thus, the layman's definition of energy is less precise and explicit than that of the physicist, who discriminates among different types of energy. This flow of knowledge derives from the assumption of divisibility. Within the domain of this assumption, the definition of a concept is related to its clear discrimination from other concepts.

In Chinese thought, the customary criteria used in the West for the definition of concepts do not apply. Indeed, the reverse relation seems to exist, as a concept becomes more central within the Chinese framework, it becomes both less definable and more obscure. This flow of knowledge is a product of the underlying assumption of unity, which

continues to submerge the concept within the ever greater unity of which it is a part. Consequently, the present discussion with the purpose of defining unity within the major traditions of China must, of necessity, fall short of Western expectations for definition.

The nearest that the Chinese approximate labeling the fundamental unity of their framework is in the concept of the Tao which is one of the most ancient, profound, obscure and central concepts within Chinese knowledge. To even attempt to define it by Western standards of definition is like attempting to hit the moon with an arrow; one is told by the sages of the East that one is destined to fail.

The concept of the Tao antedates both of the major traditions of China, Confucianism and Taoism, with the locus classicus, according to Needham (1956), to be found in the ancient classic, the I Ching, where it is recorded: "'One Ying and One Yang; that is the Tao!'" (p. 274).

Consequently, both Confucius and Lao Tse, the founder of Taoism, inherited a framework based on the unity of the Tao.

The fullest definition (if one can call it this) of the relation between the Tao and the assumption of unity appears in the great, but obscure classic of Taoism, the Tao Te Ching, generally translated as the "The Way and its Power." The work, however, far from making the nature of the Tao more explicit, tends to further obscure it. This little volume, of but a few characters, has undergone tens, if not hundreds, of translations due to its basic obscurity. We

read in the beginning of the volume that the "True Tao" cannot be spoken of:

The tao (way) that can be told of is not the eternal Tao;  
The name that can be named is not the eternal name. (Chan, 1963, p. 139)

Here, we are confronted directly with the problem alluded to at the beginning of this section: to name this unity or Tao is not to define it, by its very definition.

The point of this discussion is that the Tao cannot be approached by the traditional Western process of knowing; to attempt to do so is to miss the mark completely. The response of the Master Nan Ch'uan to the question, "What is the Tao?" is here more than appropriate:

'The Tao,' said the master, 'belongs neither to knowing nor to not knowing. Knowing is false understanding; not knowing is blind ignorance. If you really understand the Tao beyond doubt, it's like the empty sky. Why drag in right and wrong?' (Watts, 1975, p. 38)

It is here more correct to identify the problem not so much with the Tao as with the Western process of knowing which is antithetical to the very character of that which we are seeking to know.

At this point, almost in frustration, one could ask: "What can be said of the unity of the Tao?" If I must "shoot an arrow at the moon," I can provide an approximation by saying that the Tao represents to the Chinese the way of the universe, the unity of the universe. The universe, for the traditional Chinese, was a unified whole functioning in harmony like a giant organism, each part having its Tao.

harmonizing completely into the Tao of the entire universe.

This is such a difficult concept to relate because order and change in the universe, to Western eyes, stand as principles, divided from the world. For the Chinese, everything was unified into the whole of the Tao. Needham (1956) writes:

The key word in Chinese thought is order and above all pattern (and, if I may whisper it for the first time, Organism). The symbolic correlations or correspondences all formed part of one colossal pattern. Things behaved in particular ways not necessarily because of prior actions or impulsions of other things, but because their position in the ever-moving cyclical universe was such that they were endowed with intrinsic natures which made that behaviour inevitable for them. If they did not behave in those particular ways they would lose their relational positions in the whole (which made them what they were), and turn into something other than themselves. (p. 281)

The representation for this pattern or order was the Tao.

Both Confucianism and Taoism share this tradition of the unity of the Tao, with a different emphasis. The Confucians had as their primary concern the pattern and order of society and were, consequently, interested in the "Tao of Man." Alternatively, the Taoists were concerned with order and pattern in Nature and consequently concerned themselves with the "Tao of Nature." Even as these two traditions conflicted on many issues, they still shared the communality of the unity of the Tao.

In the Taoist classic, the Tao Te Ching, we find the following passage in which Lao Tse relates the Tao to the unity of the universe:

There was something undifferentiated and yet complete,

Which existed before heaven and earth.  
 Soundless and formless, it depends on nothing  
 and does not change.  
 It operates everywhere and is free from danger.  
 It may be considered the mother of the universe.  
 I do not know its name; I call it Tao.  
 (Chan, 1963, p. 152)

Again from the same classic, Lao Tse relates how the  
 universe arises from the unity of the Tao:

Tao produced the One.  
 The One produced the two.  
 The two produced the three.  
 And the three produced the ten thousand things.  
 The ten thousand things carry the yin and em-  
 brace the yang and through the blending of  
 the material force (ch'i) they achieve harmony.  
 (Chan, 1963, p. 160)

Two elements must be stressed from this passage. First,  
 that for the Chinese and the Taoists in particular, there is  
 always a unity below the diversity of things. Secondly,  
 this progression that Lao Tse relates must not be read from  
 the Western assumption of divisibility. The differentiation  
 referred to here was not simply division as it occurred in  
 the West, but rather a very special form of differentiation,  
 if this word is appropriate at all, which maintained the  
 essential unity of the system.\*

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\*Scholars in both China and the West have traditionally  
 distinguished between Tao-Chia or Esoteric Taoism and  
Tao-Chiao or Popular Taoist Religion. The former is the  
 Taoism of the great mystics celebrated in the Tao Te Ching,  
 while the latter is the corrupt version of the common  
 peasant which is given to superstition and necromancy. This  
 inquiry will freely draw from both traditions as the  
 situation warrants. It is my feeling that there is an  
 underlying communality which could be called Philosophical  
 Taoism which is at the center of both traditions and has  
 provided a particular orientation to Chinese culture. I  
 would agree with the assessment of Smith (1958) that:  
 "Esoteric Taoism has vanished; Popular Taoism is corrupt;  
 but Philosophical Taoism continues to shape Chinese  
 character in the direction of serenity and grace." (p. 181)

In Confucianism, we find the same dedication to the unity of the Tao. In one of the most profound points in the classic of Confucianism, The Analects, Confucius is asked about his doctrines by a disciple. Confucius replies, according to the translation by Legge (1970), "The Master said, 'Shan, my doctrine is that of an all-pervading unity.'" (p. 169) For Confucius, this unity must begin with the individual human being where heart and mind are one. In this manner, one can conduct one's life in accordance with the Tao of Man.

As I have suggested above, the assumption of divisibility in the West affects the function of people within the Western framework. In both religion and science, I found Western thinkers attempting to function within this assumed divisibility (namely, prayer in religion and experiment in science). Similarly, in traditional China, I would anticipate that people would attempt to function within the context of unity within their major traditions.

Without preempting the discussions that are to follow, I can in this context say that in both Confucianism and Taoism, people are attempting to work within the assumed unity by acting to promote the unity of the Tao and adjust themselves to the natural contours of its nature. The purpose for knowledge within the domain of unity is to act in accordance with the Tao. This is essentially why Confucius places such great emphasis on the correct behavior in the smallest matters. Likewise, in Taoism, contrasting

sharply with Western people's concern with experimenting and controlling Nature, people attempt to unify themselves with the Tao of Nature.

Examples of unification with the Tao abound in Taoist literature, perhaps the most famous is the story of the butcher of King Hui of Liang related by Needham (1956):

Ting, the butcher of King Hui, was cutting up a bullock. Every blow of his hand, every heave of his shoulder, every thread of his foot, every thrust of his knee, every sound of the rending flesh, and every note of the movement of the chopper, were in perfect harmony--rhythmical like the Mulberry Grove dance, harmonious like the chords of the Ching Shou music. 'Admirable,' said the prince. 'Yours is skill indeed!' 'Sir,' said the cook, laying down his chopper, 'What your servant loves is the Tao, which is higher than mere skill. When I first began to cut up oxen, I saw before me the entire carcasses. After three years' practice, I saw no more whole animals. Now I work with my mind and not my eyes, my spirit having no need of control of the senses. Following the natural structure, my chopper slips through the deep crevices, slides through the great cavities, taking advantage of what is already there. My art avoids the tendinous ligatures, and much more so the great bones. A good cook changes his chopper once a year, because he cuts. An ordinary cook needs a new chopper once a month because he hacks. But I have had this chopper for nineteen years, and although I have cut up many thousands of bullocks, its edge is as if fresh from the wetstone. (pp. 45-6)

Commenting on this passage, Needham remarks that the nature of the Tao reveals itself as something not vague and obscure to the Chinese, but as being the "naturalness, the very structure, of particular and individual types of things."

(p. 45)

### Making the Assumption of Unity Explicit

To find the assumption of unity in the major traditions of China is not to make this assumption explicit in a technical sense. Again, the principle of transcendence suggested itself to me for this task. The thought that first occurred to me was to attempt to make the assumption explicit by employing the same stratagem as was done for the Western framework: engineering the unification of a division. The expected failure of this stratagem would have the benefit of reaffirming that traditional China is in fact an alternative framework to the West.

In the assumption of divisibility in the assumed context of the West, it was pointed out that the unification of a division resulted in a failure of Western knowledge to function. It is logical that in an assumed context dominated by unity, such a condition of unification of a division should not prove a weakness but rather a strength for the system. It would be expected that such a condition would not inhibit the functioning of the assumption of unity, but actually would reinforce this assumption.

To illustrate this point, I turn to the writings of Chang-Tze, who is surpassed only by the founder of Taoism, Lao Tze, in his knowledge of the Tao and its unity. In his writings, Chang-Tze provides the following example of the unification of divisions as reinforcing the unity of the Tao:

If you hide away a boat in the ravine of a hill,  
and hide away the hill in a lake, you will say  
that (the boat) is secure; but at midnight there

shall come a strong man and carry it off on his back, while you in the dark know nothing about it. You may hide away anything, whether small or great, in the most suitable place, and yet it shall disappear from it. But if you could hide the world in the world, so that there was nowhere to which it could be removed, this would be the great reality of the ever-during Thing (the Tao). (Legge, 1927, pp. 242-43)

In the last sentence, I find the classic example of the unification of a division, as Chang-Tze asks us to "hide the world in the world." Unlike Western knowledge where this condition produces a negation of the system, given the Chinese framework, there is an affirmation of the system.

To operate upon the assumption of unity in the framework of traditional China, a different stratagem would be best employed. We cannot simply unify what is divided resulting in paradox and perplexity as has been done with Western knowledge. Given the assumption of unity, such unifications do not present a problem, and, consequently, cannot be used to advantage. For example, consider the oft quoted story of the man who confused the distinction between waking and dreaming:

Formerly, I, Kwang Kau, dreamt that I was a butterfly, a butterfly flying about, feeling that it was enjoying itself. I did not know that it was Kau. Suddenly, I awoke, and was myself again, the veritable Kau. I did not know whether it had formerly been Kau dreaming that he was a butterfly, or it was now a butterfly dreaming that it was Kau. (Legge, 1927, p. 197)

This story appears in the writing of the Taoist, Chang Tze in a section of his writings titled the "The Adjustment of Controversies" which has as its purpose to demonstrate that the unity of the Tao underlies all conflicting

divisions. Thus, in this context of unity, Kwang Kau's confusion of the division between dreaming and waking presents no major perplexities or paradoxes.

Compare this to the fate of the same unification in the Western framework. The confusion of waking and dreaming presents a central philosophical problem. This issue is best revealed in the philosophy of Descartes where the confusion of dreaming and waking is one of Descartes' key doubts and its resolution becomes central to his epistemology. He finds it necessary to make as clear as possible a distinction between the two states, while our Chinese philosopher merely entertains the possibilities of relation between the two.

This example is representative of the differences in the two frameworks. A different approach must be taken from that taken with the assumption of divisibility. To advance beyond this point, I shall employ the same general process, the principle of transcendence, to the problem of making the assumption of unity explicit. Since a framework based on the assumption of unity presents to us a continuous whole, I could not find a clear point of leverage from within the framework. In this case, an effective principle of criticism suggests that I should seek an alternative system with which to confront the unified system of the Chinese, in the manner of an external probe. In this manner, the dominant unity of the framework can be transcended.

As noted above, China has retained a privileged position insulated from the impact of alien influence. It is this very isolation that has given China its alternative framework. Traditionally, the Chinese have been dominant in their cultural area and regarded themselves as the "center of the world." Their characteristic reaction to foreign contacts has been to submerge these foreign elements, in a non-violent manner, within the Chinese whole. In this way, innumerable barbarous hordes of Central Asia became "sinicized" and assimilated. When the power of the alien was beyond the capacity of this assimilation process, the characteristic response, even to the present time (e.g., the behavior of Maoist China in the 20th century), was to withdraw into isolation.

There is one major exception to this general course of events in the history of China providing an interesting point of leverage. At the beginning of the Christian era (circa, 65 A.D.), a foreign element, Buddhism, began to appear in China. Unlike the prior course of events, the Chinese addressed themselves directly to this foreign doctrine and attempted to deal with the problems generated by its introduction within their assumed context. In Buddhism, we have a condition of transcendence where the overpowering unity of the Chinese was breached.

It will be recalled from the discussion above that the Chinese scholar Creel (1929) was quoted as saying that if we viewed the world in the most comprehensive terms, one could

divide it into two alternatives with India, the Middle East, and Europe on one extreme, and China and her cultural area on the other. On this basis, India and her knowledge system could be conceived as being Western. An indication of this can be taken from historical linguistics where it has been recognized that there is a direct linkage between the language of Ancient India, Sanskrit, and the roots in European languages.

Consequently, the linguist groups them together under the label, Indo-European languages. In China, we find a radically different language structure which has little or no relation to Indo-European languages. If there is such a gap between India and China on something as basic as language structure, we would expect that this gap would be reflected in many different areas. Wright (1959) describes the differences:

No languages are more different than those of China and India. Chinese is uninflected, logographic, and (in its written form) largely monosyllabic; Indian languages are highly inflected, alphabetic, polysyllabic. Chinese has no systematized grammar; Indian languages, particularly Sanskrit, have a formal and highly elaborated grammatical system. (p. 33)

Naturally, of course, these differences tend to permeate through the entire system. Wright goes on:

When we turn to literary modes, we find that the Chinese preference is for terseness, for metaphors from familiar nature, for the concrete image, whereas, Indian literature tends to be discursive, hyperbolic in its metaphors, and full of abstractions. (p. 33)

Here, in this comparison of languages and the immediate

ramifications in literary style, we can appreciate the fact that we are confronted with two basically different systems.

When we turn specifically to Buddhism, we find that as a system it emerged from the Indian cultural matrix being very much committed to this assumed context. The important point is that Buddhism, arising as it does from Indian knowledge, is essentially a part of the Western framework and, consequently, has inherited the assumption of divisibility which permeates the Western framework. Before proceeding further, I shall attempt to illustrate the essential association of Buddhism with the Western framework of divisibility.

Daye (1975) points out that the Buddhists were very careful in their definition of concepts such as "emptiness" to insure that reflexive problems would not arise. In the case of emptiness, a strict divisibility was maintained which viewed "emptiness" only as a construct in language, not as an ontological entity. In this way, the turning of emptiness back upon itself, and consequently, the problems and confusion inherent in this unification of a division, could be avoided.

In Buddhism, the principle that a unification of something normally divided leads to a paradox seems to be very much operative. Daye writes that in Buddhist thought, there is a "persistent confusion surrounding the propositions that there is perception but no perceiver, thought but no independent ontological thinker." (p. 99)

As I have noted and suggested above these confusions which Western thinkers and the Buddhists share arise from the common assumption within the Western framework of a separation between the knower and known. It would seem that Buddhist knowledge shares the same limitations in respect to division as does Western knowledge.

In the following discussion, I will assume that with Buddhist knowledge we have an alternative to the Chinese assumption of unity. To make use of this transcending condition, I will examine in detail the problem that the Chinese experienced in attempting to understand Buddhist knowledge. If the analysis is correct, the Chinese thinker should experience problems with the divisibilities imposed by the Buddhists. In short, the problems and paradoxes will be due to the fact that the Buddhists were assuming certain divisions which the Chinese traditionally had unified.\*

At the time of the Buddhist introduction, human beings in traditional China existed in a fundamental unity on a number of levels. On the level of knowledge, the thinker was unified with knowledge and the world, resulting in a concrete and pragmatic form of knowledge. Within the social level, human beings were unified with other human beings in

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\*To display the full impact of this discussion, it will be necessary to anticipate the discussion that will be undertaken in the next chapters. However, at this point, in order to present the contrast, it will be required to make some rather broad generalizations about the unity of human beings in traditional China without spending the time to support each assertion. The reader must keep in mind that these assertions will be documented at length in the following pages.

the whole of the family and always functioned and interpreted their world from the context of family relationships. The family, for the Confucian, revolved around the central axis of the father-son relation and placed great importance on virtue in the relation of filial piety. It was through this relation of continued obedience of the son to the father that the whole of the family was perpetuated through time.

On the level of the individual, we find a similar unity. Human beings were considered to be a harmonious whole of mind and body. In general, the image that this brief and sketchy portrayal of human beings in traditional China is intended to convey is a human being unified with the "here and now," as immediately reacting to the world in concrete terms and functioning in a pragmatic manner.

This central assumption of unity really becomes explicit when we examine the problems generated by the introduction of Buddhist divisibilities. It is difficult, I think, to appreciate the impact of this confrontation on the Chinese. From their perspective, the confrontation was traumatic, generating numerous "absurdities." Chen (1973) attempts to relate something of this:

The Chinese were also told that the phenomenal world is illusory, like a mirage or shadow, that life is suffering and transitory, that sensual pleasures are undesirable and therefore ought to be suppressed or eradicated, that the ideal pattern of life was withdrawal from society and family to life of celibacy and mendicancy. The Chinese also learned that because of rebirth, their ancestors could very well be reborn as animals and hence it would be wise to follow a vegetarian diet. (p. 3)

It can be seen from Chen's brief statement that one could not imagine a system of thought that was more antithetical to the Chinese system.

At the root of all of these perplexities was the simple fact that Buddhist notions of Reality were based on the assumption of divisibility and the Chinese on unity:

Nirvana, the sole Buddhist Reality, lay outside the Chinese order of reality altogether. The empirical world and its inner principle, which the Chinese assumed to be all of Reality, was, according to Indian Buddhism, sheer illusion. (Mather, 1955, p. 26)

To open this point of entry further, the major problem for the Chinese was the proclivity of the Buddhists for a high level of abstraction in knowledge. As I noted, the Chinese were unified with the world and their knowledge was immediate, concrete and pragmatic. The Chinese revealed their wholeness in reacting to this abstraction: they attempted to reduce the abstractions of the Buddhists to visual diagrams and, thus, attempted to make these esoteric doctrines immediately available (Nakamura, 1964). However, such attempts were of little effect for there was a basic difference in assumptions and language structures.

The Buddhists were being quite Western with their divisibilities and were seeking a "reality" beyond the world as it is immediately experienced. This doctrine comes into direct confrontation with the Chinese assumption of unity which required the world be experienced immediately as a whole. Needham (1956) writes of this conflict:

Another doctrine introduced by Buddhism which was basically antagonistic to the indigenous

philosophies was that of the illusory nature of the visible world (maya), and its corresponding theoretical form of subjective idealism. (p. 410)

Such differences resulted in different purposes for knowledge.

Buddhism was not interested in co-ordinating and interpreting experience, or finding reality in the fullest and most harmonious statement of the facts of experience, but in seeking some kind of 'reality' behind the phenomenal world, and then brushing the latter away as a useless curtain. (Needham, 1956, p. 417)

Dumoulin (1963) notes, along these same lines, that there was a basic difference in values. The Chinese wished to live in harmony and unity with Nature and other human beings, while the Indian Buddhists were committed to fleeing the world in an act of division.

If we turn to the social level, we find analogous problems centered around division and unity between human beings. The Buddhists regarded human beings as individuals, who were seeking their own salvation in the manner of the Buddha himself. Consequently, the religion advocated the monastic life independent of the everyday, profane world. Given the Chinese experience of the unity of people, the conflict in social values was readily joined.

As Chen (1973) records, the Chinese attacked the Buddhists for being "unfilial" and destroying the unity of the family and society in favor of individual gratification of monastic celibacy. Again, we find the same paradigmatic problem, the Buddhists were making a division of human beings from the rest of humankind, while the Chinese held a

unity of all humankind as represented by the whole of the family.

On the level of the individual, we find, again, the same type of problem. The Chinese had not shown any inclination to divide human beings into mind and body or to divide and analyze the personality of human beings. For the Chinese, the human being was a unified whole (Wright, 1959). The Buddhists, on the other hand, had an elaborate system of psychological analysis. Again, a confrontation was at hand: the Buddhists suggested a suppression of the passions in which the mind controlled the body. Consequently, the Buddhists advocated rules and methods for expunging of these passions. Chen (1964) records one such case in particular. The Buddhists suggested that in order to extirpate lust, one was to go to the cemetery and meditate on a corpse in various states of decay. The Chinese were deeply offended by such rules for the passions and viewed them as an affront to the natural and spontaneous movement of the Tao.

By way of summary, all of these issues speak with one voice in suggesting the strength of the assumption of unity in the Chinese framework and the threat with which the introduction of Buddhism was perceived:

Though particular criticisms arise over many separate issues, the underlying complaint was invariably the same: the adherence of Buddhist monks and nuns to an other-worldly ideal, which caused them to repudiate the actual world with its obligations and to practice principles contrary to nature, was a dangerous threat not only to society and the state, but to the harmony of the universe as well. (Mather, 1955, p. 26)

The luxury of dividing oneself from the rest of society and

from the world, that the Buddhists merely assumed, could not be so assumed in the Chinese framework based on the assumption of unity.

#### ALTERNATIVE PROCESSES OF QUESTIONING

It is hoped that the above discussion of alternative assumed contexts is not just an academic exercise. To go beyond this, the method requires that the alternative assumed contexts be related to the questions that are asked. In short, the respective assumptions of unity and divisibility should be shown to affect the nature of questioning in each framework. As a contingent further step, to use this material within the method, these alternative processes of questioning must be focused upon the problem and shown to make a difference in terms of the consequences in each system.

#### Alternative Assumptions and Alternative Questioning

Given alternative assumed contexts, it would be expected that different questions would be thought to be "significant" questions in China and the West. In short, the questions that Western thinkers ask are not the same questions that thinkers in traditional China asked.

These different processes of questioning derive from the alternative assumptions. The Western thinker works with divisions, the major division being the separation between the knower and the known. Consequently, significant questions are questions which lead to the construction of

information about the known. The purpose for knowledge is to understand.

In traditional China, the assumption of unity requires a different purpose and structure for constructing information. Since the thinker is unified into one system with everything, within the Tao, significant questions are questions which provide information about relationships within this whole. The purpose for knowledge becomes to act, to produce these relationships to the harmony of humankind in Confucianism and the harmony of Nature in Taoism. The result of these different purposes and assumptions is a radically different process of questioning in each framework:

A comparison of the discussions of knowing in pre-twentieth-century Western and in Chinese philosophy reveals that the topics of most concern to the Westerners are rarely significant in the Chinese discussions. For example, the question of certainty and doubt is important to Westerners: Are there truths that cannot be doubted? What are the grounds for the knowledge we supposedly have when we grasp such truths? What is the relation between knowing something and the reasons we can give to claim knowledge? What is the relation between knowledge and belief? How do we weight the competing arguments in favor of intuition, sense experience, and awareness of the laws of logic in answering these questions? Another set of questions important to Western philosophy concerns the relation between our sense experiences and objects supposedly external to our minds: Do objects themselves resemble our perceptions of them? Do objects exist outside of and independently of our minds and experience? Certainly, the Chinese philosophers were not unaware of some of these questions, but they were primarily concerned with two quite different questions. First, what can we learn through studying things that will tell us both how things are naturally structured to act and how they should act? That is what we can learn about moral rules and also about objects--acorns, streams,

planets, or people--that will help us evaluate whether or not they are acting properly. The other question is what happens to a knower as a result of his efforts to know, that enables him to behave properly when alone or toward other people and things? Does he learn things about himself in the process of trying to know the natures of other things; and does that knowledge help him to behave more consistently with Confucian norms? Does he acquire feelings toward objects he knows that he should seek to duplicate in his noncognitive dealings with them in the future? In short, those who are interested in knowing are interested in making the right evaluations and in guides to action. (Munro, 1977, pp. 27-28)

This lengthy quotation seems justified by the fact that Munro is one of the few scholars in this area to make explicit the relation between purposes, questions, and the resultant differences between Chinese and Western knowledge.

These alternative processes of questioning diverge from different central or core questions. As was noted in an earlier discussion of the dynamics of questioning, questions asked in any framework are really rephrasings and specific elaborations of a key question which is considered the most significant question. The same relation pertains here. The Western thinker asks questions about substance and the Chinese thinker about relation and action. At the basis of this questioning are two key questions. Needham (1956) writes:

At any rate, Chinese thought, always concerned with relation, preferred to avoid the problems and pseudo-problems of substance, and thus persistently eluded all metaphysics. Where Western minds asked 'what essentially is it?' Chinese minds asked 'how is it related in its beginnings, functions, and endings with everything else, and how ought we to react to it?' (p. 200)

### Focusing the Alternative Processes on Human Beings

To use these alternative processes in the following chapters, the process should be focused upon human beings and the questions that are asked about human beings. I can build upon the earlier discussion of the process of questioning in psychology as that process converged to the key question: "What is a human being?" If all of the effort so far directed is of any use it should be possible to give this key question an alternative meaning in opposition to the singular meaning of the Western framework.

Within the assumed context of divisibility prevalent in the West, the question acquires an all too familiar meaning: a human being is an isolated entity existing within a divided world. As the questioning progresses from this central meaning, questions centering around human beings as separate entities become of paramount importance until we come to the extreme levels of derivation such as "What traits are in this person's personality?" We can easily find in this interdependence of questions the entire framework of human beings in the West.

Everywhere I look within the West, I find the results of the Western meaning of the question. As I found divisions at the center of the major traditions of the West, I must also find that human beings who function within these traditions are a product of this same division. The conception of the human being that arises is that of a person divided: the personality is composed of traits, the

person is divided into mind and body, people are experienced as separate from other people, and humankind is divided from Nature.

Within the assumed context of unity in traditional China, "What is the human being?" acquires quite another meaning and we are propelled into another process of questioning in respect to people. In this context, the question is given the meaning that a person is a unity contained within ever larger unities. A cursory reading of the Chinese classics reveals another world from that of the West, a world where harmony and unity are the rule and not the exception.

This level of abstraction still lacks the focus necessary to serve as the basis for the operation of the method. One way of further refining this is to ask: "What are the key relationships which transect human experience and function?" I believe there are three major dimensions of interrelation: humankind's relation to Nature, human beings relation to other human beings, and a person's relation to himself. The next three chapters will examine, in turn, each of these dimensions in an effort to delimit the consequences of these alternative frameworks on the function and experience of human beings.

The structure of these chapters will be the same. The first section will ask the question in each assumed context to produce alternative meanings. The remainder of the chapter will examine the consequences of these alternative

meanings. The consequences will be examined first as they relate to how a human being experiences along this dimension, and the final section will examine how this experience leads to a difference in what people do in traditional China as opposed to the West.

Before this material is presented, something must be said about the emphasis on China in the following chapters. No effort will be made to present a completely balanced view of both systems. I am assuming a Western reader and will concentrate my efforts on making the traditional Chinese alternative explicit. Documentation about the Western framework will be presented at points to make the Chinese alternative more of an alternative in this contrast. The reader will find a full development of Chinese material, but not a full parallel development of Western knowledge in the following presentation.

## OVERVIEW

Alternative assumed contexts for questioning were constructed for traditional China and the West. The assumption of divisibility was found to be functional in the major traditions of the West, religion and science. The assumption was made explicit by producing cases where this divisibility could not be assumed with a corresponding failure of Western knowledge to resolve the paradoxes so generated.

In traditional China, the assumption of unity as reflected by the concept of the Tao in Confucianism and Taoism was made explicit by viewing the paradoxes surrounding the introduction of Buddhism, a system which did not share this assumption, into China. Problems centered around conflicts in the Buddhist view of the human being as divided from the world and humankind, and the Chinese view which regarded the human being as unified along these dimensions.

These alternative assumed contexts produce different processes of questioning and different purposes for knowledge in each system. These alternatives can be focused upon the knowledge of human beings by viewing the alternative meanings given to the key question: "What is a human being?"

## CHAPTER V

### CONSEQUENCES IN HUMANKIND'S RELATION TO NATURE

Given the process of questioning in traditional China, it would be expected that human beings would be unified with Nature and concern themselves with relationships within this whole. This chapter will be concerned first with the experience of this unity and will consider how function develops from this experience. In the case of both experience and function, a single practical area will be identified--art for experience and architecture for function. These areas will serve as a point of focus from which one can begin to appreciate an alternative relation to Nature from that of the West.

#### EXPERIENCING NATURE

In searching for a point of entry into the experience of Nature in traditional China, I was immediately drawn to the "eye" of the artist. Artistic vision is an extremely sensitive barometer of a culture's perception of its world.

#### The Chinese Artist's Experience of Nature

The immediate point of entry into Chinese art is unusual from a Western standpoint: the approach will be through the written language. This point of entry appears to be unusual because Western languages are basically

alphabetic in form while the Chinese written language is idiographic in structure. Contrary to Western words which are only a combination of a limited array of letters, Chinese characters are graphic representations of objects.

For example, as Needham (1971) indicates, one of the earliest characters for "bridge" was simply:



*liang*

being a "drawing of a plank crossing a stream." (p. 147) As the language developed from this primitive insight, phonetic elements were, of course, added to this representational base, but the basic insight of having the character be a graphic portrayal of the object it represented remained the basic format for the written language.

Calligraphy. Because calligraphy represents a fundamental relation of the artist to the world, calligraphy becomes the basic art form in China from which all of the other art forms derive. For example, the transition from calligraphy to painting is at once a direct and continuous one. Both calligraphy and painting involve the modulation of brush strokes. Thus, the student begins with calligraphy by learning to use the brush and then develops quite naturally to painting. Painting and calligraphy form a unified whole to the degree that it is common for a Chinese painter to say not that he is painting a painting but rather writing a

painting. (Chiang, 1973)

This influence of calligraphy extends far beyond the scope of the mere similarity of the brush in hand in painting to the even more functional art form of architecture. Unlikely as it may seem to the Westerner, writes Lin Yutang (1935), the forms of Chinese architecture are related directly to the forms of characters in calligraphy. He notes that, like a character, the Chinese house is built upon a framework with the lines of the structure visible like the lines of a character. He attributes the major characteristic of the Chinese building, the curved roof, to the curved strokes composing a character.

In Chinese architecture, there can be found a material representation of the original insights of the world codified first within calligraphy.

So fundamental is the place of calligraphy in Chinese art as a study of forms and rhythm in the abstract that we may say it has provided the Chinese people with a basic esthetics, and it is through calligraphy that the Chinese have learned their basic notions of line and form. It is therefore impossible to talk about Chinese art without understanding Chinese calligraphy and its artistic inspiration. There is, for instance, not one type of Chinese architecture, whether it be the pailou, the pavilion, or the temple, whose harmony and form is not directly derived from certain types of calligraphy. (Lin Yutang, 1935, p. 291)

If it is the purpose to illustrate the fundamental experience of the unity of the human world with the world of Nature in Chinese art, attention would be best directed to the artistic vision of calligraphy.

The fundamental inspiration for Chinese calligraphy was Nature and unity with her. The origins of calligraphy are, of course, shrouded in the past. However, Lai (1973) notes that one legend has it that "Ts'ang Chieh observed the patterns and movements of the celestial bodies and earthly creatures before creating the earliest writing system."

(p. xi) He goes on to note that the now extinct scripts of old have the names of natural objects which relate to their origin, for example: the "tadpole script," "the bird script," and the "the tiger script."

Through the avenue of calligraphy the entire artistic tradition of China became infused with a unity with Nature.

The fundamental inspiration of calligraphy as of all arts of China is Nature. . . . our love of Nature is characterized by a desire to identify our minds with her and so enjoy her as she is. In calligraphy we are drawn to Nature in the same irresistible way: every stroke, every dot suggests the form of a natural object. And, in turn, natural objects become in many instances prototypes of calligraphic style. Many expressive names drawn from Nature have been coined by great writers in the past to describe different kinds of strokes: 'falling stone,' 'sheep's leg,' 'the ruggedness of a plum branch,' 'decayed trunk of an old tree,' 'the muscles, bones and sinews of an animal's limbs,' are examples. (Chiang, 1973, p. 111)

In the case of calligraphy, I find the gem of the Chinese artistic spirit: an experienced intimacy and unity of human art with Nature.

The calligrapher becomes the model for Chinese artists as they call upon Nature for their inspiration. Within the experienced unity of human art form and Nature there is a full exchange. Lin Yutang (1935) writes that a famous

calligrapher practiced for years, but still could not perfect his style until one day while wandering through the mountains he chanced upon two fighting snakes and from this inspiration developed his classic style called "the fighting-snakes." Such an incorporation of Nature into the calligraphy of the scholar is quite common as he notes:

If a scholar sees a certain beauty in a dry vine with its careless grace and elastic strength, the tip of the end curling upward and a few leaves still hanging on it haphazardly and yet most appropriately, he tries to incorporate that into his writing. If another scholar sees a pine tree that twists its trunk and bends its branches downward instead of upward, which shows a wonderful tenacity and force, he also tries to incorporate that into his style of writing. We have therefore the 'dry-vine' style and the 'pine-branch' style writing. (Lin Yutang, 1935, p. 293).

The transition from calligraphy to painting proper is hardly a change in the area of discourse at all. As noted above, the materials and techniques are essentially the same and are readily transferable from one to the other. Indeed, most paintings have calligraphy appended to them as a matter of course. It would be expected that the dominant inspiration of Nature in calligraphy would apply to Chinese painting.

Landscape painting. Calligraphy and poetry, antedating painting as such, reflect at a very early stage of development the interest of the Chinese in Nature as a source of artistic inspiration. Munsterberg (1955) presents several examples of poetry dating from prior to 1000 B.C. which exalt the loveliness of Nature and the human

Figure 6

A Typical Chinese Landscape Painting Illustrating  
the Integration of Human Beings with Nature  
(Courtesy Museum of Fine Arts, Boston)



being's intimate relation with her. Painting, especially landscape painting, is a graphic representation of trends which have existed since the dim past of China.

This experienced unity makes itself available to us in its full fruition in the Chinese landscape painting. In Figure 6, we have what Munsterberg (1955) has called an example of the supreme expression of the spirit of Chinese landscape painting. This painting by a Sung artist reflects his interest in Nature, particularly an emphasis on her major features: mountains, water, and, secondarily, sky. It must be remembered that the Chinese name for a landscape is Shan Sui, translated as "mountains and water." (Sowerby, 1940)

In the idiom of mountains and water, Chinese artists relate their experience of Nature: the yin-yang in the Tao of Nature. The water represents change and flow in contrast to the solidity of the rock of the mountains, yet both are unified within the Tao of the painting itself. As one author aptly notes, "peaks and torrents seem to fill these painters with a kind of intoxication, as if their spirit were buoyed on the stream of universal life pervading all things . . . ." (Fry, 1935, p. 13)

In this context, it would not be surprising to us that one of the most striking things about Chinese painting is the early period in which landscapes appeared as independent themes (Binyon, 1927). This is in striking contrast to Western art where the landscape as an independent theme is a

quite recent development.

Binyon (1927) observes a further contrast: the mother-child theme is as predominant in Western art as Nature is in Chinese art. Even where human themes are presented in Chinese paintings, he asserts, they are presented in such a manner as to suggest the full beauties of Nature, not of the human subjects. In Western art, the relation is inverted. The landscape as such was used as a background for human action and was, generally, selected to enhance the human form.

At the heart of all that has been said about the Chinese landscape, there is the intimate, experienced unity of the artist and Nature as the subject. By way of summary, Binyon (1936) writes:

The chinese word for 'landscape' means 'mountain-water picture,' and suggests at once something more elemental. It is concerned with that which is solid and that which is fluid. The mountains are thought of as the flesh, and the streams as the blood, of a living organism. It is not the life of nature conceived of as something separate from the life of man, but the whole created universe through which one spirit streams.  
(p. 83)

A further insight can be obtained by examining how the artist paints human beings in a landscape. It follows from what has been said that when humans are pictured in the landscape, they are pictured as part of the whole of Nature not unlike other natural objects such as trees or rocks. Again in reference to the example in Figure 6, at first it is difficult to discern humans in the painting where the characteristics of Nature predominate. It is only through

close inspection that we find some people in a boat on the great expanse of water, and then, upon closer inspection, we find some human beings waiting on the shore overshadowed by the tree that lies behind them. On this point, Sowerby (1940) writes:

Often will be found a diminutive human figure or two accompanied by some beast of burden; but always the dominant theme will be the mountains, the water, and the mists. Human figures are always given their rightful place by the Chinese artist in the grand scheme of nature. Never do they assume proportions that would suggest that man is considered the most important thing in the universe; for Chinese philosophy is above all rational and maintains a fine sense of relative values. (p. 153)

This placing of human beings as an integral element in the whole of Nature by the Chinese artist takes on added importance when we compare this with the place of human beings in Western art. In Western art, human beings tend to be portrayed as dominant, with Nature serving only as a backdrop for their action and the object of their conquest.

Throughout Chinese poetry and painting we find this same awareness of the beauty and mystery of Nature--always, however, a Nature in which man holds an integral but not assertive place. Never, on the one hand, are the mountains, rivers, and forests of the great Chinese landscape painters mere decorative backdrops for man and his activities, as so often in pre-romantic Western art; equally never, on the other hand, do they consist simply of empty and seemingly uninhabited wildernesses. Always they are peopled by human figures, tiny yet distinct: a fisherman in his boat, a woodcutter, a cowherd, a recluse sitting in contemplation on a rock. (Bodde, 1957, p. 32)

The false impression should not be given from the above that the Chinese conception of the unity of human beings and Nature is somehow the reverse of the Western, where Nature

**Figure 7**

**The Reciprocal Relation between the Characteristics  
of the Human Being and the Natural Setting  
(Courtesy Museum of Fine Arts, Boston)**



dominates the human being. The relation is a reciprocal and complete one for the Chinese artist where the human being relates to Nature and Nature relates to the human being.

In Figure 7, we have another characteristic setting from a Chinese painting, a recluse scholar in a natural scene of again "mountains and water." It is significant to note that the artist is attempting to relate to us something about the scholar from the natural setting in which he is placed. Priest (1954), in discussing such paintings, makes explicit this relation:

Often in these landscapes there is a scholar (or sometimes two scholars), very tiny in comparison to the scene he sits in. We are informed that we can gauge the profundity of the scholar's mind by the loftiness of the mountains in the distance. We are further told that when gnarled, ancient trees appear they are the symbols of the scholar's years, that when hung with vines, the vines symbolize the chains of habit impeding the growth of the tree . . . . (p. 15)

The artist, then, is working with the whole of Nature and attempts to use this reciprocal relation to relate to us something about the characteristics of the human subject.

In respect to Figure 7, Boyd (1962) provides these very appropriate comments:

Hence that constantly recurring figure in Chinese literature and painting, the scholar recluse in his retreat, living alone or perhaps with a single attendant, in a thatched hut surrounded by the immense precipices, the torrents and mists of the mountain landscape, having risen above the ambitions and desires of the world and being freed from the rapacities and intrigues of the official career. (pp. 111-112)

Not only is the human being unified with Nature, but so must the good artist be part of this same whole.

The Tao of the artist. The key to becoming a good artist in traditional China was an ability to involve oneself with Nature completely. Northrop (1946) has delineated the basic differences in approach between the Western and Eastern artist. The Western artist superimposes a theoretical dimension on the subject, while the Eastern artist approaches the subject directly within a purely aesthetic dimension without the need for abstraction. Northrop feels that the first thing a Chinese painter must acquire is the capacity to grasp the immediately apprehended aesthetic factors in the immediately experienced. There is little attempt to approach art via abstraction, as Westerners do, with perspective and the science of optics playing an unimportant role.

The comparison that Northrop draws between the approach of the Eastern and Western artist to art is quite striking: while Western artists content themselves with the careful study of the geometric form and perspective, Chinese artists immerse themselves in their subjects, usually the majesty of Nature's mountains and rivers, to obtain an immediate grasp:

Before taking up brush and pigments, they [Chinese artists] went out into nature, and immersed and lost themselves, becoming one with the all-embracing continuum which is nature in its aesthetic immediacy. Approaching nature in this way, in their paintings, they portray the aesthetic manifold primarily, and the external three-dimensional objects, which Westerners tend to seek for in these paintings only incidentally, if at all . . . (Northrop, 1946, p. 330)

Along these lines, Lin Yutang (1935) comments in a rather critical vein:

The Chinese artist does not learn painting by going into a room and stripping a woman naked in order to study her anatomy, nor does he make copies of plaster figures of Ancient Greece and Rome, as some backward art schools in the West still do. The Chinese artist travels and visits the famous mountains like Huangshan in Anhui or the Omei mountains in Szechuen. (p. 288)

If we can free ourselves from Lin Yutang's obvious moralizing, we can distinguish the two approaches of the artist to the subject.

This merging of the artist with the subject, however, can be carried to an extreme. To illustrate this point, Prodan (1958) relates the story of the master painter, Li Lung-Mien who possessed the gift of identifying himself so completely with his subject that "his friends used to dissuade him from depicting horses, for fear lest he might become a horse himself!" (p. 159)

It would be an error to leave the area of Chinese art without relating the unities that have been unearthed to a more general process within the framework. The unity of human beings and Nature in Chinese art is derived from the assumption of the unity of the Tao.

By the single daring assumption of the cosmic principle of the Tao, the Chinese focused on the notion of one power permeating the whole universe, instead of emphasizing the Western dualism of spirit and matter, creator and created, animate and inanimate, and human and nonhuman. This concept of the Tao was the touchstone of Chinese painting which affected the creative imagination, the subject matter and the interpretation. (Rowley, 1959, p. 5).

Along the same lines, Munsterberg (1955) writes of the artist and the Tao: ". . . the artist was taught that he must first of all identify himself with the landscape and become one with the Tao which pervades all of Nature, for only then could he begin to do justice to his theme." (p. 8)

#### The Human World as Unified with Nature

There is in Chinese landscape art an anthropomorphic projection of human characteristics onto the organism of Nature. Sullivan (1962) writes of such an attitude toward Nature as it contributed to the development of landscape painting:

In popular belief the mountain is the body of the cosmic being, the rocks its bones, the water the blood that gushes through its veins, the trees and grasses its hair, clouds and mists the vapor of its breath . . . (p. 1)

In this context, Chinese artists looked out upon Nature and found an analogue of themselves since to them they were unified within the same Tao. They did not experience a representation of life in a primitive sense or in a Western animistic sense, but rather they experienced the same order and relations within themselves as they experienced in the cosmos. As we move from the experienced unity of human beings and Nature in Chinese art to a more general system, we will find this correspondence assuming more specific and literal dimensions.

Macrocosm-microcosm relations. Chinese art is only a special case of the general tendency in Chinese knowledge to experience human beings as a microcosm of the macrocosm of Nature. At the root of the microcosm-macrocosm dimension, were two analogies: ". . . one postulated point-for-point correspondences between the body of man and the universe or cosmos as a whole, the other imagined similar correspondences between the human body and the society of the State." (Needham, 1956, p. 294) Needham refers to the former as the universe analogy and the latter as the state analogy.

Before examining these analogies in a detailed manner within a specific area, something must be said of the general nature of the unity expressed by the doctrine of macrocosm and microcosm. I feel that the key concepts in Needham's description are whole and correspondence. This doctrine is always relating elements from one whole to corresponding elements in another whole.

It is helpful to imagine three planes, each placed a distance above the other such that an object on the first plane becomes projected onto the second plane, and, further, projected upon the third plane. Now if a circle is drawn on the bottom-most plane with points within it, this circle and its related points will be projected to the next higher plane, and from this plane to the third plane. The important point is that the circle on each plane will be in correspondence to the circles of the other planes. In a

like manner, the relation of points on the first plane will correspond to the relations of the points on the other planes.

This ordering of a hierarchy of wholes is a dominant feature of traditional Chinese knowledge. With this notion of correspondence between wholes, I can turn to a practical illustration in traditional Chinese medicine. The two analogies which compose the doctrine of macrocosm and microcosm can be examined at the extremes of the spectrum where there is a correspondence between the microcosm of the human body on one hand and the macrocosm of Nature on the other.

In Chinese medicine, the whole of the human body was related in detail to the corresponding aspects of the larger whole of Nature. This gives rise in Chinese medicine to what Palos (1974) labels a philosophical anatomy in which parts of the body become experienced as being related to the phenomena of Nature.

By virtue of the universe analogy, the parts of the human body are related to corresponding parts in Nature.

The universe with its dual forces (the Yin and Yang) is a macrocosm. Man is a microcosm, a little universe. Thus, we read that as heaven is round and the earth square, so a man's head is round and the feet square. As heaven has its sun and moon, its order of stars, rain and wind, thunder and lightning, so man has two eyes, a set of teeth, joy and anger, voice and sound. The earth with its mountains and valleys, rocks and stones, trees and shrubs, weeds and grasses, has its parallel on the human body in the shoulders and armpits; nodes and tuberosities; tendons and muscles; hairs and down. The four limbs correspond to the four seasons, the twelve joints to the twelve months . . . . The pulse is of

twelve kinds to agree with the twelve rivers. The heart contains seven holes because the ursa major is composed of seven stars, and the human skeleton has 360 bones for the simple reason that there are the same number of degrees in a circle. (Wong and Lien-te, 1936, p. 21)

This correspondence was not just a loosely held belief, but was actually a part of practical medical knowledge. Hume (1975) remarks that an often heard phrase among Chinese doctors is that the human being is a miniature heaven and earth. For this close relation of the human body and Nature, there is no lesser classical authority than Lao Tse who said: "One may know the world without going out of doors." (Chan, 1963, p. 162) The implication of this is that all the knowledge of the universe is contained within the sage himself.

If we turn to the state analogy, there was within traditional Chinese medicine an equally detailed relation of the microcosm of the human body to the macrocosm of the state. Again, as in the universe analogy, we find a detailed correspondence of the parts of the human body with the parts of the state.

Thus the body of a man is the image of a State. The thorax and abdomen correspond to the palaces and offices. The four limbs correspond to the frontiers and boundaries. The divisions of the bones and sinews correspond to the functional distinctions of the hundred officials. The pores of the flesh correspond to the four thoroughfares. The spirit corresponds to the prince. The blood corresponds to the ministers, and the Chhi to the people. Thus we see that he who can govern his body can control a kingdom. Loving his people, he will bring peace to the country; nourishing his Chhi, he will preserve his body. If the people are alienated the country is lost; if the Chhi is exhausted the body dies. (Needham, 1956, pp. 300-301)

At this point, it may be possible to give more substance to the image of the hierarchy of wholes. I can imagine that on the first plane there is the whole of the human body. This microcosm is related directly to the macrocosm of the second plane of human social structure or the state. Finally, this microcosm becomes related, on the third plane, to the whole of Nature herself. One could almost draw a line connecting the wholes within the planes such that corresponding elements are connected in each whole. For example, on the first plane, we have the four limbs of the body. This corresponds, on the second plane, to the four frontiers and boundaries of the state. Finally, on the third plane, of the macrocosm of the universe, the four limbs of the human body are projected to become the four seasons.

This hierarchy of wholes that I have just considered are experienced as being unified such that changes in one whole are reflected in changes in another whole. For example, changes in the whole of the human world are reciprocally reflected in corresponding changes in the whole of Nature. It is an attractive idea to consider these changes as occurring within a causal framework. I think this is a reading of the Western framework into these relationships. I do not feel that these are causal connections, but rather, more of a sympathetic resonance where changes in the microcosmic human world are reflected in resonant changes in the macrocosmic whole of Nature.

This connection, in my opinion, cannot be reduced by analytic methods to a simple mechanistic interaction of, for example, one billiard ball hitting another. It will be recalled from the above discussion that Needham (1956) expressed the opinion that objects to the Chinese behaved not because of mechanistic impulses but from the general pattern of things, such that "if they did not behave in those particular ways they would lose their relational positions in the whole." (p. 281) This is one way of conceiving of a framework where correspondences between wholes are not mechanistically determined, but are relational, determined by the pattern of the whole. This discussion, if developed, would take us far beyond the modest purposes of this work to dealing with the major interface between metaphysical frameworks in traditional China and the West.\*

Reciprocal relations. In the following discussion of corresponding relationships, I will talk of the corresponding changes of the human body and Nature as if

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\*It should be noted that there have been several attempts on the part of Western thinkers to construct a relational framework similar to the one I am talking about in traditional China. Jung (1973) with his principle of synchronicity and the principle of seriality suggested somewhat earlier by the Austrian zoologist, Paul Krammerer, reported by Koestler (1971), suggest an acausal ordering principle. Progoff (1973) presents an interesting interpretation of the relation of synchronicity and Jung's depth psychology as they are supported by Leibnizian notions of macrocosm/microcosm. These positions are an attempt to approximate the acausal order of the Chinese world by extending the Western framework. At least in the case of Jung, there is a decided Chinese influence, in particular from the I Ching.

they were causal relationships. To the traditional Chinese, they did not have this coloring. This should not be misconstrued as indicating that the Chinese did not experience these relationships; they simply did not make the inferences that a Western mind does when confronted with the correspondence. I am definitely not asserting that changes in one whole are producing changes in another whole in a causal sense.

From the direction of Nature to the human body, I find a smooth, continuous flow. For example, the experienced unity is such, as Needham (1971) notes, that one flows smoothly from the hydraulic to the sociological within the context of the same discussion. In the following discourse, the Duke of Huan is being given counsel by Kung Chung (presumably, an engineer) on the best site for his capitol:

It is the nature of water to flow, but when it reaches a bend (in its channel) it is retarded, and when the bend is full (the water) behind pushes forward that which is ahead. Where the land slopes downward it flows along smoothly, but where it rises (the water) is impeded. (In some places) where the bank curves (the water) becomes agitated and leaps up. When it leaps up it runs to one side. On running to one side it forms whirlpools. After forming whirlpools it returns to its central course. On returning to its central course (and slowing) it leads to a change of course. Changes of course bring fresh stoppage. Thus, impeded, (the water) runs wild. Running wild, it injures men. When it injures men, there arises great distress among them. In great distress they treat the laws lightly. Laws being treated lightly, it is difficult to maintain good order. Good order lapsing, filial piety disappears. And when people have lost filial piety, they are no longer submissive . . . (Needham, 1971, p. 223)

It is interesting to find in the above discourse the ease

with which Kung Chung passes from the physical consequences to the social consequences of hydraulics. One could speculate that to him the smooth flow of water in its river bed is the same process as the smooth flow of human behavior within the channels of filial piety.

In a similar fashion, we can examine the alternative direction: the relation from the human world to that of Nature. Bodde (1957) writes:

The close interrelationship of the human and natural worlds means that disturbances in the one result in corresponding disturbances in the other. Floods, droughts, plagues, and innumerable other abnormal phenomena are, thus, positive evidence of irregularities in human society. (p. 38)

He continues with some concrete examples:

The school of changes and reversions says that the eating of grain by insects is caused by officials of the various departments. Out of covetousness they make encroachments, and this results in the insects eating the grain. When these latter have black bodies and red heads, it is said to be the military officials (who are the blame), whereas when they have black heads and red bodies, then it is said to be the civil officials. When punishment is brought to those officials whom the insects resemble, these insects thereupon disappear and are no longer seen. (p. 38)

It follows from this reciprocal relation with Nature that human beings must be extremely careful in their behavior lest they destroy Nature's order.

The full ramifications of all that has been discussed is that human beings are inextricably linked with Nature within the Chinese experience, in what Needham (1956) has aptly labeled an ethical solidarity. In the West, a human being's ethical behavior is experienced as having

implications for the function of society. Within the traditional Chinese framework, the human being's ethical behavior was experienced as having cosmic implications far beyond the limits of the immediate society.

In the this framework, a breach of moral conduct on the part of a single person was not experienced as an individual problem or even a social problem, but as an indication of a potential or actual disorder in Nature. Needham (1956) writes that because of this experienced ethical solidarity, there was a "basic disquiet aroused in the Chinese mind by crimes, or even disputes, because they were felt to be disturbances in the Order of Nature." (p. 526).

#### FUNCTIONING TOWARD NATURE

It would be expected that the experience of the unity of the human world and the world of Nature would affect the actions of people in traditional China. Again, it is best to begin with a practical area of study and expand this point of entry to a more general statement. I will begin with the functional component of art in the practical area of architecture.

#### Nature in Chinese Architecture

As in the case of calligraphy, approaching Chinese architecture from the perspective of the garden may appear to be unusual by Western standards. Yet it is a clear example of the differences in Chinese and Western values in the placing of human structures in a natural setting. Just

as with the discussion of calligraphy and its relation to traditional Chinese art, the garden can provide a valuable insight into the infusion of Nature into Chinese thought.

The Chinese Garden. The study of the Chinese garden and its relation to the European garden is a vast area of scholarship in its own right. Here, I can only give a passing account of the Chinese garden as it reflects the unity of human beings and Nature and, consequently, affects the function of the architect in building design. As in the case of landscape painting where the majesty of Nature predominates (the ruggedness of mountains, the movement of a rushing stream) Nature and her ruggedness predominate, in a similar manner, in the Chinese garden.

This point is best illustrated by a comparison with the pre-romantic European garden. In the latter, geometric form dominates; Nature is bent to the will of the garden designer through the use of the ruler and compass. Nothing could be more antithetical to the Chinese garden than the gardens of Versailles where everywhere there is the evidence of the human hand forming Nature to the abstract patterns of the human mind.

In contrast, the traditional Chinese garden designer seems to be inspired by the spontaneity of the free forms of Nature. Needham (1956) writes from his own experience:

In my youth I greatly admired the gardens and park of Versailles, but when many years later I visited it again after having become acquainted in the interval with the Summer Palace (I Ho Yuan) at Peking, it was with a feeling of desolation that one surveyed its geometrical arrangement,

imprisoning and constraining Nature rather than flowing along with it. (p. 361)

He goes on to note that the movement away from the geometric pattern in the European garden which occurred in the seventeenth and eighteenth centuries can be attributed, in some degree, to a Chinese influence.

These differences relate to differing assumptions for knowledge in each framework. In the Chinese framework, the human being is to be inspired by Nature with the result that the Chinese garden was designed to continually engage the visitor with differing vistas. The visitor in the Western garden, on the other hand, is confronted with geometric formalism which restricts the perceiver to fixed channels of observation. Tuan (1968) summarizes these differences precisely:

To the question, what is a fundamental difference between the European and the Chinese attitude towards nature, most people with any opinion at all will probably make some such reply: that the European sees nature as subordinate to him whereas the Chinese sees himself as a part of nature. Taken as a broad generalization with a grain of salt there is much truth in this distinction; a truth illustrated with diagrammatic force when one compares the formal European garden of the seventeenth century with the Chinese naturalistic garden. The geometric contrast reflects fundamental differences in environmental evaluation. The formal European garden in the style of the Le Notre was designed to produce a limited number of imposing prospects. It can be appreciated to the full only at a limited number of favoured spots where the onlooker is invited by the garden's design to gaze at distant vistas. Or, seen in another way, the European garden is a grandiose setting for man; in deference to him, nature is straitjacketed in court dress. The Chinese garden, on the other hand, is designed to produce almost constantly shifting scenes: there are no set prospects. The nature of the garden requires the perceiver to move along a winding

path and to be more than visually involved with the landscape. It is not nature that is required to put on court dress in deference to man; rather it is man who must lay aside his formalistic pretensions in order to enter nature.  
(pp. 176-177)

This experienced unity of the human world and Nature in the garden has implications for the function of the Chinese architects, as they approach their work less from abstract design, and more from the ruggedness of Nature herself. The purpose is to integrate the human structure, in the spirit of the landscape painter, integrating human artifacts into Nature as an unobtrusive part of her total pattern, less as something of human origin and more as a feature of Nature herself. Boyd (1962) speaks of the Chinese garden in this way:

And yet man was to be present in this natural landscape, just as in the wildest of landscape paintings there was almost always some human figure, some hut, path or bridge. There was to be no dichotomy or separation between architecture and Nature. There were in fact more buildings and other architectural elements in the Chinese garden than in that of Europe; and this integration of the two things was one of the achievements of the Chinese tradition. (p. 112)

It seems that the position of the architect in traditional China was quite different from that of the Western counterpart. The life and work of these great architect-gardeners have been carefully preserved by the Chinese (Needham, 1971). The relation of the human structure and Nature was always an important aspect of design. Boyd (1962) writes:

The Chinese architects never extended the formality of the building pattern into the surrounding landscape, forcing nature to be

architectural, as we in Europe have done from time to time. True to their philosophy of the place of man in the World, the relation of two things, architecture and nature, was rather the other way around. As Siren has pointed out, the garden was not conceived as a setting for the house; rather the house was a setting for the garden. (p. 112)

Turning to the actual structure of the buildings themselves, the architect did not just design a house, but worked with the relation of the house with its surroundings. Thus, the "house-garden complex" and the "house-courtyard complex" became dominant features of Chinese structures. In this manner, aspects of Nature, gardens and open spaces, were functionally planned as part of the house itself. As Needham (1971) indicates: "In domestic buildings, the courtyard system . . . has the great merit that yards and gardens are made a part of the building, and not something additional and separate." (p. 62)

Structures to blend with Nature. Thus, the architect, like the Chinese artist, is working within the unity of the Tao. The Chinese artist constructs a painting from the context of a whole such that where a brush stroke is not placed is as important as where one is placed. In a similar fashion, the relational nature of architectural structures in traditional China produces a meaning for "empty" space, which surrounds the physical structures. Wu (1963) admonishes his readers that the significance of the courtyard lies in its "emptiness":

Both clearly demonstrate the significance of the courtyard, which as negative space plays a prominent role in forming the 'house-yard' complex. The student of Chinese architecture will

miss the point if he does not focus his attention on the space and the palpable relationships between members of the complex, but, rather, fixes his eyes on the solids of the buildings alone.  
(p. 32)

The total effect of the relational system of architecture is to integrate the human world, the world of the house, with the larger world of Nature beyond. The courtyard system does this quite effectively, for the courtyard has the effect of bringing Nature into the human structure and still providing a measure of privacy. Wu (1963) writes: ". . . horizontally the yard is separated from the street by the wall or by the surrounding buildings, but it shares both the sky and the elements of the weather with other houses and yards." (p. 32)

This courtyard system makes the inhabitant of the house always aware of the space that surrounds and the corresponding conditions of Nature which surround the house. Needham (1971) comments by way of summary: "the spaces between the low houses supply abundant air, and all the windows look out internally onto plants and trees in the garden courtyards. Thus man is not isolated from Nature." (p. 62-63, My italics)

As we move inward from the courtyard and the garden to the house itself, the architect, through the design of the structural features of the house, insured an intimate contact between the place of habitation and Nature. In the earlier discussion concerning the relation of calligraphy and architecture, it was suggested that the curved roof of

the house was thought to be related to the curved strokes of the Chinese character. In a similar vein, the complete structure of the Chinese house is designed much like a character. A character is written on a framework with the strokes placed on this structure. In a similar manner, the architect begins with a timber framework for the house and hangs the walls from it.

The walls serve no support function in the typical Chinese house. The walls of Chinese buildings are always curtain walls and are not bearing walls which support the structure (Needham, 1971). This provides a certain flexibility in design that is not possible in load bearing walls of Western structures:

Every architect is familiar with the logic--and the aesthetic--of separating the elements of support from those of enclosure, the column from the screen, and the advantages of a frame system of structure, providing wide spans, supports of small plan area, a freedom in planning, and a flexibility in use, since walls and partitions are 'moveable' and need not even be there at all, and the plan can thus be completely opened up in any or all directions. The Chinese were quite conscious of these advantages and they fully were used in the Chinese tradition. (Boyd, 1962, p. 24)

Within this construction tradition, the screen walls or curtain walls could be easily moved and removed without disturbing the framework of the house itself. Many times the walls were not even carried up to the full height of the framework (Boyd, 1962).

In general, this form of construction promoted still further the purpose of integrating Nature into the home first made possible by the courtyard and garden. The total effect of the house-courtyard complex and the method of non-supporting walls was to allow the full unity of the human world and Nature such that the human being could always be aware of Nature within the house. Again, Needham (1971) draws upon his own personal experience:

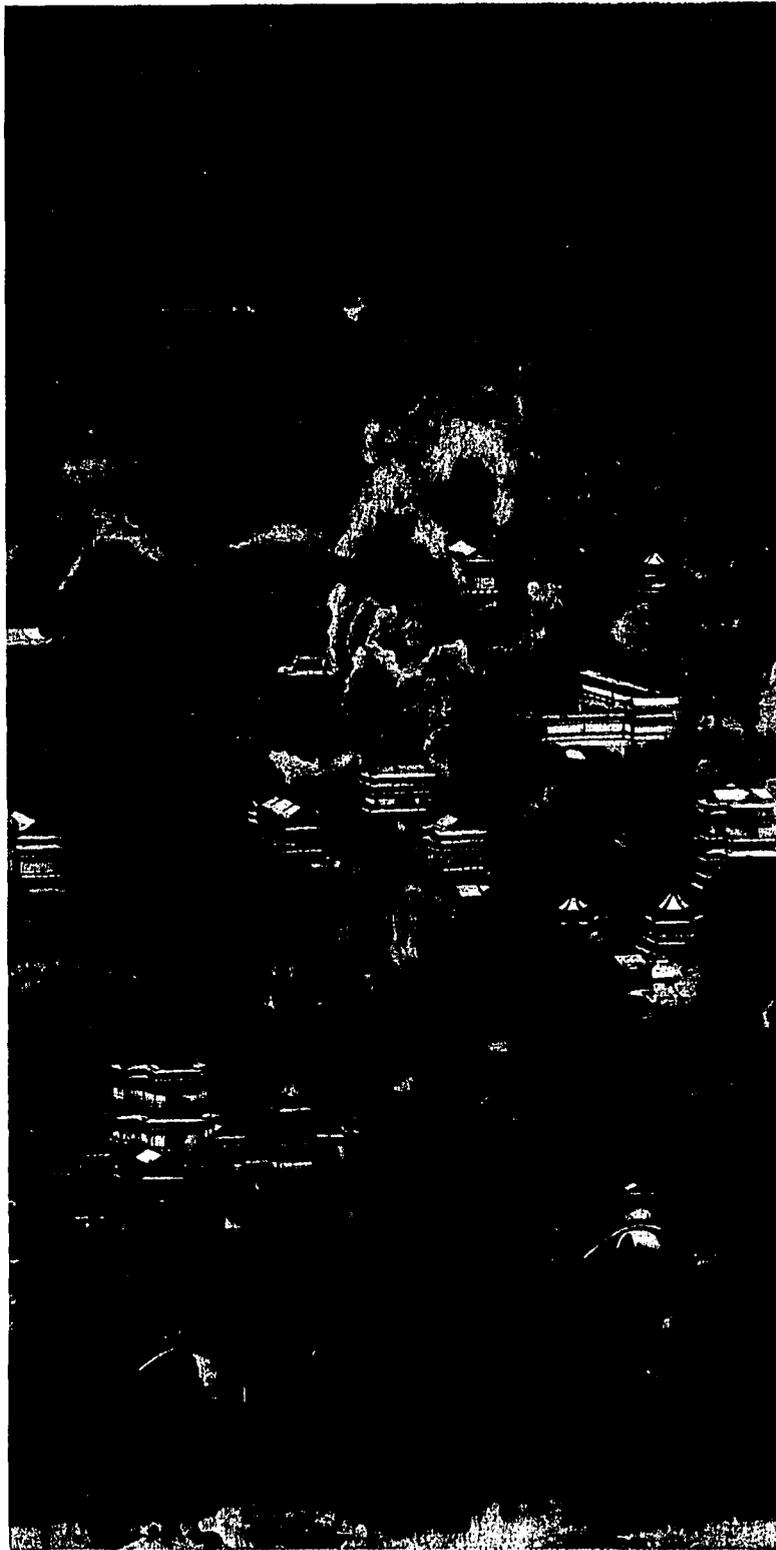
One of my most dominant impressions for sometime after first returning to Europe from China was the sense of loss of intimate contact with the weather. The wooden lattice windows covered with paper (often torn), the thin plaster walls, the open verandahs outside every room, the sound of rain-water dripping in the courtyards and small patios, warmth made individual by fur-lined gowns and charcoal fires--everything gave a consciousness of Nature's moods, of rain, snow, wind and sunshine, from which one is utterly isolated in European housing. (p. 63)

This is quite an acknowledgement of the ability of the Chinese architect to put into action the experienced unity that is so central to the Chinese mind.

In the above discussion, I have concentrated on individual, domestic housing as it was constructed to allow the full relation with Nature. This same blending is equally true for architectural structures on a grander scale. In general, the Chinese did not attempt to impose their architectural forms on Nature, but rather attempted an organic union of the buildings with the natural setting. Even in the case of large and numerous structures, the Chinese chose a predominantly horizontal mode of construction which allowed the buildings to conform to the

Figure 8

The Integration of Architectural Structures with  
the Horizontal Lines of Nature  
(Courtesy Museum of Fine Arts, Boston)



natural contours of the terrain, rather than obtrude from the natural setting. In Figure 8, we have an example of a complex of larger structures as they are made to blend horizontally with the lines of Nature.

It is interesting to compare this to the Western tendency toward vertical lines in structural design. Needham (1971) remembers musing on this very point with a Chinese friend while viewing a great cathedral of Europe. Needham likened the vertical lines of the medieval cathedral or the modern skyscraper to the general tendency of the Westerner to attempt to transcend the material world in theology. While the Chinese with their horizontal lines, tend to be very this-worldly in their theology. We can recall in this context the extreme problems that the Chinese were confronted with in attempting to understand the Nirvana of the Buddhists.

In this characteristic horizontal architecture, I find a material manifestation of a basic tendency at the heart of the Chinese mind: the tendency to prefer the concrete to the abstract, the immediate to the derived, and the this-worldly to the other-worldly. This earth-bound trait not only reveals itself in architecture, but in many other aspects of functioning.

The Tai Chi master Al Huang (1973) makes the interesting comparison between Tai Chi (a more complete discussion of this traditional Chinese dance form will be presented in Chapter VII) and the Western dance form of

ballet. In Tai Chi, he says, there is a constant awareness of a connection between the dancer and the earth, while in ballet the dancer attempts to touch the earth as little as possible to produce an ethereal effect. Again, the nature of the dance is as earthbound as architecture. Many other examples can be produced from other areas which demonstrate this proclivity among the Chinese.

Chinese Geomancy. In the exploration of unity in traditional Chinese architecture, I have progressed from the unity of the microcosm of the Chinese garden to an examination of this same expression in domestic housing, and finally to the unity of relatively large structures. I would now like to examine the macrocosmic implications of this unity by examining how all human structures were harmonized into one whole and how this whole was harmonized with the whole of the cosmos. The system by which this was accomplished was a method of geomancy called Feng Shui, the science of 'winds and waters.' (Needham, 1962)

The basis of this system was the correspondence between the microcosm of the human body and the macrocosm of the earth as suggested above, such that the earth was compared to the human body having veins and vessels corresponding to those of the human body. It follows that the placing of human structures must be carefully planned lest they cut these veins and vessels and, thus, disturb the harmony of Nature. The method of Feng Shui was a method of divination whereby these natural lines of the earth could be determined

and prescriptions made for the placement of human structures. Needham (1962), following Chatley, defines Feng Shui as "'the art of adapting the residences of the living and tombs of the dead so as to cooperate and harmonise with the local currents of cosmic breath.'" (p. 239)

Even though this chapter has concentrated on displaying the unity of the human world and Nature in China, it is still extremely difficult to appreciate Feng Shui which is based on this unity because our own Western experience is so different. Freedman (1966) speaks of his own efforts to understand:

It is difficult for somebody brought up in a tradition which distinguishes sharply between man and nature to grasp at once the basic premise of feng-shui and yet (if I may generalize from my own experience in trying to understand what Chinese geomancy means to people who believe in it) the significance of the premise becomes apparent as soon as the outsider begins to examine a landscape through Chinese categories. One may stand by the side of a Chinese friend and admire the view . . . the combination of hills and sea produces splendid vistas. One's own pleasure is aesthetic and in a sense 'objective': the landscape is out there and one enjoys it. One's friend is reacting differently. His appreciation is cosmological. For him the viewer and the viewed are interacting, both being part of some greater system. The Cosmos, is Heaven, Earth, and Man. Man is in it and of it. So that while my characteristic reaction to a landscape may be to say that I find it beautiful, my friend's may well be to remark that he feels content or comfortable . . . . Man is in Nature. The landscape affects him directly, in the ideal case making him feel relaxed and confident. (pp. 121-122)

It is this experienced unity of the human observer and Nature that is at the heart of Feng Shui. Without this insight the system becomes unintelligible, a mere primitive

superstition, instead of an attempt by the Chinese thinker to deal with Nature from his context quite as much as science is the Western thinker's attempt.

Whenever any human structure was contemplated, a geomancer was called to position this structure according to the lines of divination on the earth. Not only the structures of the living, but most importantly, the tombs of the dead were not constructed without the principles of Feng Shui being applied by a geomancer. In this manner, human structures became related to the whole of the natural world. In a real sense, the unity of the human world and Nature were connected in the sagely experience of the geomancer. This is reflected in the education of the novitiate to Feng Shui:

Education of the eye and the sentiments, familiarization with the local terrain, and at the same time an initiation, this discipline is an indication of the primary place of immediate experience in geomancy. In the last instance, all that counts is how a site feels, the quality of blend of psyche and landscape; if one can feel life breath directly, all else is superfluous. (March, 1968, p. 259)

Feng Shui was not only a descriptive system, but a remedial system as well, not only indicating where structures were to be placed, but also how the unfavorable sites could be more beneficially prepared.

Every place had its special topographical features which modified the local influence of various chi of Nature. The forms of hills and the directions of watercourses, being the outcome of the moulding influences of winds and waters, were the most important, but, in addition, the heights and forms of buildings, and the directions of roads and bridges, were potent factors. The force and nature of the invisible currents would be from

hour to hour modified by the position of the heavenly bodies so that their aspects as seen from the locality in question had to be considered. While the choosing of sites was of prime importance, bad siting was not irremediable, as ditches and tunnels could be dug, or other measures taken, to alter the feng shui situation. (Needham, 1956, p. 359)

Feng Shui not only demanded that human structures be harmonized with each other, but that all structures harmonize with the whole and, ultimately, with the entire universe including astronomical phenomena. There is a certain uniformity of application of the principles of Feng Shui such that the largest whole becomes involved directly with the smallest whole.

For example, in determining the site for the grave of a parent, a geomancer would be called in and, using the method of Feng Shui, he would position the tomb with the characteristics of other human structures on the site, with the structures of Nature herself, such as mountains and rivers, and, finally, with the characteristics of the cosmos itself. In this manner, Feng Shui provided a unified function for the traditional Chinese in all of their architectural projects.

This order was not the result of the dictates of some master plan. It was rather that Feng Shui, uniformly applied at each site, produced an ordered whole with a spontaneity beyond that possible by the calculation of a master planner. Instead of looking to a master plan, in each specific case, one looked to the immediate relationships around the site itself. For example, "within

a village the height and position of a new house are watched with close attention lest it damage the fortune of other houses; and caution must be exercised in modifying an old house (by piercing a wall to make a window, for example) lest a deleterious effect be produced on the Feng-Shui of nearby houses." (Freedman, 1966, p. 139)

Through the consistent application of the principles of Feng Shui in each specific case, the cumulative effect was that all of the human structures were unified into an harmonious whole and this whole itself unified with the whole of Nature. Using this grassroots ordering principle, the traditional Chinese became the first successful urban planners (Breuer 1970).

One of the most dominant features of the Chinese city is its integrated, harmonious order. The Chinese city, like most cities of the ancient world, were not constructed as one whole, but were expanded in stages over time. Because of the uniform application of a few principles on a consistent basis, the result was a unified ordered pattern while the same additive procedures in the Western city produced a chaotic pattern of structures.

The whole city was a work of art. And this was not because it was planned by one mind or even at one time. On the contrary, Peking was the result of growth additions over five centuries . . . It was, as it were, a collective rather than an individual work of art, and the strict limitation of the Chinese system, the constant application of a few principles, its constant following of precedents, far from being disadvantages, were part of the means by which the Chinese city achieved its high degree of harmony and artistic unity. (Boyd, 1962, p. 72)

Boyd goes on to make a very fruitful comparison of the plan of Versailles and the Palace City of Peking. The order of the latter, arising as it does from the simple application of a few principles, displays more spontaneity and artistic integration than that of the former which tends toward geometric form and abstraction where buildings are placed simply to satisfy the requirements of the general plan and the symmetry of the whole. Even when holistic planning is attempted in the West, the whole that results seems to fall short of the harmony and integration of the planless whole and order of the Chinese.

As natural objects are seldom perfect straight lines or angles, there was a tendency to favor irregular contours of the terrain.

There was in general a strong preference for tortuous and winding roads, walls and structures which seemed to fit into the landscape, rather than to dominate it; and a strong objection to straight lines and geometrical layouts. (Needham, 1956, p. 361)

There is a certain parallelism here with the Chinese artist's love for an asymmetry and ruggedness in landscape paintings.

Under the aegis of the harmonizing principles of Feng Shui, the Chinese were counseled to use the wisdom of Nature to shelter human habitations.

In many ways Feng Shui was an advantage to the Chinese people, as when, for example, it advised planting trees and bamboos as windbreaks, and emphasized the value of flowing water adjacent to a house site. In other ways it developed into a grossly superstitious system. But all through it embodied, I believe, a marked aesthetic component, which accounts for the great beauty of the siting

of so many farms, houses, and villages throughout China. (Needham, 1956, p. 361)

Before leaving the topic of the harmonizing of human structures and Nature in traditional China, I should warn against reading into this unity Western values of conservation and ecology. This unity did not serve to preserve Nature in her virgin state. Tuan (1968) makes the point that if one were to compare the "total tonnage of earth removed there may not be so very much difference between European formal and the Chinese naturalistic garden. Both are human artifacts." (p. 177) From a purely ecological standpoint, both the Chinese and the Westerner were engaged in transforming the pristine condition of Nature. It was rather that different ideals and purposes directed these human endeavors in this transformation.

#### The Unified Functioning of Humans toward Nature

The example of architecture easily broadens into a general spirit of human functioning toward Nature, Needham (1971) relates a story surrounding one of the oldest references to the practice of Feng Shui. It is alleged that Meng Thien, after building a particularly large section of the Great Wall, committed suicide because he had through his excavations disturbed the pattern of Nature. Meng Thien was reported to have given the following reason for his suicide:

'Indeed I have a crime for which I merit death. Beginning at Lin-thao, and extending to Laio-tung, I made ramparts and ditches over more than 10,000 li, and in that distance it is impossible that I did not cut through the veins of the earth. This is my crime.' (p. 53)

It can be seen from this that there was the expectation that human beings should respect the veins of the earth as they respect the veins of their own bodies. Human function and the function of Nature were to be closely linked, such that the functioning of the former was a necessary element to the functioning of the latter.

Pathology and meteorology. Again the practical area of medicine is helpful as a point of focus. Changes in Nature were indicative of changes in human health. In traditional Chinese medicine there was a linkage between pathology of the human body and climatological changes in Nature. The underlying unity of pathology and meteorology became the unquestioned medium for much of medical practice, both diagnosis and therapeutic treatment.

It is axiomatic in Chinese thought that all realms of Nature--the macrocosm and all microcosms--are interconnected inductively. The energetic processes of the Cosmos unceasingly modulate the changes that take place in every individual organism. For this reason systematic and qualitatively unequivocal descriptions of temporally variable meteorological, climatological, and immunological influences are needed for diagnosis and therapy of both the exogenous . . . diseases and the epidemic and pandemic diseases. (Porkert, 1974, p. 55)

In this context, an elaborate system of medicine was developed which allowed the doctor to function within this relationship. Palos (1974) gives an insight into what his medical practice entailed:

Ever since ancient times an interrelationship has been observed between climate, seasons, and variations in temperature on the one hand, and a balanced state of bodily health on the other . . . . According to the 'Su Wen', Spring is

the season of increasing vitality, fecundity in Nature, the time of restitution. During this period the liver can suffer harm if Man does not adjust himself to the natural order of things. Summer is the time when celestial and terrestrial forces combine. Particularly characteristic of this season are cardiac diseases and 'the intermittent fever' (malaria). In Autumn the forces between heaven and earth balance out, and this season can be harmful for the lungs. Finally, Winter is the period when Nature rests and it is now that kidney diseases frequently occur. It was noted that windy weather in Spring caused diarrhea and that summer heat brought on feverish illnesses. The autumnal dampness coincided with 'coughing' and the Winter cold with feverish ailments which broke out in Spring. (pp. 34-35)

From the special case of the relation of meteorology to the health of the person, it is an easy step to the more general case of the relation of the natural world to the health of society. In this way, astronomical phenomena, being among the most pronounced of natural phenomena, were related to the condition of the social order.

Astronomy and society. Very early in their development, the Chinese became interested in recording changes in the celestial world. As Needham (1970) notes, the Chinese were the most persistent and accurate observers of celestial phenomena in any culture before the Renaissance. It is no accident that some modern day radio-astronomers use ancient Chinese records to validate their theories. The ancient Chinese were extremely astute and accurate observers of the heavens for this interest was motivated not by the love of abstract knowledge, but by the desire to gauge the events that were occurring in their own society. Their records of

supernova and nova have been found to be extremely valuable. The orbit of Halley's comet was originally estimated from Chinese records (Needham, 1970).

Behind this astute astronomical observation was the state astrology which looked to the heavens for portents of events to come in the political realm. Thus, astronomy became an integral part of the government. This is in clear contrast to the West of the same period where the astronomer was an independent seeker after truth. The contrast is most striking when a comparison is made between the social position of the astronomer in ancient Greece and China:

As has been said, 'while, among the Greeks, the astronomer was a private person, a philosopher, a lover of the truth (as Ptolemy said of Hipparchus), as often as not on uncertain terms with priests of his city; in China, on the contrary, he was intimately connected with the sovereign pontificate of the Son of Heaven, part of an official government service, and ritually accommodated within the very walls of the imperial palace.' (Needham, 1959, p. 171)

To the Chinese, astronomy was the "cardinal science." In addition to observing the portents of heaven, astronomers also had the vital duty of fixing the calendar which in turn would order all of the actions of human beings, especially the actions of the emperor himself. The Chinese firmly held to the notion that "'comets do foretell the death of princes.'" (Needham, 1970, p. 2) Given this ethical solidarity between changes in astronomical phenomena and the political climate in the society, meteorological and astronomical events became an important political force and were used as an important check on the power of the ruler

(Eberhard, 1957).

Responsibility to Nature. Central to this entire discussion is the notion that the emperor was responsible for the harmony of Nature. Thus, any abnormality of this natural order was immediately related to some disturbance in human society. All human beings had a responsibility to maintain a harmonious social order in order to promote a harmonious natural order. Mei (1968) reminds us that there is a persistent importance applied to the responsibility of human beings, where human beings, Heaven and Earth are spoken of in the same breath.

This responsibility was true for all human beings but for the "One Man," the emperor, this responsibility was extremely great, for as the "Son of Heaven" he sat at the apex of all of humankind and at the vortex of the triangle where the human world meets the natural world. It follows that his personal behavior was extremely ordered lest the natural order be disturbed. The emperor was required to travel about his empire with the regularity of the calendar. He had to "regulate his progress so as to find himself in the East during the vernal equinox, in the South during summer solstice, in the West when autumn came and in the North during winter." (Reincourt, 1965, p. 79)

The extent of this integration of the life of the emperor and the changes of Nature was extremely detailed in its correspondence; Wallnofer and von Rottauscher (1965) give the following directives for the emperor's activities

from the Spring and Autumn Annals:

During the three spring months, the emperor remains in the Eastern wing of the Hall of Light (the principal building for cult rituals). He rides in a carriage drawn by green-shimmering dragon-horses. All the banners are green. His officials and entourage are dressed in green gowns and wear jade jewelry. The emperor conducts the sacrificial rites on the palace's East lawn. He orders his ministers to be magnanimous and to exercise gentleness, and to prevent the felling of trees and the taking of arms (wood is destroyed by metal!). (p. 5)

It is interesting to note the detail: the emphasis on green and the prescription of the place (by compass position) in which the emperor must perform the rites.

We can compare the above with the directives for the autumn months:

During the three autumn months, the emperor stays in the Western wing of the Hall of Light. His war-carriage is drawn by white horses. The banners are white. His officials wear white gowns and white jade jewels. He conducts sacrificial rites on the palace's West lawn. The emperor orders his ministers to revise the laws and to conduct the court trials. Dressed in his war habit, the emperor personally takes part in the hunting expeditions. (Wallnofer and von Rottauscher, 1965, p. 6)

If the emperor faithfully performed the rites that were prescribed, it was believed that the order of human society would be integrated with the order of Nature.

It is important to stress that every action or ritual had its proper place and time in the order of Nature. It was not a question of having enough time to do the prescribed activities, as much as needing to perform the correct ritual at the precise time. For example, there is written in ancient texts that "there is upheld the idea that

punishments can only be carried out in autumn, when all things are dying; to execute criminals in the spring would have a deleterious effect on the growing crops." (Needham, 1956, p. 527)

To fail to execute these rituals at the proper time was to court disorder and disaster from the natural world.

Again, the emperor was a model for all humankind.

The smallest actions of the emperor were believed to affect the cosmic mechanism. Thus, the Records on Ceremonial . . . informs us that if the emperor were, in the last month of summer, to wear white clothing instead red, 'even high ground would be flooded, the grain in the fields would not ripen, there would be miscarriages among women.' (Creel, 1949, p. 77)

Such a ritualistic function of humankind toward Nature would not be thought to be fertile ground for the development of scientific ways of thinking. This is not to say that the Chinese were not very astute observers of empirical phenomena. As noted above, the Chinese astronomers maintained extremely accurate records of the heavens and changes in celestial phenomena. They were, for example, the first to observe sun-spots. Yet, something more is meant by science than simply empirical observation. It is the welding of these empirical observations into a theoretical framework that is the essential mechanism of science. In this respect, the Chinese were extremely limited by their experience of unity with the natural phenomena being observed.

The essential scientific process of hypothesis and refutation could not easily function within their system of ethical solidarity. Eberhard (1957) speaks to this point:

But instead of attributing apparent discrepancies, i.e., unusual celestial or natural phenomena, to inadequacies of the theories, such phenomena were thought to be the result of human activity, human interference in the balance of Nature. Therefore, instead of correcting or adjusting the theory, men sought the sources of human interference. (p. 39)

The traditional Chinese thinker was deprived of the basic mechanism by which scientific knowledge is fostered the refutation of hypotheses and the corresponding modification of the theory to account for anomalous findings.

In summary, the Western thinker could play upon the assumption of divisibility and deal with Nature as something separate and objective. The purpose for the knowledge of Nature in China was different to use the assumed unity of the human world with Nature to promote a harmonious relationship, all within the ever present Tao. The Chinese purpose toward Nature could not foster scientific endeavors, but favored an ethical treatment of Nature:

In order to grasp the universal order, man should not dream of knowing and dominating Nature with the help of scientific knowledge, but should seek to integrate himself harmoniously into Nature. Instead of science, he adopted etiquette and ceremony as the suitable agents for the desired integration. Whatever he did or thought, every item of his life had to be 'in tune' with Nature, related by a set of complicated rules to the revered Tao. (Reincourt, 1965, p. 78)

These different assumptions and purposes for knowledge have lead to different actions toward Nature in each system.

## OVERVIEW

This chapter has examined the consequences of the unity of the human world and Nature on the levels of experience and function. Beginning with calligraphy and landscape painting, a feeling of unity with Nature was the central inspiration for the artistic vision in China.

This unity was expanded to the general case in which the human world was experienced as a microcosm in detailed relation to the macrocosm of Nature. In Chinese medicine, the characteristics of the human body were experienced as being in relation to the characteristics of the natural world. Within the state analogy, the characteristics of the social order were conceived as a microcosm of the natural.

This experience of unity was reflected in practical areas of function such as architecture where gardens and courtyards were designed as integral part of human structures. This permitted the blending of Nature with the protection and privacy of a building. A form of geomancy, Feng Shui, allowed a harmonious ordering of all human structures with their natural setting.

In response to this unity, human actions were perceived as having consequences in the functioning of the natural order. In medicine, human pathology was related to meteorological changes, as were changes in the cosmos related to changes in the social world. In this context, astronomy was a most highly valued endeavor. All human beings and the emperor in particular were responsible for

the smooth functioning of the natural order through the maintenance of harmony in the social order. This resulted in ritualistic behavior inhibiting the growth of a system of knowledge based on scientific principles.

## CHAPTER VI

### CONSEQUENCES IN HUMAN RELATIONS

In this chapter, the discussion will turn from the macrocosm of human relations to Nature to an examination of the relative microcosm of the relation of human beings to other human beings. I have taken pains to make this statement in microcosm-macrocosm terms for the purpose of stressing that, at least for the Chinese, we are exploring the same unity, only another plane. This is not a separate section independent of the last, but a further refinement of the unity of humankind and Nature.

As has been stressed above the major priority for the human being in China was to maintain social harmony with Nature. It follows that all social phenomena were experienced as having a large component which was related to Nature; Nature is always assumed to be the background for human interactions. Sometimes this background may be ignored, but at other times, as we shall see below, it is the most important determinant of social structure.

Before beginning the discussion of human relations, two problems which relate to this area should be considered at the outset. Firstly, there is the problem of the extreme complexity of the social history of China. This history extends over at least 4000 years, a period which has seen

the introduction of many different ideas about social structure, the rise and fall of many different social systems, and the elaboration through time of many social ideas. This area does not easily reduce itself to simple relationships which have endured unchanging over time.

Yet within this kaleidoscopic social history, I think most scholars would agree that the Confucian vision of human relations has been the major constancy and pillar for Chinese civilization over the centuries. In the following, I will concentrate on presenting human relations as they were envisioned from the Confucian context. I will deal with conflicting schools of thought only to the extent that they can aid in defining these Confucian ideals.

Alas, even Confucianism is a kaleidoscope of different ideas and has been modified over time. If Confucius were to be resurrected, he would no doubt find it difficult to understand many of the ideas that were propounded in his name by the Neo-Confucians centuries later. To further complicate matters, Confucianism, like any all-embracing system, deviated in social practice from the ideals of the vision itself.

With these admonitions, the reader should be fully aware the following does not represent the full structure of traditional Chinese social thought or even of Confucianism for that matter. In the following discussion, I will attempt to rise above these issues and examine an ideal model of the Confucian vision of human relations.

Secondly, the Western framework of divisibility presents a further problem. In dealing with human relations, the Western framework forces upon us two foci of attention and two areas of discourse--the human being and the society. Within the Western framework, this division is merely "assumed" as a matter of course. For example, the psychologist does not feel it necessary to defend the notion that individual psychological processes can be investigated independently of social variables, but in many cases assumes the division and proceeds to work within this assumed context. In a similar manner, the sociologist does not find it necessary to defend the isolation of social processes from individual processes, but merely assumes that social processes can be known independently of the individual human beings that produce them.

The Chinese framework does not allow such luxuries. If I were to make this assumption of separation, the Western framework would tend to obscure the framework of traditional China which has as its most important feature the unity of human beings and the social process. However, to make this discussion intelligible, I must adhere to Western standards of discourse.

My solution will be a compromise--I shall assume both foci of discourse, the human being and the social process, and attempt to illustrate that in traditional China both foci tend toward the same point, to the unity of human beings with other human beings. In this way, we can begin

to appreciate a framework of unity from the perspective of Western categories of division. What will emerge from the discussion will be the identification of the family as a major aspect of the organization which contains both the individual human being and the social process simultaneously.

#### EXPERIENCING OTHERS

The last chapter presented a point of entry into human relations. It is best to examine the interface between Nature and the social process and expand this entry point to a consideration of social process in general and the individual human being's experience. The pattern that I shall follow is based on the assumption that the unity of humankind and Nature requires a certain unity within human society itself.

#### Human Relations at the Center of Social Process

I wish first to establish social process in traditional China as a viable alternative to Western social structure; and to do this, I shall examine the same condition in both China and the West and observe the different reactions of each. As a point of comparison, I have chosen gunpowder. As is well known, gunpowder was discovered in China and used there for some time before being introduced into Europe. The interesting feature which I want to consider is the alternative reaction of the different social systems.

As Breuer (1970) indicates, the invention of gunpowder did not produce any major changes in Chinese social structure and simply found its way into the arsenal of armies. In complete contrast, its introduction into the social structure of Europe produced catastrophic changes in the social structure. Together with the invention of the printing press, these two forces were instrumental in changing the entire social order from the feudalism of the Middle Ages to the Renaissance, heralding the beginning of the modern era.

In this context, Breuer asks how the same element can produce such different reactions. He goes on to account for this difference by discussing differences in the social structure of feudal Europe and traditional China. What he points to is a difference in the social structure and power structure itself. In short, the power and influence of the emperor in the Chinese social system was much different from that of the feudal lords in Europe when gunpowder was introduced. I would be anticipating the material that will be presented below if I were to account for the anomaly of gunpowder at present other than for the purpose of demonstrating the alternative character of the two social structures. I shall attempt to resolve this issue below.

One civilized humankind. At the outset, it is important to recognize the restrictions imposed by the unity of humankind with Nature. It was suggested that this unity placed a responsibility upon each human being to maintain the order

of Nature through personal action. To the Chinese, Humankind, Heaven, and Earth formed a ternion. Each element of the pattern was equally important. At the apex of all humankind was the emperor whose responsibility it was to perform set rituals at set times to insure the smooth function of Nature.

For this model to function properly, there must be assumed a uniformity of rituals of all civilized human beings. Mancall (1968) writes:

In this sense the Chinese state was not a state at all, in the conventional meaning of that word, but rather the administration of civilized society in toto; and the emperor, far from being the ruler of one state among many, was the mediator between heaven and earth, a cardinal point in the universal continuum, the apex of civilization, unique in the universe. In other words, the emperor was not only a temporal political ruler but a figure of cosmic dimensions. The rituals he performed, or those performed about him, were not particularistic but universal. In the annual fertility rite he plowed the sacred furrow not so the Chinese crops could grow but so that crops per se could grow. (pp. 63-64)

From this linkage of the social and natural orders, two of the major characteristics of traditional Chinese society derive--the necessary unity of all civilized humankind behind the emperor, and the necessity for the basis of the social order to rest on the rituals and personal relations of human beings extending upward from the mass of peasants to the emperor himself.

Like many major civilizations, the Chinese saw themselves as being at the center of the world. However, for the Chinese this view of centrality was taken to an

extreme. The traditional Chinese experience of the world could almost be diagramed in the form of Dante's Hell with concentric circles converging on the emperor at the center and unfolding outward with circles of ever increasing diameter representing lesser and lesser degrees of civilization, until one is delivered in the outermost circle to pure barbarians who did not perform the rituals necessary for civilized human beings.

Nonetheless, all human beings had their respective places in this system as they were contained in the major interface between the human world and the natural. The quite common expression which relates this is T'ien hsia, which is translated, quite literally, "all-under-Heaven." One finds this expression used quite commonly to refer to human society, implying the unity of all humankind beneath Heaven. As Fairbank (1968) indicates, this expression was used to embrace the whole, including everything outside China. He concludes that the dominant Chinese experience of the world was that of sinocentrism.

This sinocentrism, however, must be correctly understood. It was not experienced as the dominance of China as a political entity throughout the world. It must be remembered that the notion of "China" as a political entity is a quite recent development of only the present century. The notion of sinocentrism was more basic: the Chinese experienced themselves as the center of civilized humankind having the only channel of communication with

Nature.

Again, the Chinese reaction to the infusion of Buddhism is a very enlightening case in point. The Chinese conception of civilization led to the rejection of Buddhism not as a competing civilization or system of thought, but as barbarism lying beyond the rituals of civilized humankind. Since, as Mather (1955) points out,

. . . China has never exhibited the kind of xenophobia with which we are familiar in the West, the almost chauvinistic contempt for 'barbarian' culture characterizing nearly all critiques of Buddhism in China seems paradoxical enough. But it was precisely because the Chinese intellectuals did not champion nationalistic culture, but insisted instead on maintaining a universal one, that divergent practices were rejected, not so much on the grounds that they were Indian or Parthian or Kuchean, as that they represented no culture. If the foreign missionaries had accepted this universal culture and lived by its principles, no objections would have been raised. The cultured man (and he is inseparable from the moral man) is one who accepts the pattern of the universe, as it has been perceived and transmitted by sage kings and emperors, and cultivates it within himself. (p. 34)

This salient feature of Chinese social thought perpetuated itself into modern times. Peyrefitte (1977) relates a statement made by the emperor on receiving a British delegation to China in the last century. The emperor stated: "Governing the whole world as I do, I have only one aim in view--to uphold perfect government and to fulfill the duties of the State." (p. 245) It was this quite unrealistic attitude that prevented the Chinese from taking action against the increasing Western incursion into China until the situation was irreversible. Notwithstanding

the reality of Western material and technological superiority, to the Chinese, given their social and cosmic unity, the Westerner was still only a barbarian, not a member of civilized humankind.

Within this experience of the unity of humankind, there was no place for isolated and autonomous groups of human beings. As Fairbank (1968) indicates, even our Western language and ideas seem to fail us for there are no concepts such as nation, sovereignty, and equality of states within the Chinese experience of the world order. All of these concepts suggest a division of human beings into different societies and nation-states which runs in direct opposition to the experience of the unity of all humankind at the basis of the Chinese world order.

In a very revealing contrast, Fairbank (1968) writes of the differences between the European order based on division and the Chinese order based on unity:

The European order, with its interest in precise division of territories and its own concepts of legitimacy, came to depend upon a balance of power among the nation states. The Chinese world order, in contrast, was unified and centralized in theory by the universal preeminence of the Son of Heaven. It was not organized by a division of territories among sovereigns of equal status but rather by subordination of all local authorities to the central and awe-inspiring power of the emperor.  
(p. 9)

Even during the Chinese Feudal period and during the chaotic period of the Warring States, the relation of subordination to the emperor as the Son of Heaven was carefully maintained.

Yet, this experienced unity of all humankind within civilized society extends far beyond the political order itself to every aspect of Chinese civilization. Buck (1970) writes:

The essential unity of China is not in its political life, which has not until the present generation been of great importance. China's unity, so much more profound than our own, consists in its people's coherence as Chinese, the unity of a people who has lived in one part of the world for thousands of years, a unity of history and of habit. To such a people, accustomed to so profound a unity, the mere unity of a transient government means little. (p. 3)

From this context, we can begin to appreciate the phrase: "the experienced unity of civilized human beings."

This experience of unity, of course, became a central concept of the dominant system, Confucianism. Indeed, the unity of all human beings within society is the very essence of this system and the source from which the Confucian vision arises:

The essence of the Confucian vision was that of a 'cooperative world.' It was the conviction that antagonism and suspicion, strife and suffering, were largely unnecessary. It was a profound faith that men's true interests did not conflict but complemented each other, that war and injustice and exploitation injured those who profited by them as well as those they caused to suffer. This was, indeed, a thread which 'ran through' all of Confucius' thinking and from which much of his philosophy can be derived by logical deduction. (Creel, 1949, p. 123)

Basis for social order. The second requirement imposed by the unity of the human world with Nature relates to the basis of the social process itself. If a human being's function affects the function of Nature as I have tried to

establish above, it follows that the smooth function of the social order and, consequently, of the natural order, must be based on the uniformity of rituals of all human beings. Social order, within this system, must evolve from the "grassroots" so to speak. At this point, our Western concepts again seem to fail us, for the basis of the social order in the West is of a reverse nature: Western order is imposed from above to regulate an assumed chaotic system. This is the reason why divine revelation, natural law or social contract become the central issues around which the social process and order revolve.

In China, we find the reverse process where each element displays its own order and, through a summation of these individual orders, the ordering of the whole is achieved. We have already met this inverted ordering principle above in the discussion concerning geomancy. I attempted to establish that the geomancer, working at each individual site, by producing order in the specific was producing order in the general case.

What I am suggesting is a two-factor theory of how order can arise within any given system. One factor orders the system from the specific to the general, while the second factor orders the system from the general to the specific. To take a simple example, if the purpose is to produce order on the highways, we can proceed in one of two ways. We can attempt to order traffic from the general to the specific, in which case we would pass new laws for

speeding and enforce the laws with heavy penalties, increase the quality and quantity of law enforcement, and, as a final effort, place speed controls on every engine manufactured.

However, we could attempt to accomplish the same purpose by moving from the specific to the general. In this case, we would attempt to make individuals through their own actions produce the order in the larger whole. We could, for example, attempt to produce in each driver a sense of religious shame if he should exceed a prudent speed. From the Western perspective, it is extremely difficult even to conceive of how this latter option would be effected, for the Western framework is heavily weighted toward the first factor.

The predominant way to produce order in the Chinese framework is from the specific to the general:

As I see it from my many years in the Orient and my few years in my own country, it seems to me that the two peoples begin thinking from opposite ends. That is, the Chinese reason from the individual to the general, we reason from the general to the individual. That is, the Chinese principles of living, the Chinese essentials of what constitute justice and righteousness are drawn not from any religion, not from any idealism, but from thousands upon thousands of individual cases. (Buck, 1970, p. 64)

To apply this principal difference to the problem of social order, in the West the basis for social order is to be found in the general: in religion from God and his divine revelation, and in the world of science from some discovered laws about the world. In China, the basis of the social order is from the specific to the general with the basis

resting on how human beings conduct themselves.

Within the Western tradition there are few examples to draw upon. A notable and important exception is the philosophy of Leibniz. Within his theory of monads, we find a system of order which, in many characteristics, has an uncanny resemblance to that of the Chinese. The monad is thought to produce, from its pre-established harmony, order in the whole world. While we cannot overlook the fact that this order derives from God, a Western concept to be sure, the philosophy of Leibniz stands out as being signally unique in this regard and has suggested to me evidence of a possible infusion of Chinese thought into European philosophy. For those readers who would like to pursue this speculation further, some preliminary materials are presented in the Appendix.

Returning to the problem at hand, the experience of the social order develops from the relations of individual human beings. This process cannot be isolated within the Chinese perspective from the behavior of individual human beings. Human relations become the source of all social order. The Chinese categorized these relations into five relationships central to the society:

Consider now the Confucian conception of the ordering principle in society. According to the sage's grandson, Tzu Ssu, it involved the establishment of five relationships: (1) Between ruler and subject; (2) between father and son; (3) between husband and wife; (4) between the elder and the younger brother; and (5) between friend and friend equally . . . . There can be no trust in government, no proper relation between sovereign and subject, without a trust of friend and friend. Thus, the first of the five relations

depends on the fifth. But there can be no trust of friend in friend unless men are dutiful to their parents. There is no point more important than this for understanding of Chinese culture, both traditional and contemporary. A proper filial relation in the family is prior to, and the necessary prerequisite for a wider social organization in the business world or in government. (Northrop, 1946, pp. 326-327)

It can be seen that the Chinese conception of social order and social process is based directly on human relations of human beings to other human beings. Further, the relationships themselves are interdependent, with all relations, and ultimately social order, resting firmly on the relation of filial piety.

I would be remiss at this point if I did not examine one of the virtues of the Chinese social process and one of the corresponding dangers of the Western social process. It is quite obvious from the discussion above that, since the social process is based on the function of human beings, the human being is experienced as being at the center of social process and order. In the Western framework of social order, there is a corresponding tendency for the process to be increasingly abstracted from human actions. In the West, the principles of order tend to take on an importance beyond the individuals that have constructed them. There then develops the danger that human beings become estranged from the social process and manipulated by it.

As Marx recognized, there is a tendency in Western economic systems for human beings to be alienated from the means of production. In traditional China, however, a

corresponding danger could not exist, for the economic process has at its heart the function of individuals that produce it. Wilhelm (1947) writing to this point draws the following contrast between the two economic systems:

The leaders of Chinese economic policy, above all Confucius, have always endeavored to place man in a central position in regard to things . . . . No one was allowed to sink to the level of a mere tool. Hence the tendency to have tools as simple as possible and artisans as skilled as possible. The emphasis was entirely on the perfection of men, not on the perfection of means of production. In economic activity it was sought to organize as a natural expression of man. Man was to guard his humanity even in the midst of the economic process. (p. 6)

What is true here for economics is also true for the entire social process. Since human beings were experienced as being at the basis of the process, they were experienced as being unified with that process. Contrastingly, in the West, the social process while still being constructed by human beings for human beings has the tendency to abstract itself from its human origins to become at times an adversary.

#### The Human Being in Relation to Others

I will now assume the alternative focus to the social process and examine the experience of the individual, if you wish the psychological process. It is difficult from the Western perspective to appreciate the Chinese experience of the human being. The individuality of the human being, especially in the modern West, is so much a part of the Western intellectual and emotional apparatus that it is

difficult to assume an alternative point of view. The words of Hsu (1970) are helpful in this regard:

. . . in the American way of life the emphasis is placed upon the predilections of the individual, a characteristic we shall call individual-centered. This is in contrast to the emphasis the Chinese put upon an individual's appropriate place and behavior among his fellowmen, a characteristic we shall term situation-centered. (p. 10)

Hsu's work is an elaboration of this contrast as it is manifest in many diverse areas of human function in each system.

In the West, the predominant experience of others tends to be individually centered with the person being conceived as an isolated ego, almost an atom, functioning among other equally autonomous, isolated centers of consciousness. In this context, the Western ethic reinforces the individual-centered mode of life by fostering values of independence.

In the situation-centered context of China, the tendency is precisely the reverse. The human being is experienced as being in relation to other human beings as an initial condition. Consequently, the Chinese tend to foster inverse values to that of the West: "the Chinese is inclined to be socially or psychologically dependent on others, for this situation-centered individual is tied closer to his world and his fellow men." (Hsu, 1970, p. 10) In China, the individual ego becomes diluted, or, perhaps more precisely, never becomes differentiated, from the matrix of other egos.

A context of relationships. This is not to say that the Chinese have no individual egos, but that this individuality is submerged in the ego's pattern of relationships with other human beings.

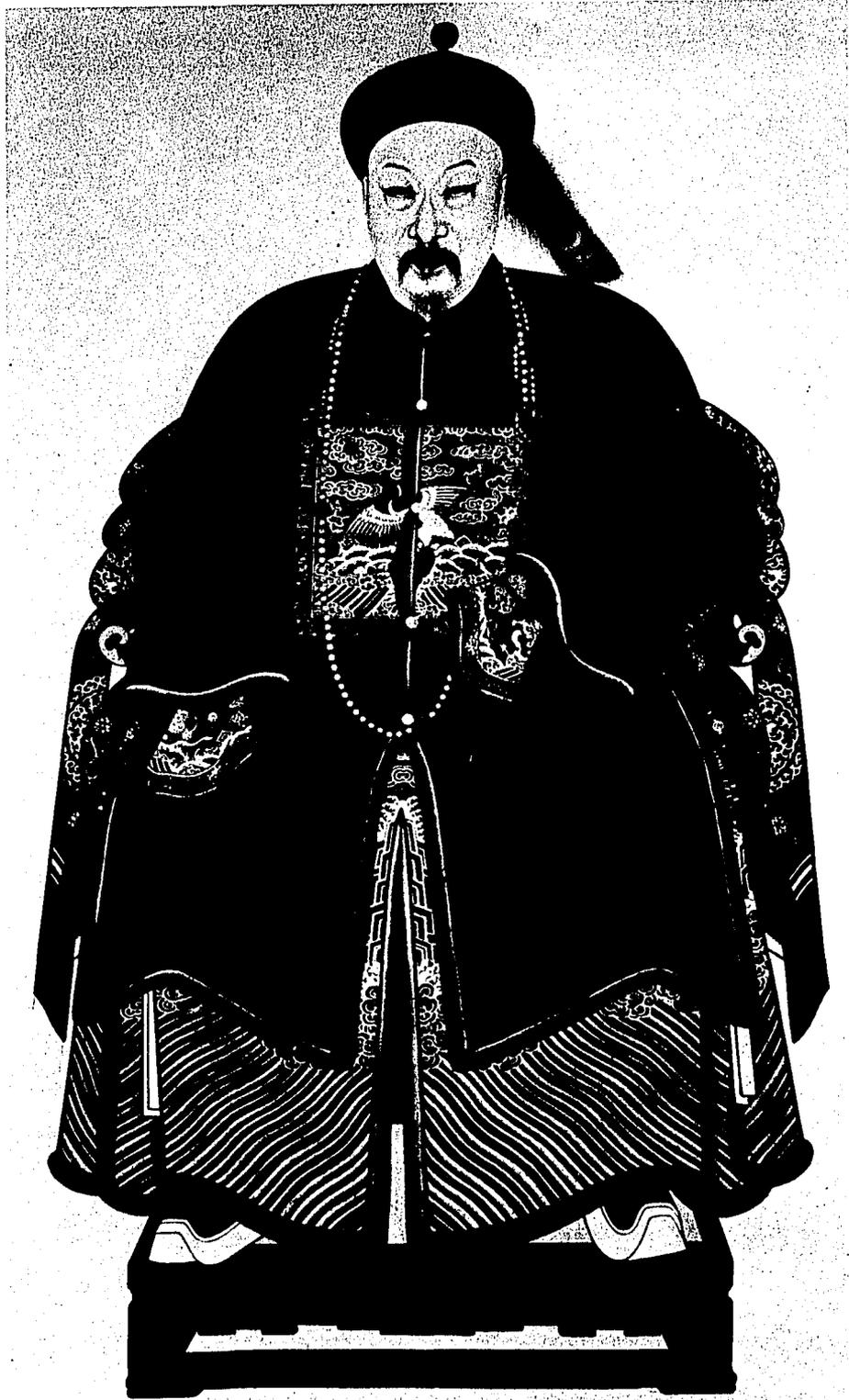
The 'ego' of the Chinese peasant is not in the first place his own insignificant person but embraces the larger ego of the family. The fortunes of the family are the fortunes which he directly experiences. A typical example of this is the answer of a peasant who was asked how long he lived in the locality: 'three hundred years,' he said; 'at that time we came to this neighborhood from the South.' Of course, personal consciousness also exists. The individual is conscious of himself as a separate member of his family. But he does not think of himself abstractly as an individual but as a collective type. He is someone's son, or someone's father, or holds some other position in the family . . . (Wilhelm, 1947, p. 19)

The approach to the individual ego is always through the direction of others and the relations that the ego has with others. To know an individual within the Chinese context, we do not begin with the attributes of the individual as one is inclined to do in the West, but the entire direction is reversed. One must first inquire of the person's status within the social structure, then the family, then the relationship within the family, and, finally, at the ultimate extreme one begins to examine the individual consciousness.

To illustrate this situation-centered experience, I turn to art. I have concentrated above on landscape art which is given form by the Taoist ideal of unity with Nature. However, there are some examples of portraiture which display more of the Confucian ideals and concentrate

**Figure 9**

**An Example of Chinese Portraiture Illustrating  
the Interest of the Artist in the Subject's  
Relations to Other Human Beings  
(Courtesy Museum of Fine Arts, Boston)**



on human beings as their subject. Because of the rather formalized character of Confucian art, the entire area has been treated with benevolent neglect by most scholars of Chinese art who seem to prefer the vitalism of the Taoist landscapes.

Displayed in Figure 9 is an example of Chinese portraiture. The overriding first impression is that of formalism--the subject seems to have very little "personality" as the artist has painted him. This contrasts sharply with the vitalism that characterizes Chinese landscapes where Nature seems most alive. Commenting on such a painting, Hsu (1970) writes:

The facial expression of such figures is nil. The viewer obtains a much better idea of the status, rank, prestige, and other social characteristics of the subjects portrayed than he does of their personalities . . . . In fact when we do see human faces in Chinese paintings, their blankness bears a remarkable resemblance to the expressionless figures portrayed in 'Daughters of the American Revolution.' However, the absence of expression in the Chinese faces results because the Chinese artist is not concerned with personality whereas the very blankness of the features in Grant Wood's work is intended by the artist as a satiric representation of character. (p. 18)

This is quite significant for it is not that the subject of the painting in Figure 9 does not have a personality, as much as it is that the perception of the artist upon which the painting is based is not from the focus of the individual with his independent attributes, but from a preoccupation with others and their relations to the subject.

In seeking to define the human being in China, we are not looking at a single human being or an isolated sliver of living protoplasm as much as a nexus of relationships within an ever wider whole. It is this context of relationships that Cheng (1976) has recognized as being at the center of the Confucian world. He identifies a paradigm which sees all life as interrelated within wholes upon wholes:

Life is not a single part of a whole, but a whole of parts; nor is it an isolated phenomenon which is externally related to external things. For life phenomenon or life experience, an item or part is always internally related to other parts in the whole as well as the whole as a whole. To say that parts are internally related to one another and to the whole is to say that without relation the parts will not be parts and the whole will not be a whole. In this sense, parts and wholes are defined in the relationships in which they find themselves. A part is, therefore, unlike an atom which has its essence independently of relations with other things, nor is it like a member of a class, which is a result of abstraction in conceptualization and which is also independent of the existence of the class to which it belongs as the latter could be granted existence as in Platonism.

The life paradigm is not only restricted to things individually, but extends to the whole world, as the whole world of things is conceived of as resulting from the same source of life, which is the Heaven. The whole world under this conception is a great organic whole and unity with internal relational or interrelational structures in both time and space dimensions. (p. 9)

Again, we begin to see the importance of patterns within wholes. It is not that a part has an essential nature which makes it what it is, but rather that the nature of the thing arises from its position within the pattern of relationships within the whole. Focusing this on the human being, it is the Chinese conviction that to know a human

being one must know the place occupied by this human being in the pattern of relationships within humankind.

This to some degree accounts for the importance of the family, for it is in the context of the family that a human being's relations are defined. The Confucian paradigm of life demands that each individual person be experienced in the proper relation within the total stream of life. The individual is viewed as being embedded in this stream of life not only spatially in present but, more importantly, through time itself.

According to the stream-of-life theory as seen in the family system, immortality is almost visible and touchable. Every grandfather seeing his grandchild going to school with a satchel feels that truly he is living over again in the life of the child, and when he touches the child's hand or pinches his cheeks, he knows it is flesh of his own flesh and blood of his own blood. His own life is nothing but a section of the family tree, or of the great family stream of life flowing on forever, and therefore he is happy to die. (Lin Yutang, 1940, p. 190)

The emotions that Lin Yutang attributes to the Chinese grandfather are certainly universal human emotions of any grandfather toward his grandchild. However, the difference lies in degree, and it is an important difference. The Chinese have made this universal human experience the most central of their culture. This accounts for the care with which ancestor worship is maintained through many generations and the equal care that the younger generation takes for the elder. Lin Yutang (1940) writes: "The Chinese ideal of life is to live so as not to be a shame to one's ancestors and to have sons of whom one need not be

ashamed." (p. 191) This simple principle accounts for many characteristics of Chinese society. The individual is conceived of as a vital connection with the unity of all humankind.

The family. In the institution of the family, one experiences the full stream of life in the concrete rather than the abstract. Scharfstein (1974) gives a concise definition of the family within a context of unity:

Ideally, the family consisted of a number of generations living together in the same household. Because the Chinese believed that spirits of their ancestors remained somehow active and understanding, the spirits were invited to all family occasions. Tablets commemorating ancestors were kept and honored in a special hall. It was supposed that the ancestral spirits, if pleased, would help the family, and, if seriously displeased would cause it harm. The children yet unborn were considered members of the family, which was morally obliged to hand its tradition and property on to them. (pp. 4-5)

From the Western context, it is possible to misunderstand this emphasis on human relationships within the context of unity as an affirmation of Christian values of love for all humankind. Quite to the contrary, the relationships were graduated such that differing degrees of responsibility were associated with various relationships. The love for all humankind would be a most uncomfortable abstraction for the Chinese. They would rather deal with concrete love beginning with the intimate relationships within the family and radiating outward from this source.

Confucianism did not only remain neutral to the unregulated love of all humankind as a basis for society, but was actively involved in a condemnation of such a view on the grounds that to adhere to such a position would destroy the obligations within the family and, ultimately, the society itself. Thus, the Classic of Filial Piety states that "He who does not love his parents, but loves other men, is called a rebel against virtue; and he who does not revere his parents, but reveres other men is called a rebel against propriety." (Legge, 1879, p. 479)

The Confucian position can be contrasted with the system of Mo Tzu (Mohism) which advocated a principle of all-embracing love quite similar to that of Jesus in the West. The reaction of the Confucians was quick and complete. Mohism threatened to dissolve the unity of the family and the graduated love within these familial relationships. For the Confucians, love must be modulated by the five relationships noted above. Mohism was completely suppressed to the extent that only modern scholars have recognized its importance in Chinese thought.

Most central of all relationships was that of filial piety, the relation of the child to the parent. This is the fundamental relationship in Chinese culture because it is the essential linkage between generations, from one's ancestors to one's offspring. It was this filial relation that was the source of all love and benevolence toward others. Yu-Wei (1962) writes: "Hence, the Confucian tenet

'The benevolent man loves others' must be interpreted in the light of filial piety to the effect that 'The benevolent man loves others, with his own parents as the starting point.'" (p. 415)

From this fountainhead of filial piety, it was thought, the other relationships would be ordered in a loving manner.

With genuine and comprehensive love toward one's own parents in its developing process, one may naturally learn to be benevolent to all living creatures, affectionate toward mankind as a whole, loyal to his country and to the duties of a free citizen, faithful in keeping obligations, righteous in action, peaceful in behavior, and just in all dealings. All these eight virtues, moral items, together with many others, may emanate from filial piety through its expansion. The Classic of Filial Piety says, 'It is filial piety which forms the root of all virtues, and with it all enlightening studies come into existence.' (Yu-Wei, 1962, p. 417)

The Chinese favor the immediate, concrete and universal love of the child for the parent as the basis for the love of humankind rather than the abstractions of the West which are given force by the commandments of God or the categorical imperatives of an ethical philosophy.

#### The Centrality of Human Relationships

This discussion has had two foci: the human being and the social process. In both, I have been impressed at the degree to which these two points of focus are inextricably drawn together. In the social process, the dominant conception of the society was that of a network of human relationships. Likewise, the experience of the human being is deeply rooted in human relationships and not in the

attributes of the individual. In this context, the artificial Western distinction between society and the human being becomes blurred and merges into the family structure.

The relations within the family become the major idiom for experiencing the world. It is interesting, for example, to see how the Chinese used the family concept to deal with a foreign doctrine. Nakamura (1964) points to the Chinese interpretation of Indian concepts of atomic structure. Indian knowledge conceived of the world as arising from the union of two primordial atoms. The Chinese interpretation of this relation was in terms of kinship referring to the child atom and the parent atom. As he points out, such concepts were not present in either the Greek or Indian notions of atoms.

The family as a concept becomes the key model for all human experience in China. The family has far reaching implications for all social functions producing many differences in social institutions with respect to the West--for example, differences in the perception of government. Since government is considered in China to be paternalistic, there is no need for laws which protect the rights of the individual:

The most striking characteristic in our political life as a nation is the absence of a constitution and of the idea of civil rights . . . . A 'constitution' presupposes that our rulers might be crooks who might abuse their power and violate our 'rights' which we use the constitution as a weapon to defend. The Chinese conception of government is the direct opposite of this supposition. It is known as a 'parental government' or 'government by gentlemen,' who are supposed to look after the people's interests as

parents look after their children's interests, and to whom we give a free hand and in whom we place an unbounded confidence. (Lin Yutang, 1935, p. 206)

From the perspective of the individual, the isolated person without family ties found it difficult to function in traditional China. The family system was not a structure, but the social structure to the Chinese; the individual and social process were only different aspects of this one structure.

#### FUNCTIONING TOWARD OTHERS

Assuming human function follows from experience, the present discussion is a continuation of what has preceded, only here the emphasis is on function.

#### Relationships at the Center of Social Function

Chinese civilization has maintained an extraordinary integrity over some 4000 years. This must be placed in the perspective of other civilizations. While their contemporaries in Greece soon lost their integral civilization to blend into the greater container of Western Civilization, the civilization of China retained its unity and identity even into the present century. This is a remarkable record, for in no other place on earth has as large a portion of humankind lived for such a long period of time, over such a large land area, as have the Chinese. This is perhaps the best testament to the functional effects of an assumed context of unity.

It is not difficult to understand why many observers have labeled traditional Chinese society as the most successful social system ever constructed. The scholar Latourette (1964) comments: "Nowhere else has any group of mankind succeeded so long a time as have the Chinese in holding together under a single rule so large a section of the earth." (p. 18)

Factors promoting longevity. Several factors are paramount in accounting for this stunning record of success. The first is the experience of the unity of human beings at the heart of the definition of civilization for the Chinese. Contrary to the definitions of the West, civilization was defined as the unity of all humankind. While the Westerner associates civilization with liberty and individual human rights, the traditional Chinese have endorsed the reverse conception where civilization was associated not with individual autonomy but with the human being's responsibilities to others.

Abegg (1952) writes of these differing perceptions of "civilization":

The East Asian has an instinctive aversion as much to the idea of political liberty, as to individualism. He does not regard it as an ideal. By liberty he understands mostly something licentious, uncontrolled and uncivilized. He associates this idea first and foremost with the wild animals of the jungle, or with primitive and barbaric tribes of nomads or hunters. Liberty is for him a kind of barbaric and primordial condition associated with the earliest ages of man. He considers civilization and culture to begin at the moment when men band together in a community and establish a communal, legal, and moral code. Thus, the instincts of the East Asian

and the way he interprets things are directly opposed to ours; for it is generally speaking our wont to characterize lack of liberty and collectivism as barbaric and primitive, as a reversion to a condition we have long outgrown. The East Asians relegate freedom to the jungles, and we, collectivism. (p. 213)

The functional result of this experience of civilization was that the traditional Chinese endeavored to produce a civilization based on the unity of human beings within one social system.

This tendency toward integration can be found in the earliest records of Chinese social history. Latourette (1964) recalls that from 1766-1122 B.C., "the Chinese fostered the idea that all men must be unified under a whole, one unitary government." (p. 32) In the West, government was taken almost by assumption to be the result of the balance of competing interest groups and their interaction. By Shang times, the central features of Chinese civilization, together with the central notion that all China should be under one government, emerged. This vision of civilization was to continue over the centuries, quite unchallenged, until the impact of the West in modern times. Through these centuries, the basis for the function of Chinese society was the conviction that "All truly civilized mankind--as the Chinese understood civilization--must be under one ruler." (Latourette, 1964, p. 33)

Another factor was the very structure of the society itself. The basis for the society rested not so much on the external government as on the grassroots support of the people themselves. This produced a great strength, for the unity of the society was not identified with any one governmental structure, but rested on Chinese civilization itself. Thus, as governments and dynasties rose and fell, the integrity of Chinese civilization maintained itself. Even the conquest of barbarians did not challenge this unity, for as time passed the barbarians themselves became Chinese, assimilating Chinese customs.

Traditional Chinese government, at least to Western eyes, presents an enigma. On the one hand, the Chinese have steadfastly maintained a central government with a defined hierarchy of positions, while on the other hand, paradoxically, this condition of centrality did not lead to rigidity of norms or totalitarian control of every aspect of society. To unravel this paradox, I will examine how this alternative mode of social order was integrated into the governmental structure.

Government. Traditional Chinese government was a centralized government, converging from every point in the empire to the point of the emperor. However, while the power of the emperor was widely recognized and upheld throughout the empire, the structure of the social system and its order from the grassroots demanded almost complete autonomy at the village level. Thus, as Fairbank (1968)

remarks, the rule of the emperor or Son of Heaven

. . . could be maintained over so broad and diverse a terrain and so vast a population precisely because it was so superficial. The emperor remained supreme as a symbol of unity because his officials did not attempt to rule directly in the villages. (p. 8)

It was the nature of the social ordering principle that the central government and the emperor relied on the automatic functioning of society. In this context, the emperor's immediate concern was merely to serve as a model for this order by ordering his own behavior in the manner of self-cultivation. The society did not have to be "ruled" in the active sense of this word; to promote order, the Chinese emperor had only to adhere to certain set rituals and perform certain ceremonies at certain times during the year.

From this personal focus of order in his microcosm as it surrounded him, the macrocosm of his empire would be given, almost automatically, a corresponding order. Needham (1964) reminds us that "the ancient definition of the Ideal Ruler was that he should sit simply facing the South and exerting his virtue (Te) in all directions so that the ten thousand things would automatically be well governed." (p. 144) We find in the role of the emperor quite a contradiction in terms by Western standards--a figure who was openly and unquestionably revered as a symbol of unity and who, at the same time, cared to exert little actual power which, one would think, should develop from such an exalted position.

There was generated then the Chinese proclivity toward non-intervention of the central government in village affairs and the equally dominant tendency to use force only as a last resort. The classical distinction between wei and wu wei is quite illustrative of this:

The central authority relied a great deal upon the 'automatic' functioning of the village communities, and in general tended to reduce to a minimum its intervention in their life . . . . This difference is expressed epigrammatically in the Chinese terms wei and wu wei. Wei meant the application of force, of will-power, the determination that things, animals, or even other men should do what they were ordered to do; but wu wei was the opposite of this, leaving things alone, letting Nature take her course, profiting by going with the grain of things instead of going against it, and knowing how not to interfere. (Needham, 1964, p. 142)

Thus, the wu wei action of human beings toward Nature favored by the Taoists becomes reflected in the wu wei function of human beings in the ideal Confucian society.

As will be recalled, I left hanging the issue of the different effects of gunpowder in East and West. The reason gunpowder failed to radically alter Chinese society as it had that of Feudal Europe lies in the alternative nature of government and the power relations in the two social systems.

Given the wu wei pattern for the power structure of Chinese society, the emphasis was on one central government with little desire in this central government to exert force to govern its people. Consequently, fortresses and independent principalities were not common. In this political context, the introduction of a powerful weapon

like the cannon would not have great moment. As Breuer (1970) asks, in such a power relationship, against whom should the weapons of destruction be employed within the country? There was only one nominal, unquestioned center of power--the Son of Heaven--and his power existed with or without cannons.

Feudal Europe, by contrast, did not have a central authority with many petty princes, each coveting small pockets of humanity from the security of fortified castles. In this situation power and force ruled. With the introduction of gunpowder and cannon, fortified places could now be breached and power centralized. This produced major social changes for the West.

Scholar-officials. In practice, China was governed by a bureaucratic structure managed by a class of scholar-officials. The word "scholar" is here used because the major source of appointment and promotion within the system was scholarship in the Confucian classics. We should pause at this point to note the immense importance of education in Chinese society. In a very democratic fashion, education was an important source of social mobility for families. The fortunes of families rose and fell in relation to the success of their members in the state examinations.

The Chinese very early in their social development (traces can be found from 165 B.C) instituted a civil service examination system. This examination system was

theoretically open to all. There are stories of many a peasant's son who, through diligent study and excellent grades, obtained an important official position. As in any system, the son of a rich man or a man of the official class had a better opportunity to pass the examinations, for his family could well afford the services of a tutor.

The examinations were based primarily on the almost complete memorization of the Confucian classics. In his study, the prospective scholar-official became totally immersed, mind and body, in the Confucian vision of human relations and the unity of all humankind within a Great Harmony. Yang (1959) writes of the content of these Classics:

The Confucian classics are oriented toward the achievement of T'ai-p'ing (Great Peace) through knowledge of the general social order based on a harmonious system of human relations and moral norms. . . . The Great Peace will obtain when things and people are structured into the smoothly operating order of these principles and norms, ideally with all frictions and obstructions eliminated. (p. 138)

Thus, as the scholar-official was graduated to his post and assumed his position in the hierarchy, he tended to function in accordance with this Confucian ideal of the unity of humankind.

This system of examination and education had two profound effects on the governmental bureaucracy. First, it fostered a certain unity and uniformity throughout the governmental system to the far flung ends of the empire. All the scholar-officials would have essentially the same

knowledge and be functioning from the same framework. Throughout the empire there was a unity of purpose and action. Every educated human being read the same language and interpreted the world from the same set of Confucian co-ordinates.

Secondly, a knowledge of human relationships and the Confucian view of the unity of human beings within a cooperative world became the basis for the entire governmental system. Every scholar-official was pulling in the same direction toward the same vision of society.

Contrary to most bureaucratic systems where the specialist becomes highly valued, appointments and advancement in the Chinese bureaucratic order went most often to the generalist with a knowledge of Confucian ideals about human relationships. The person who had knowledge of the Confucian classics and could apply these principles to the relations between people became most highly valued.

Balazs (1964) writes of the requirements for success in the Chinese bureaucratic order:

They [the scholar-officials] did not require any detailed, specialized knowledge. What they did require was worldly wisdom and savoir-faire, and a certain amount of rudimentary knowledge about technical matters together with the fine art of being able to manage people; or, it might be better to say, these duties called on aptitude acquired through experience for planning and directing public works and being in command of the technicians, experts and specialists. The social system did not permit its elite to narrow their personalities by specialization. To know the classics by heart and have a smattering of music, to master the rules of polite behavior and acquire a polished literary style, to be something of a calligrapher and an occasional writer of verse--these were the kinds of accomplishments

considered likely to contribute more to the exercise of social and political functions than would training in some profession or study of the exact sciences . . . . (p. 9)

As a consequence, there arose the belief that a knowledge of the Confucian classics and an ability to apply this knowledge to concrete relations between human beings qualified a person for any position within the society. Yang (1959) quotes Lu K'un who is reported to have said:

'With a deep acquaintance with the principles of human relations and worldly affairs, one can take up any official position, however high; with adaptation to the principles of nature and the inclinations of men, one can accomplish any task.' (p. 139)

To be accomplished in the art of helping people live in harmony immediately qualified one for any duty. In his books, Lin Yutang never tires of quoting Confucius: "'Truth may not depart from human nature; if what is regarded as truth departs from human nature, it may not be regarded as truth.'" (Lin Yutang, 1935, p. vi) It follows that the person who is the most skilled in the art of living possesses the highest truth and must be highly valued by society.

Law. Turning to the practical problems of producing order in the social system, while the West has relied increasingly on the law for the basis for this order, to the Chinese, law was considered to be rather unimportant. The major importance of the law was its punitive action, in an attempt to restore the harmony of the social order with that of the natural order lest this disruption of the social microcosm

have cosmic consequences.

Law had a very degraded position as contrasted with the position it has had in almost any other civilization. To set the tone for this discussion, I mention two comments which illustrate this point. Lin Yutang (1940), for example, writes in his usual flippant style that in China all quarrels and disputes are settled at dinner tables instead of at the court of justice. In the same vein, a Chinese proverb reads: win your lawsuit and lose your money.

The Chinese perception of the law was extremely negative in comparison to the honored position it is given in most societies. Bodde and Morris (1967) write:

"What is really arresting, however, especially when we remember the honored status of law in other civilizations, is the overt hostility with which its appearance is initially greeted in China--seemingly not only as a violation of human morality, but perhaps even of the total cosmic order." (p. 13)

This degraded position of the law, it would seem, has its roots in the unique structure of Chinese society: in the nature of the social ordering principle placing an emphasis on individual morality and on the interface of the social and natural orders within the microcosmic and macrocosmic dimension.

Within this conception, people's virtuous behavior was the source of the order, not the abstraction of the law. As a consequence, an appeal to law to settle a dispute was used only in the last resort, when all else had failed. As

Meskill (1973) writes: "an appeal to law often had the connotation of a failure in virtue. The resort to law meant not so much a confirmation of rights as a way of reaching a decision when more civilized means had failed." (p. 86)

Law was conceived as having a dubious and dispensable role in providing for order in the society. On this point the two great sages of China are in complete agreement.

Confucius says:

Guide the people with government measures and control or regulate them by the threat of punishment, and the people will try to keep out of jail but will have no sense of honor or shame.

Guide the people by virtue and control and regulate them by respect, and the people will have a sense of honor and respect. (Minick, 1974, p. 94)

In a more laconic manner characteristic of Taoism, Lao Tze says essentially the same thing: "the greater the number of laws and enactments, the more thieves and robbers there will be." (p. 94)

Both of these statements assert the superiority in the Chinese mind of virtue over the law. The argument is that if each individual's behavior in relation to other human beings is virtuous, there will be no need for laws and a legal system; society would become automatically ordered. Thus, Confucius says: "In hearing litigations I am like anyone else, but what is necessary is to cause the people to have no litigations!" (Legge, 1970, p. 364) In the Chinese mind, to become involved in litigation was an humiliating affair to be avoided at all costs.

Law as punitive. Another source of the devalued position of the law in China relates to the perceived interface between the social order and the natural order along the microcosm-macrocosm dimension. As noted above, disruptions in the social order were experienced as being disruptions in the natural order. This interrelation leads to what Bodde and Morris (1967) call a naturalization of the law. Within this conception, the law was not to function only in the social sphere, but was to be instrumental in redressing relationships in the whole of the social-natural world.

In the Chinese legal framework, the law was less--if at all--the protector of human rights than the administrator of punishments. This is evidenced in the overriding penal nature of the law, with minimal concern being given to civil matters.

The law was only secondarily interested in defending the rights--especially the economic rights--of one individual or group against another individual or group and not at all in defending such rights against the state. What really concerned the law--though this is to be surmised rather than explicitly read in Chinese legal literature--were all acts of moral or ritual impropriety or of criminal violence which seemed in Chinese eyes to be violations or disruptions of the total social order. The existence of the norms of propriety was intended to deter the commission of such acts, but once they occurred, the restoration of social harmony required that punishment be inflicted to each retribution from their doer. In the final analysis, a disturbance of the social order really meant, in Chinese thinking, a violation of the total cosmic order because, according to the Chinese world-view, the spheres of man and nature were inextricably interwoven to form an unbroken continuum. (Bodde and Morris, 1967, p. 4)

In this context, law always had the connotation of

punishment. There was the tendency to refer in their legal system to penal laws as punishments (hsing) instead of as statutes (fa or lu). (Bodde and Morris, 1967)

Thus, there was yet another reason for people to avoid litigation at all costs for fear of punishment. The courts were almost bound to administer some punishment, even if it be a token one, for any crime brought before it. Holcombe (1895) relates that an ancient rule of procedure in Chinese courts was to have both litigants flogged before the case was to be heard. The purpose of this procedure was "to warn them not to rush lightly into litigation." (p. 213)

Acquittals of a defendant were extremely rare. The legal framework demanded that if social order had been disrupted, a punishment must be administered to return the system to a state of balance. It was thought that no matter how occasioned the defendant's crime demanded punishment. As a case in point, Bodde and Morris (1967) relate that once  
a

. . . district magistrate, riding in his sedan chair at dawn through a driving rain to participate in the sacrifices at the Confucian temple, was borne before he knew it beyond the outer enclosure where, according to ritual, he should have dismounted. The Board's conclusion is that 'his failure to dismount from the chair in time, though occasioned by the great accumulation of rain water on the ground and the error of the chair bearers, nevertheless constitutes a violation of the established regulations.' It accordingly sentences him to 100 blows of the heavy bamboo and dismissal from his position. (p. 181)

Behind this rather harsh decree of the Board is the naturalization of the law and the need to restore harmony to

the natural order:

. . . a criminal act is not merely a violation of the human order, but also ipso facto of the total cosmic order of which the human order forms a part. In order to restore the original state of cosmic balance, therefore, a punishment precisely corresponding to the original violation must be exacted in return. (p. 182)

The function of the legal system in China transcended the mere administration of justice in some abstract manner; it was most concerned with the delicate task of administering punishment to the guilty in the degree to which their crime had upset the balance of the natural world. The task was a difficult one because the balance must be just restored, and in no circumstances should punishments be too harsh, for this too would endanger the balance.

Bodde and Morris (1967) write:

. . . crimes produce discord; once a crime is committed, harmony is restored by suitable punishment. An inept punishment is as bad as, or worse than none; it will not restore natural harmony; on the contrary, it will disrupt order still further. (p. 497)

It was common practice to pronounce sentences and execute punishments even after the individual offender had died. If this ultimate administration of the law were not effected, the continued presence of the case on the books would otherwise make impossible the task of repairing the imbalance in cosmic harmony originally caused by the offense. (Bodde and Morris, 1967)

Propriety over law. If abstract law was not to be the basis for social order, the concrete actions of individuals were to be. Social order was to arise from individual function and not be imposed from without. To make this point clear, it is helpful to distinguish between the Confucian position and that of a competing school, the Legalists, and, in this context, to distinguish between the social order of the Confucians based on li and the social order of the Legalists based on fa.

As a school the Legalists, or School of Law (fa chia), was less theoretical than the Confucians. The Legalists in general were practical men who had as their purpose the construction of a strong empire with a central authority which actively administered through a system of laws which were fixed and known beforehand. Thus, everyone's behavior could be evaluated against a fixed standard.

Quite in contradiction to the general trend of Chinese society, the Legalists had great faith in the laws to provide for a stable social order. Bodde and Morris (1967) give this example of the Legalist position:

'For governing the people there is no permanent principle save that it is the law (fa) and nothing else that determines government . . . . He who rules makes use of the many while disregarding the few, and hence he concerns himself not with virtue but with law (fa) . . . . In governing a state, the regulating of clear laws (fa) and establishment of severe punishments (hsing) are done in order to save the masses of the living from disorder . . . .' (pp. 25-26)

It is clear that the Legalist advocacy of the law (fa) runs directly counter to the Confucian and dominant Chinese view

that the function of society and its social order cannot rest on the law, but on personal action and virtue.

In contrast to the Legalist glorification of the law, the Confucians put their faith in li. The term li, like many central concepts in Chinese knowledge, has some ambiguity associated with it, given Western criteria for definition. The term originally referred to the cutting of jade along its natural cleavage. The term is most often translated into the English by the word 'propriety.' In the Confucian world, it referred to the virtuous behavior of the individual--the following with meticulous care the prescribed rituals and rites. At the center of the li and its meaning was the Confucian concept of human relationships. In the most general sense, li was "a designation for all the institutions and relationships, both political and social, which make for harmonious living in a Confucian society." (Bodde and Morris, 1967, p. 19)

Mu (1962) believes that it is significant that the term li has been translated many different ways in European literature as "ritual," "decorum," "courtesy" and "propriety." This indicates a significant difference between the two systems. He writes:

When we give different names to ideas like 'propriety,' 'morality' and 'manners,' which are connected with and partly similar to each other, we emphasize their differentia at the expense of their common nature. To the western mind, these ideas carry different ethical values so that being immoral, for instance, is considered worse than having bad manners. To the Chinese, however, the undifferentiated term li, by constantly making people think of what is common among manners, morality, decorum and so on, gives all socially

approved actions in China a single motivation and ethical support and makes all 'proper' behaviour, from good manners to charity, equally important.  
(p. 51)

Li was closely tied to and reinforced by the key Confucian human relationships:

The five major relationships of Confucianism--those of the father and son, ruler and subject, husband and wife, elder and younger brother, friend and friend--are instinctive to man and essential for a stable social order. The li reinforces these and similar relationships by prescribing modes of behavior differing according to status, whereas law obliterated the relationships by imposing a forced uniformity.  
(Bodde and Morris, 1967, p. 21)

Since the Legalists wanted to administer an abstract law to order the entire society and the Confucians preferred the order of the li, a conflict between the two approaches was inevitable. The basis of the Confucian criticism of the fa of the Legalists, as Needham (1956) notes, is that

. . . since correct behavior in accordance with li always depended on the circumstances, such as the status of the acting parties in social relationships, to publish laws beforehand which could take insufficient account of the complexity of concrete circumstances, was an absurdity.  
(p. 545)

In short, it seemed ludicrous to the Confucians to attempt to evaluate the virtue of a particular action before the action had occurred.

As an historical fact, the Legalist position did gain power in the third century B.C. However, the triumph of the Legalists was short lived, perhaps due to the harshness dictated by their own system. Much of the structure of the Chinese legal system owes its existence to this brief period

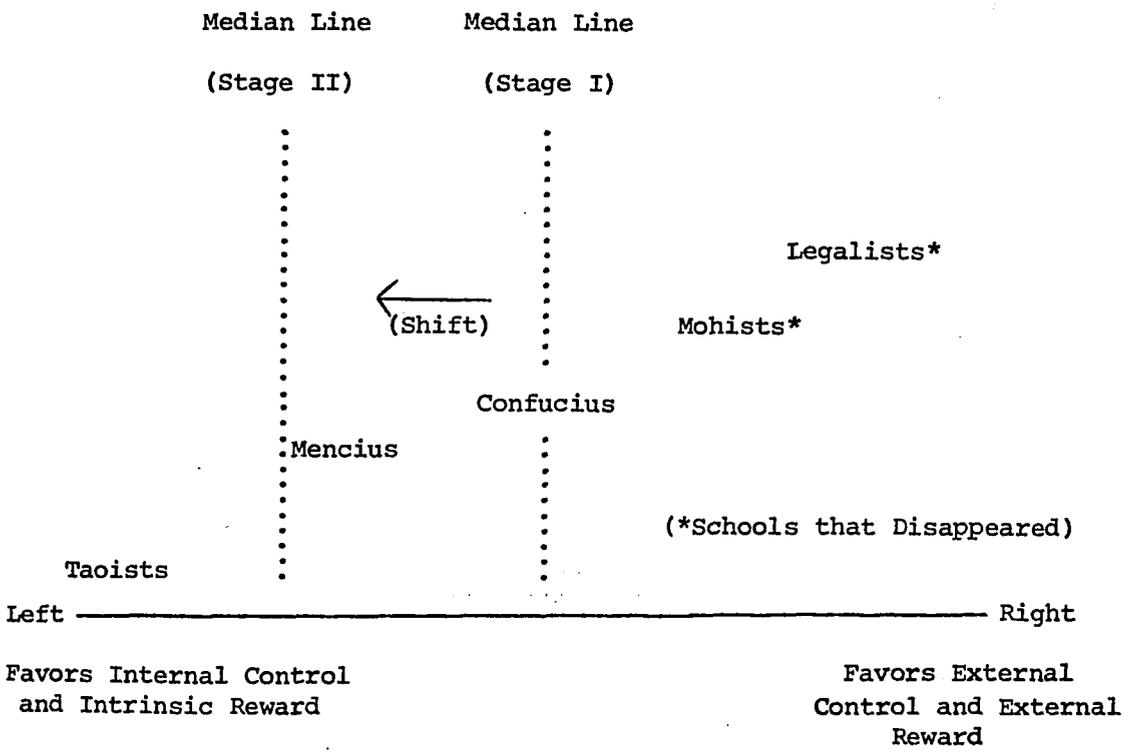


FIGURE 10

THE TENDENCY AND HISTORICAL SHIFT TOWARD INTERNAL CONTROL IN THE MAJOR SCHOOLS OF CHINESE THOUGHT (AFTER CHIANG, 1971)

of Legalist domination. Following their decline in power, the Confucian vision was again the guiding force for Chinese society. There followed a process which scholars have labeled the "Confucianization of the Law." Within this process, the Confucian ideal of the li slowly began to moderate and subsume the positive law (fa) of the Legalists.

This historical example tends again to stress the general tendency in Chinese thought to view the source of social order as resting with the individual and individual function rather than with some independent process external to the individual and imposed from without. Of the many positions taken by the numerous schools and social thinkers of China, this general trend remained dominant.

These historical relations are presented diagrammatically by Chiang (1971) in Figure 10. The median line at stage I (before the second century B.C.), lies with Confucius and favors "internal control." With the disappearance of the Mohist and Legalist schools in the second century, the median line shifts even more toward the left. It is clear that even given the great diversity of different schools of social thought in China, the overriding tendency in Chinese social thought has been toward a reliance on the self-directed behavior as a source of order.

The li was a representation of this personal ordering principle as it permeated all human action and resulted in an ordered social system. This system of the li was thought to be able to go beyond the shortcomings of a legal system

of order. Mu (1962) summarizes:

. . . what the Chinese called li is manners, custom, ritual, moral code all mixed together. It has a communicative function in that it provides a means by which people can understand but not embarrass each other; an artistic function in that it satisfies and regulates man's desires by giving his emotions articulate expression; and a social function, in that, based on experience, it defines the acceptable and safe limits of conduct and thereby ensures peaceful relations. It is only in the abstract, however, that the distinction can be made between these functions. For example, losing temper is giving up lucid expression, calling forth wild and violent feeling and making oneself disagreeable to others, all at once. The law as such may not carry any ethical sanction and clever offenders will break it in spirit but not in letter; moral philosophies may be interesting as academic theories, but carry no moral compulsion; but the Chinese li, being a habit to which each individual is trained, benefits even those ignorant of law and incapable of philosophies. To conform to li in its manifold aspects is a uniform duty of every member of the society because no matter whether a man is acting with good manners or participating in established ceremony he is maintaining an order through which the Chinese society stands. (pp. 59-60)

In this way the li became the mainstay of the social structure providing a broad and resilient base upon which the Chinese culture could be anchored. So universal and simple was the li that the concept could appeal to all sections of the empire, to people of great learning as well as to the illiterate peasant.

#### Human Function in the Context of Relationships

From the perspective of the individual, it would be anticipated that the individual's function will be modulated by the structure of human relationships in which he is embedded. It is helpful to keep in mind that the

relationships were themselves graduated, centering around the relation of the father to the son. Following this graduated nature of relationships, it would be expected that the human being's responsibilities and function would be correspondingly graduated and correlated with the ordering relationships.

Relationships and behavior. In the following discussion, I will concentrate on relatively extreme conditions of human conduct, i.e., life and death conditions. The false impression should not be given that these extreme examples of the modulation of human function by relationships are in any way abnormal. I have simply focused upon these cases because the society has taken particular care to make the relationships as explicit as possible. However, in more mundane aspects of human function, the same principle of modulation holds.

Reverence within the context of human relationships was viewed as the basis for human function, the source of all the harmony in the world. Thus, we read in the Classic of Filial Piety:

The Rules of Propriety are simply (the development of) the principle of Reverence. Therefore, the reverence paid to a father makes (all) sons pleased. The reverence paid to an elder brother makes (all) younger brothers pleased; the reverence paid to a ruler makes (all) subjects pleased. The reverence paid to one man makes thousands and myriads of men pleased. The reverence is paid to few and the pleasure extends to the many; that is what is meant by an 'All-embracing Rule of conduct.' (Legge, 1879, p. 482)

The meaning here is quite clear: if human beings use reverence as a rule of conduct in their relationships with others, the result will be harmony and pleasure throughout the entire society. In the Confucian system the behavior of the individual was always thought to go beyond the immediate effects of the personal world to become the ordering principle for the entire system.

Beyond mere reverence and respect in relationships, the manner of human function was carefully and precisely modulated by the degree of relationship. As a preliminary example, I will examine the institution of revenge as it was practiced in traditional China. As Chu (1965) notes, the obligation to revenge was formulated in terms of the five relationships. Further, since the relationships were themselves ordered, the obligation to revenge was modulated in respect to the degree of relationship. Chu writes: "The five human relationships are not equated in Chinese thought and thus the obligation to revenge varied according to the relationship between the victim and the avenger." (p. 79) To illustrate this modulation of revenge we find the following passage in the Li Ki translated by Legge (1926):

Sze-hsia asked Confucius, saying, 'How should (a son) conduct himself with reference to the man who has killed his father or mother?'

The Master said, 'He should sleep on straw, with his shield for a pillow; he should not take office; he must be determined not to live with the slayer under the same heaven. If he meet with him in the market-place or the court, he should not have to go back for his weapon, but (instantly) fight with him.'

'Allow me to ask,' said (the other), 'how one should do with reference to the man who has slain his brother?'

Figure 11

The Self as Embedded in a Network of Relationships to  
Others which Modulates the Self's Mourning  
Behavior to the Deceased  
(After Legge, 1926)



'He may take office,' was the reply, 'but not in the same state with the slayer; if he be sent on a mission by his ruler's orders, though he may then meet with the man, he should not fight with him.'

'And how should one do,' continued Sze-hsia, 'in the case of a man who has slain one of his paternal cousins?'

Confucius said, 'He should not take the lead (in the avenging). If he whom it chiefly concerns is able to do that, he should support him from behind, with his weapon in his hand.' (p. 140)

In this case, a human being's function in revenge is modulated by the avenger's relationship to the victim. The filial relationship of the son to the parent was regarded as the paramount relationship, and consequently, the death of a parent through foul play required the highest obligation for revenge. Confucius makes it quite clear that the son should not live "under the same heaven" with the slayer meaning that the son is not to live in the same world with the slayer of a parent. As one moves down from this paramount obligation to the lesser relationships, the avenger's required function is equally lessened.

While the example of the modulation of human function within revenge illustrates the principle clearly, it fails to do full justice to the complexity and precision with which the prescriptions for action were given within Confucianism. To make this aspect more available, I will now consider the area of responsibilities to the dead through mourning behavior.

Figure 11 represents, diagrammatically, the web of relationships which surround the individual and how these relationships modulate the mourning behavior of the

individual in respect to the deceased. There were five degrees of mourning differing in the duration of time in which mourning rites were to be maintained. These degrees of mourning were correlated with the self's relationship to the deceased. Because of this correlation, the closeness of relationship becomes defined according to the individual's place in the mourning system and visa versa (Chu, 1965).

Note for example that the mourning behavior demanded of a son for his father is of the first degree requiring a duration of three years, while the degree of mourning for an uncle and his wife is only the second degree requiring a duration of mourning for one year. A careful examination of this diagram is particularly rewarding for it not only gives substance to the notion I expressed above that the human being or individual self is embedded in a matrix of human relationships, but it also illustrates the integration of the self with other human beings in both time and space. Note that the "great-great-grand father" occupies a place in the matrix of human relationships and modulates the mourning behavior of the self quite as much as contemporaneous relationships do.

I cannot leave Figure 11 without noting the complexity and precision with which these relationships are presented. For example, note the remote relationships included--"the Wife of 1st cousin twice removed" or "the Great grand-nephew's wife." Such examples tend to underline the preoccupation with human relationships in the Chinese mind.

Even in the most elaborate kinship system in the West, one seldom finds such an intricate and complex structure of relationships.

Another interesting observation is the change of an individual's mourning behavior when the relationship of others change. For example, the duration of mourning for an unmarried sister is of the second degree requiring one year while for the same person when married it is of the third degree requiring only nine months. Thus, the same person's position in the system changes with respect to that person's relationships with others.

As I examine the structure of relationships in Figure 11, I am impressed by the holistic, field-like character of human experience and function. The impression that I get is that of a fish swimming in a sea of human beings with the fish modulating its direction and speed by the contours of the currents in the body of water. The central current, the central relationship, is that of filial piety.

Filial piety. Since the filial relation was seen as being the "root of all virtue," it not only modulated the son's behavior directly, but also modulated in great degree all of the human relationships in the society. So in the examination of the responsibilities of the son to the father in terms of required behavior, we are really examining the full spectrum of human function. The Classic of Filial Piety states: "He who loves his parents will not dare (to incur the risk of) being hated by any man, and he who

reveres his parents will not dare (to incur the risk of) being contemned by any man." (Legge, 1879, p. 437)

It is difficult for the Westerner to appreciate the imperative that the filial relation holds for the Chinese mind. To attempt to illustrate this, I will relate a story from contemporary China found by Hsu (1970) in a North China newspaper. It tells of Chang and his wife who left their home to work in the coal fields of Manchuria.

Chang's wife died while there and was entombed. Finding that he must leave, Chang unearthed his wife's corpse and ventured with his small children toward their home. Unable to afford transportation, he walked with his human cargo several hundred miles. During their journey, a thief, thinking the bundle valuable, stole it.

Through various means, Chang was able to recover the body from the authorities who subsequently required that he bury the corpse locally. Whereupon Chang replied: "'burial here will never do. Even if I agree, my sons will object. I carried her over a thousand miles. I used the bundle as a pillow every night, but I am still not sick!'" (pp. 1-2) Chang was allowed to return to his home and bury his wife.

After reading this story, the Western reader is no doubt puzzled as to why Chang felt such a deep conviction to act as he did. We can certainly understand the love of the husband for the wife, but the Westerner finds it difficult to understand the extremity of Chang's behavior simply from the context of this single motivation.

At the heart of his behavior was the filial relation,  
as Hsu (1970) comments:

. . . to be buried with body intact in the village of one's birth is, to the Chinese, part of the complete life, and it is a son's obligation to carry this out. Because the miner's [Chang's] children were too young to bury their mother, the father acted for them, regardless of whatever hardship this entailed. (p. 2)

In both life and death, the filial relation must be adhered to. The relation becomes the ultimate container for all living human beings. Again, from the Classic of Filial Piety: "The services of love and reverence to parents when alive, and those of grief and sorrow to them when dead--these completely discharge the fundamental duty of living men." (Legge, 1879, p. 488)

As another example, consider the situation posed by Buck (1970). The scene is a simple one: a family of father, mother and son are strolling by a lake when far out upon the water a man is seen going down for the last time. The son leaps into the water and attempts to save the drowning man and the son is himself drowned in the attempt. Now, evaluating this train of events from the Chinese and Western contexts leads to a different feeling about the action of the son:

An American son would leap into the water to save a stranger, without thought, probably, of his parents. Indeed, his parents would be proud of him, and would consider him a hero. If he lost his life, it would be a melancholy comfort to them that he lost it in saving someone else. Thus, his action might even bring honor to his parents. Not so a Chinese son. A filial Chinese son would remember his parents and would reason that his body belonged to his parents, not to a stranger, and that he therefore had no right to leap into

the water at all. If he did so forget himself as to think of the stranger as a human being and put out his hand to save him and thereby lose his own life, he would bring actual shame to his parents. He should have had more control--he should have thought of them first, of their dependence upon him emotionally, of his duty to them all his life long. He may not risk his life so heedlessly. (Buck, 1970, pp. 61-62)

Two points present themselves from this example.

First, filial piety, for the Chinese, is a perennial modulator for human action through every second of life. There are no times when this principle may be forgotten. Secondly, filial piety is an indispensable standard for the evaluation of a person's behavior. The actions of the son cannot be evaluated apart from the human relationships in which he is embedded.

Before leaving the consideration of the modulation of human behavior through the relation of filial piety, I should attempt to relate the full spectrum of this modulation from the small and seemingly unimportant to the area of extreme sacrifices that are obligated. At one end of the spectrum, we find the following passage from the Li Ki:

When his father or mother is ill, (a young man) who has been capped should not use his comb, nor walk with his elbows stuck out, nor speak on idle topics, nor take his lute or cithern in hand. He should not eat of (different) meats till his taste is changed, nor drink till his looks are changed. He should not laugh so as to show his teeth, nor be angry till he breaks forth in reviling. When the illness is gone; he may resume his former habits. (Legge, 1926, p. 83)

Here, we find the filial relation modulating the commonplace aspects of one's life in rather absurd detail.

However, the same relation required, at the other extreme, that very severe measures be taken. Hsu (1970) remarks that it was quite common for the filial relation to require that a son slice part of his flesh for use in a medicine to be given to an ill parent. The filial relation sometimes required even more harsh behavior as this oft-quoted story relates:

A poor man by the name of Kuo and his wife were confronted with a serious problem. His aged mother was sick in bed. She needed both medicine and nourishment which Kuo could ill afford. After consultation between themselves, Kuo and his wife decided that the only way out was to get rid of their three-year-old only son. For Kuo and his wife said to each other, 'We have only one mother, but we can always get another child.' (Hsu, 1970, p. 78)

Reminiscent of the biblical story of Abraham and his son Isaac, just as the couple were to dig a hole to dispose of the child, they discovered gold and the child was spared.

Relationships and the law. Given the context of our examination of the modulation of human function in the mourning rites and in the case of filial piety, it follows that the evaluation of any human function cannot be made without placing this function within the context of human relationships from which it developed. The guiding principle for Confucian law was that any criminal action could be understood only with reference to the matrix of human relationships from which it arose.

This emphasis becomes particularly apparent when we examine the Confucian position in contrast to the competing school of the Legalists. The Legalists, as was noted above, favored a uniform standard for the law to be administered equally to all, irrespective of the status or the relationships of those involved. In clear contrast, the application of the law for the Confucians was a particularly complex affair, taking into account the nature of the crime, the human relationships involved and the relative intimacy or degree of the relationships.

As a concrete example, let me examine the offense of beating. To evaluate this crime, it was important in Confucian law to establish who was beating whom and within what relationship in order to evaluate the behavior and administer a punishment. As Bodde and Morris (1967) relate, if it is the son who beats his parent, the son is given the punishment of decapitation regardless of the circumstances. If, however, it is the parent who beats the son, no punishment is administered unless the son dies from the beating, in which case the parent is given 100 blows if it was justly provoked by the son's disobedience and a year of penal servitude if it was not.

This principle not only obtained for the key relationships such as the filial one, but also filtered down to the lesser relationships. Thus, Bodde and Morris (1967) write of the crime of beating within the relation of brother to brother:

Thus if a younger brother beats an older brother, he receives two and one half years penal servitude plus ninety blows of the heavy bamboo, even if no injury results. If, however, an older brother beats a younger one, he incurs no penalty at all.  
(p. 38)

The same modulation of punishment by relationship extends even further to include cousins and lesser relatives.

It is particularly interesting in this context to examine the conflict between the two powerful institutions of the law and filial piety. In most respects, the result of this interface was the dominance of the human relationship of filial piety over the law. Bodde and Morris (1967) remark that it was the duty of the son to conceal a crime of the father; implied here is that a son who brings parental wrongdoing before the authorities is thereby unfilial and hence subject to heavy punishment.

In this regard, the traditional Chinese legal system was unusual for it was the only legal system which entailed a punishment for reporting a genuine crime to authorities! There is some evidence, as Chu (1965) indicates, that the authorities simply acted as punishing agents. He remarks that often the parent would simply have to report that the son was unfilial and, without the demanding of evidence, the son was punished according to the parent's wishes. In the case of filial piety, the legal system tended to only serve the human relationship involved.

### The Centrality of Relationships in Function

In the context of traditional China, the examination at each focus propelled us inextricably toward a median point: the importance of human relationships as the determinant of function. As we examined the function of the social system, we were constantly drawn to the Confucian vision of society based on a hierarchy of relationships among human beings. The examination of the bureaucratic order likewise demonstrated that positions were given on the basis of the person's knowledge and ability to deal with human relationships.

Assuming the opposite pole of the individual's function, we found an equal tendency toward the median of human relationships. We found that individual human function, particularly in the cases of the mourning rites and filial piety, was dependent on relationships with others. It seems that human function in traditional China cannot be found exclusively in either the social or individual mode.

The one institution that comes closest to the median and middle ground between social process and the individual is the family. The family was seen as the important container for human relationships with others, and, consequently, the family was the basis for social and individual function. The function of the father in a family was seen as the proper function for the ruler of the society. In the case of the individual, the person without

some family affiliation as a basis for function was an outcast and doomed to an ineffective life. Thus, the relationships of the human being within the context of the family was the indispensable basis for function towards others.

## OVERVIEW

This chapter has examined the consequences of the assumed context of unity on the experience and function of human beings toward others. The Western framework directs us to make a distinction between individual process and social process. An attempt was made to undercut this dichotomy by examining both foci and illustrating how they converge to the same point--relationships within the family for the Chinese.

Developing from a context of the unity of human society and Nature, in order for this relationship to be maintained, there could be only one social system of civilized human beings. The social order was experienced as resting on individual human behavior. The individual human being was always experienced as being in relation to others. The individual process was submerged in a network of relationships which were graduated in importance from the cardinal relationship of filial piety.

Functionally, these factors resulted in an extremely durable social structure which prescribed in detail the behavior of the individual toward others. Much of the longevity of Chinese civilization can be attributed to the structure of the government which did not rule by force but by example, and to a bureaucratic system which trained well its scholar-officials in the Confucian vision of a harmonious society. The educational system and a civil service examination system insured that the scholar-official

had a generalized knowledge to deal with human relationships within the Confucian model.

Abstract law was not valued as a basis for ordering human relationships. The dominant Confucian alternative was to encourage individual human behavior in accordance with li or propriety. When the legal system was used, it tended to assume a punitive role and had the major purpose of restoring social order and redressing the imbalance of Nature produced by the crime.

Relationships with others actively modulated the individual's behavior, much of the time in great detail. For example, revenge and mourning behavior were rigidly modulated in accordance with the degree of relation between the individual and the deceased. The central relationship of filial piety was the most important determinant of an individual's function. In the Chinese mind, this relationship was always to be considered in evaluating any action.

## CHAPTER VII

### CONSEQUENCES IN RELATION TO SELF

We now turn to yet an inner circle of an inner circle to examine the microcosm of the human being. I hesitate to use the term "self" to describe this inner circle. It is extremely easy to read into this term all of the Western assumptions about individuality and personality. As the last chapter has attempted to illustrate, the self in traditional China, even if we may use the word at all, was extremely diluted by Western standards. The self or the individual was always conceived as a node in the matrix of human relationships, as being in relation to other human beings within the context of the family. In this way, one could question if the self as it is known in the West was ever an appropriate category within their knowledge.

In purely descriptive terms, it may be impossible to define the self in traditional China as a point of focus. However, one could identify a focus for action which is directed toward the individual. For example, medicine has as its purpose the administering of therapy to an individual human body at some point in its use. Equally, exercise systems may be thought of as making prescriptions for certain actions for the individual person. In this way, even a system which does not place a high value on the

individual ego and its conscious experience does focus on the self at least at this functional level.

#### EXPERIENCING SELF

In this section, I would like to look at the experienced unity of the human being. The human being that is presented to the observer in the West, is, many times, a fragmented human being, a composite of divisions: of body and mind, reason and emotion, and so forth. The Western context, which endorses such pre-existent divisions, places certain limits on the following discussion. All that can be suggested is how the Chinese experience of the human being is somehow the interrelation of these divisions forming a unity.

This manner of approach can only hope to approximate a system where the divisions are not part of the assumed context. The unification of something divided seldom equals the unity before the object is fragmented. In the following discussion, my approach will be to examine how the Chinese have experienced what we in the West have often assumed to be divided, knowing full well that such an approach does not do justice to a system where all was unified in its beginnings within the unity of the Tao.

#### The Human Body in Chinese Medicine

Any medical system begins with the human body and its structure as the basis for medical practice. In this both Western medicine and traditional Chinese medicine agree.

After this point, the divergence begins as each system is elaborated, based on different conceptions of the structure of the human body. Western medicine, developing as it does from the context of divisibility, will tend to experience the human body as a composite of separate anatomical parts which are statically defined and, then, functionally related.

In contrast, developing from the context of unity, traditional Chinese medicine, with equal vigor, attempted to develop an experience of the human body as a whole with function being a product of relations within this whole. Contrary to the West, the major purpose for Chinese medicine was not to increasingly fractionate the human body, but the purpose was to identify functional relations within the body.

An alternative anatomy. The approach to Chinese medicine's anatomy of the human body is somewhat hampered by Western biases. There is the tendency in many books written on this subject to simply translate the relational terms used by Chinese medicine to describe the structure of the human body into Western terminology, reducing them to Western physiological correlates. In this manner, the experience of the unity of the body and relations within this whole become obscured.

Recognizing this tendency, Porkert (1974) indicates that instead of attempting to deal with the body in Western terms by relating Chinese concepts to the underlying Western

substratum of organs, one should approach the human body as the Chinese do from the perspective of a functional unity. He suggests the concept of "orb." Orbisiconography, as he uses the term, attempts to undercut the analytic tendencies of Western anatomy and to do justice to the inductive synthetic character of Chinese medicine which is concerned with functional manifestations of different body regions.

Orbisiconography is antithetical to the Western approach to the human body which assumes a static structure of isolated organs which can be known separately and then interrelated in a functional way. The two conceptions may be contrasted in this way: traditional Chinese medicine sees functional wholes and relations within these wholes, while the Western experience of the body is that of discrete pictures of anatomical substrata. As Porkert (1974) indicates, the attempt to reduce one picture to the other in a one-to-one manner is the source of much confusion in dealing with Chinese medical knowledge.

When one examines the Chinese experience, there is a tendency to view the Chinese conception as an early developmental stage of Western anatomical thought. Such a view fails to account for the possibility of different views of the human body and different purposes for developing such knowledge. Manaka and Urguhart (1972) warn: "Thus, the ancient anatomy charts of the Chinese do not show ignorance of physiology, as some have claimed, but illustrate their overriding concern with establishing the relationships

between organs and function." (p. 38) For example, defining the anatomical structure of the "heart" is, for the Chinese, subordinate to the major purpose of defining functional relationships. Thus, the "heart" is not conceived as an isolated organ but is viewed as a system with blood vessels and other organs. Equally, the "heart" becomes functionally related to other functions like respiration.

Within this framework, the experience of the body is that of a network of orbs which have an ill defined anatomical focus and little precise meaning in terms of Western notions of physiological structure. Porkert (1974) gives the following example:

The Chinese word fei, 'lungs,' for instance, calls to mind coincidentally and vaguely most of the ideas someone with a Western education associates with the lungs. Instead, fei designates primarily and predominately an orb of function defined systematically and logically, the 'orbis pulmonalis.' The qualifiers used in orbisiconography (pulmonalis, cardialis, and so on) must be understood as definitions of effective relations or functions, not simply as expressions of crude anatomical insights. This is why statements bearing on a certain orb can under no circumstances be made to agree completely with statements bearing on the corresponding organ in Western thought. The better both statements are supported in context by empirical data integrated into their logical system, the less reconcilable they turn out to be. (pp. 106-7)

He goes on to relate that many times an orb will be given meaning in traditional Chinese medicine and have no corresponding anatomical substratum in Western medicine, while the reverse relation also tends to hold where an anatomical organ has no corresponding orb in Chinese medicine.

Diagnosis and disease. Given these different views of the human body, it follows that diagnosis will take on a different character in each system. Chinese diagnosticians would be more likely to experience relationships between external aspects of the body with the function of internal organs than is the custom in Western medicine. Coupled with this purpose, as I observed above in the case of astronomical observation, is the general proclivity of the Chinese for making detailed empirical observations. Both of these factors laid a groundwork for the development of a diagnostic system which rested upon detailed and subtle observations about the patient to an infinitely higher degree than in Western medicine.

For example, an entire diagnostic system was developed around the careful observation of the tongue on the assumption that its condition was related to the condition of the visceral organs. Being faithful to their tradition of careful and detailed observation, the Chinese doctor distinguished more than one hundred varieties of tongue condition. These conditions of the tongue were experienced as being related to the condition of the internal organs:

The middle of the tongue is correlated with the stomach.

The two sides of the tongue are correlated with the liver.

The root of the tongue is correlated with the kidneys.

The tip of the tongue is correlated with the heart.

(Wallnofer and von Rottauscher, 1965, p. 113)

More generally, the body was experienced as having a network of ducts or meridians which connected the internal organs with the external skin of the body. Thus, the skin, with its acupuncture points, was experienced as being in relation to the corresponding points in the interior of the body. As we shall see below, it is this projection that is the functional basis for the therapy of acupuncture.

Nowhere is the difference between Western and Chinese diagnosis more pronounced than in the case of the clinical indications of the pulse. For Western medicine, the pulse is experienced as being related to the function of one organ, the heart. In traditional Chinese medicine, pulsology is a central diagnostic tool and provides information not only about the function of the heart, but about the functioning of many internal organs.

Chinese pulsology recognizes three spots along the radial artery of each wrist that give pulse readings of the functioning of different internal organs. Moreover, at these three spots each wrist has a deep and superficial reading, giving a total of twelve different pulses in all. From these, the trained physician--and it is an art which requires long experience as well as great sensitivity--can diagnose malfunction in any of the internal organs or in the various physiological processes of the body.

(Croizier, 1968, p. 22)

This is only the beginning of the intricate knowledge that pulsology can provide to the Chinese physician. For example, the pulse is itself differentiated into three types to be felt with three different fingers: "The index finger

feels the ts'sun or 'inch pulse' . . . the middle finger feels the kuan or 'passage' pulse . . . and the ring finger feels the ch'ih or 'cubit' pulse." (Wallnoffer and von Rottauscher, 1965, p. 99)

It follows that, given a different system of diagnostics, a different experience of pathology would be associated. Disease was experienced as affecting the body as a whole and having its source in an imbalance in the relations within this whole. While Western medicine was concerned with localizing the cause of the disease, the Chinese came to the conclusion that disease is seldom localized in one part of the body, but generally affects the entire human being (Veith, 1973). As a result of this, the concept of a diseased entity was not an important concept in Chinese pathology.

Health and disease of the body were thought to be related to the relation of yin and yang within the body. If these two forces were balanced and in harmony, then the body enjoyed health; but if one force dominated over the other, a pathological condition would arise. Yin and yang became the key nosological schema for Chinese medicine:

The functioning of the body depended upon the two forces that created the world and men, the Yin and the Yang. While Yang, the male or positive principle, predominated in man, and Yin, the female or negative principle, predominated in women, neither of these forces ever existed alone, but a certain proportion of both had to be present in every well-functioning human being. These two ever-active forces, alternatively opposing and supplementing each other, were held to exist within all parts of the body and to circulate through the vessels that carried blood and pneuma. Pathological conditions arose out of abundance of

either the Yin or the Yang, obstruction of the flow of blood and especially the pneuma. All these deficiencies and obstructions disturbed the balance of the organism as a whole, but usually affect one particular organ. (Veith, 1973, p. 20)

In summary, the Chinese physician was functioning within a different conception of the human body than his Western colleague. The contrast was quite pronounced: Western medicine begins with the experience of a static anatomical structure, diagnosis centers around the knowing of this structure, and disease is conceived of as the result of a diseased entity which has affected this structure; the traditional Chinese view was dominated by the experience of relation and function, with diagnosis and ideas about the nature of disease becoming adjusted accordingly.

#### Unity of the Material and Non-material

The human body may be conceived of as a microcosm, the innermost circle of a hierarchy of concentric circles of ever-increasing radius. A dimension can be identified which begins with the whole of the body, integrates the mental function with the body to form another whole, and unifies both of these within the whole of the material world. As one progresses along this dimension, the assumed divisions of Western knowledge become subsumed.

First, the separations of the mental processes themselves such as reason and emotion, then to the separation of the mental and the physical, to the separation of the soul from the body and, finally, the possibility of

flight from the material world are progressively merged one with the other. Again, the problem is to approximate the unity of the Chinese experience of the individual human being from the context of Western divisions.

In attempting to relate this unity, a persistent problem is generated. It is a difficult task to illustrate the unity of the self within a framework such as that of the West, which relies so fundamentally on a dualistic premise. A separation between the material and non-material aspects of human beings and a differentiation of psychological functions, while a point of argument in the Western framework, in final analysis, is the basic orientation in the West. This is not to say that there have not been attempts to unify these separate functions within a single process such as becoming. However, the legacy of the Western thinker is that of a differentiated human being which must then be integrated, after the fact. The Chinese did not share this legacy, so the integration process was not necessary.

The problem is reflected in Western language itself. The language we use to talk about human beings has the assumption of divisibility embedded within it. In this regard, Abegg (1952) goes directly to the heart of the matter: "the chief difficulty--a fundamental one--lies in the fact that our terms are those of the 'split' type of man, while the East Asian's terms are those of the 'total' type." (p. 15)

Thinking. To illustrate this point, let me take the example of the concept of thinking as this concept is given split and total meanings in the two contexts. In the Western context, thinking is conceived of as an autonomous process in the human being, for the most part independent or split from the other psychic functions like will or emotion as well as being split from the processes of the body. This does not mean that one function is not experienced as affecting another, but they still maintain a high degree of independence.

In the traditional Chinese context, thinking is totalized with other psychic functions such that thinking becomes only one part of a greater unity being harmonized with other psychic functions. Thinking takes on a total type of meaning in which thinking, instead of standing out from other human functions, assumes a relative position in the totality of function:

The chief characteristic of this way of thinking lies in the fact that it remains constantly aware of the relative value of the actions of individual functions. One function hereby controls the other; sensations control feeling, the intellect and the will, the intellect controls the sensations, the emotions, the will and so on--and all are directed collectively by the psychic center . . . (Abegg, 1952, p. 32)

This view, based on integration and unity, produces different criteria for evaluating the development of the self. The West places great value on the differentiation of psychic function and has a criterion which reflects this. Inversely, the Chinese regard this form of development as

primitive and will look to a criterion which positively values integration:

In the East Asian's view it is not the 'total' manner of thinking but, on the contrary, that which treats the thought function as something separate--that does not take 'the entire man' as a starting point--which is the more primitive. The East Asian has known at first hand enough of the dangers of such cleavages and the problems they create, and he has, therefore, constantly striven for the opposite, namely the reconquest of totality. (Abegg, 1952, p. 17)

Unity of mind and body. Beginning with the unity of the mind and body, "Traditional Chinese medicine strove to treat the whole person rather than isolated parts, and to think of him in relation to his emotional sphere and physical environment." (Cooper and Sivin, 1973, p. 203) This is a fair summary of the integration of human function in Chinese medicine.

Given this orientation, the psychosomatic cause of disease was early recognized as being important. Of the causes of illness, third in the order of importance after environmental causes such as cold, wind, and epidemics, were the seven emotional states: joy, anger, anxiety, worry, grief, fear and shock. "The fact is worth noting that, even at that early date, Chinese medicine was aware of psychophysical interrelationships and recognized the importance of psychic factors as a cause of physical disorders." (Palos, 1974, p. 91)

Turning to psychic processes themselves, there was the feeling of unity where reason and emotions were not experienced as separate functions, but as being in relation. One way of looking at this would be to see the human being in China as retaining a psychic unity, while the Westerner has taken this unity and differentiated it. This does not mean that the Chinese psyche has not undergone a "development," but it is a development that cannot be characterized as a process of differentiation.

The psychic development of Western man consisted above all in the progressive differentiation of his psychic functions. Feeling, intellect, the will and sensations went their separate ways and accomplished those remarkable feats peculiar to each of them. Deep religious feeling and abstract philosophy, miracles of technology and marvelous harmonies of music, the conquest of the earth and the conquest of the atom--all these things we have experienced and accomplished in the course of our development. Things such as these are not found in East Asia or anywhere else in the world.  
(Abegg, 1952, pp. 12-13)

All of these developments have been made possible by differentiation. In East Asia, the term is hardly appropriate where changes in psychic function over time could best be characterized as an unfolding of a totality.

Unity of the soul and material world. Moving from the unity of psychic functions to the next larger circle, one begins to experience the unity of the soul and the body within the material world. There is absent here the belief that the individual has an immortal component which could flee the prison of the flesh and this material world, to attain freedom and fulfillment in another, heavenly world.

The earlier discussion concerning the difficulties with Buddhist doctrine is relevant here. A concept the Chinese could not accept was the Buddhist conception of this world as illusion, maya, and the practicing of methods which would allow the individual to flee this life for Nirvana in another world. Part of the difficulty was with the focus of the Confucians on relationships between human beings within the context of the family. The notion that monks should attempt to attain enlightenment and sever all obligations to others in this world in favor of Nirvana in another was clearly disruptive to society.

It is unfair to characterize the this-worldly orientation of the Confucians as merely materialistic in the Western sense, but rather as collapsing the non-material into the material. The material world, as the Chinese conceived of it, contained both matter and spirit, mind and body, emotion and reason, all of which were contained in the here and now, in the immediately experienced world. It was not so much a world of souls or matter as a world of soul-matter all contained within the Tao of the World.

In the Chinese view, even if people were to die, and their souls were to leave their bodies, these souls did not gain entry to some higher realm, but were experienced as only changing form and continuing to exist in this world. "Soul," to the Westerner, implies a separability of the soul from the body, suggesting a freeing of the individual from the prison of this world to attain another-worldly

existence. Such an implication of division was not present in the Chinese mind. The soul to them was always viewed as having a corporal component and as such could not free itself from this relation even if it were desirable to do so. In this way, the individual was always to be of this world and in this world.

To the Chinese, a soul without a body would no doubt have been a meaningless abstraction.

It was not that the Chinese lacked any conception of 'souls' or subtle spiritual essences; on the contrary, there were more of them than the European mind imagined--but it was not thought . . . that an individual personality could continue to exist without some bodily component. In other words, their conception of the living organism was an organic one, neither spiritualistic nor material. (Needham, 1956, p. 156)

This perspective on the nature of the soul can undercut one of the major paradoxes China presents. As Bodde (1942) remarks, it is paradoxical that in a country where ancestor worship is strong and the belief in spirits and ghosts is rife among the unlearned, the sages of China either are agnostic about immortality or discount any personal survival. Confucius is a case in point. Confucius did not discount life after death as much as he tried to redirect the attention of the questioner to the practical problems of living in this world.

In an oft-quoted passage from the Analects, Confucius is questioned by a disciple about an afterlife:

Chi Iu asked about serving the spirits of the  
dead.

The Master said, 'While you are not able to serve men, how can you serve their spirits?'

Chi Lu added, 'I venture to ask about death?'

He was answered, 'While you do not know life, how can you know about death?'  
(Legge, 1970, pp. 240-41)

Here, Confucius tries to redirect his disciple from the contemplation of another world to action within this world. Rather than speculate about the possible glories of the world beyond this, the duty of a Confucian was to make this world a paradise through one's harmonious relations with others and through self-cultivation.

The full impact of the emphasis on living in the here and now can be found in some ideas of the Taoists. The Taoists, it will be recalled, experienced themselves as unified with Nature. Within this view, the human body was not separate from Nature or the material world, but was contained within the eternal Tao. Whereas the Westerner sought the eternal in some afterlife, there was a tendency for some Taoists to seek immortality and the eternal within this world.\*

In contrast to notions of immortality in the West, the Taoists became captivated with the idea of a material immortality, the cult of the hsien. Needham (1956) has stated that in respect to this goal of material immortality, there does not seem to be any close parallel in any other part of the world. The goal of the Taoists was quite simple

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\*The quest for practices which would promote physical immortality was an exclusive pursuit of Popular Taoist Religion (Tao-Chiao) and was scorned by Esoteric Taoism (Tao-Chia) of the great mystics.

and direct: "To become a hsien, or a 'True Man' (chen jen) meant that one would go on living forever (chhang seng) with a youthful body in a kind of earthly paradise." (Needham, 1956, p. 141)

One such conception was that of the ti hsien or "Earthly Immortal" who would become unified with Nature and merge into Nature like a mountain "aged but not dying," quite immune to human frailties:

. . . able to spend the rest of eternity wandering as a kind of wraith through the mountains and forests, enjoying the company of similar enlightened spirits and the cycle of the seasons ever repeated yet with glory ever renewed. These are the beings that one can discern against the immensity of a landscape, flitting across remote ravines in many beautiful Chinese paintings. (Needham, 1974, pp. 11-12)

In this conception, the infinitesimal becomes the infinite; in dealing with the microcosmic whole of the human being, one becomes involved with the largest whole of the universe.

Conceptions of a paradise, if there was to be one, had a materialistic form for these Taoists. Paradise was thought to exist in some remote regions of this world. Since the soul was not allowed the luxury of astral travel, it must seek its paradise here on earth. Even when the hsien was to defy gravity and rise Christlike into the clouds, it was thought only to be part of a journey to another place in this world (Bauer, 1976).

The conception of paradise was that it was continuous with present existence and that in this paradise one would have current human needs:

Even where the legends evidently report ascensions to heaven, the extent to which the gravitational pull of the earth gradually overtook the 'immortals,' the degree to which their flight through the clouds became a walk across mountains, is easily recognizable. Ascensions were less and less often presented as the transition to a wholly different mode of being, but rather as a kind of voyage into another country . . . . Very typical in this connection are the stories telling of the eagerness of many hsien to take along into the new world the greatest possible number of objects for their personal use. There is even the case of an 'immortal' who was accompanied by his entire family and household goods as he ascended to heaven, a naive parallel to the previously mentioned custom of placing models of all the things the dead had come to cherish during their lifetime into the grave with them. To free oneself from all the ties of this world, to take one's leave from all the companions left on the shore before the great ocean was crossed was no longer the essential element in gaining blessedness, but more nearly the opposite: the attainment of immortality, the promise of everlasting life, but precisely a life on earth, or at least, a life as it had been lived on earth. (Bauer, 1976, p. 103)

For the Chinese, if there was to be a soul, an immortal element to the human being, it must function within this world and could not migrate to an other-worldly realm.

#### FUNCTIONING TOWARD SELF

Before I examine the functional consequences of a unified and differentiated view of the individual, I should stress that each of these views has its own strengths and limitations. One is always balancing possible benefits against possible disadvantages. Given certain criteria and certain purposes, one approach will be more functionally sound than the other; when the criteria and purposes change, so does the ratio of adverse effects to the

beneficial.

As an example, I can follow the reasoning of Abegg (1952) given above in the context of the discussion of psychic differentiation. It will be recalled that the West has developed along the lines of differentiation of psychological processes while the parallel development in China is best conceived of as an unfolding of a unity. As she points out, many of the great achievements of Western civilization have their source in the differentiation of the Western mind. The development of technology, putting a human being on the moon, the writing of great literary classics and the great advances of modern medicine, all have been made possible because of the ability of the Western thinker to differentiate one aspect of the psychic function and give it full power, submerging the other components of the mind.

Such was not possible for the Confucian or the Taoist. The purpose was to balance and harmonize all functions, to make the whole human being an actuality, at the expense, perhaps, of the possibility of developing the creative force of one component. There was no space here for pure thought as we find in Western philosophies.

Nothing is gained without an equal sacrifice. For the great heights of intellectual and technical achievement, the West has had to pay with the inherent instability of these separate faculties. It must be remembered that the mind that is capable of great achievements of good is also the

mind that can journey into the deep valleys of despair.

The unity of China, on the other hand, provides for greater stability and continuity over time. The full weight of the society is not on individuals and their achievements, but on the community of human beings and a continuity of tradition. At this point, the Westerner would ask: "Stability at what cost?--at the cost of stagnation!" True, over the history of China, by Western standards of technological progress, there has been little progress, but one must weigh this against the benefits of a human society which was able to support humankind, with continuity, for 4000 years.

My only reason for examining these issues is to counterbalance the tendency for viewing the benefits of the Chinese framework without also seeing the disadvantages. The same is true for the West. In the following, I will examine the consequences in function of the unity of the self in traditional China. It is beyond the scope of this presentation to evaluate these consequences; it is left to the reader's judgment if it is better to retain the unity of psychic functions or to develop along the road of differentiation.

#### Unity as a Functional Basis for Medicine

In a theory of disease there is a prescription for therapeutic function. If one defines and experiences disease, as in the case of Western medicine, as being the result of a diseased entity in some part of the body, it

follows that one should develop therapeutic methods which will remove the cause of disease and return the body to a state of health. This is the primary direction for Western medicine. The Western physician's armamentarium is well stocked with therapeutic devices for discovering the site of the diseased entity and with techniques for the removal of this entity.

In contrast, the armamentarium of the the traditional Chinese physician is stocked with therapeutic methods which derive from a different definition of disease and a different experience of the body. Traditional Chinese medicine assumes the unity of the body and, consequently, defines the disease of the body as a result of the disharmony of relations within this whole. Therapeutic methods, instead of proceeding analytically, will attempt to work with the whole of the body by altering relations within this whole. In terms of Chinese diagnostic categories, disease is an imbalance or disharmony between yin-yang relations within the body, and the purpose of therapeutic methods is to restore this balance and harmony.

In the following discussion, I do not begin to do justice to the full spectrum of therapeutic methods used by the Chinese doctor. The latter's armamentarium was quite eclectic by Western standards including not only the use of drugs or herbs, but, more generally, attempts to administer to all of the dimensions of physical health with methods such as gymnastics and diet therapy. I cannot hope to fully

document this entire array. Consequently, I will focus on a contrasting set of therapeutic methods, surgery and acupuncture, as they developed or did not develop in each framework.

Absence of surgery. While surgery has been an important component to Western medicine, surgery is conspicuously absent in traditional Chinese medicine. Since Chinese medicine did not conceive of disease in entity terms, it is quite understandable that techniques, such as surgery, for the removal of the diseased entity would not have been developed and, even if introduced, would not find fertile ground in China.

There is much evidence that suggests that what surgical techniques did exist in the history of Chinese medicine can be traced to the introduction of Buddhist thought and tend to originate in Indian medical practices. Chen (1964) feels that many Chinese surgical techniques can be attributed to Indian surgeons. He notes that the father of Chinese surgery, Hua T'o, is described as performing many operations that are quite similar to the accomplishments of the Indian physician, Jivaka, a contemporary of Buddha. This has led some scholars to conclude that the accomplishments of the former are mere echoes of Jivaka.

Be that as it may, the important point is that in China the absence of a divisibility concept prevented the fruition of surgical methods. Even with the introduction of an alternative model of the body, surgical methods never became

a major therapeutic technique in Chinese medicine. The major thrust of Chinese medicine was in the opposite direction. Every effort was directed toward the aim of administering treatment to a whole body and to maintaining this wholeness as a result of treatment.

Confucianism supported the unity of the body on an ethical basis: the body was not the property of the owner, but a gift from one's ancestors which must be returned to them in good order. For this, there was no lesser authority than The Classic of Filial Piety, which says: "Our bodies--to every hair and bit of skin--are received by us from our parents, and we must not presume to injure or wound them--this is the beginning of filial piety." (Legge, 1879, p. 466) In good Confucian fashion, it was not an uncommon practice to retain any severed organs or limbs of the person to be buried with them at the time of death.

The Confucian imperative to maintain the unity of the body was sometimes carried to rather paradoxical extremes. For example, Bodde and Morris (1967), in their consideration of systems of punishment in Chinese law, state that the Chinese often chose the slow and painful death by strangulation over the swift method of decapitation, for the former left the body intact for burial.

Acupuncture and moxibustion. In direct contrast to the absence of surgical therapy in Chinese medicine, there developed therapeutic techniques which were capable of treating the body as a whole and changing the balance of

relationships within this whole. As noted above, since the human body is experienced as a whole such that the internal organs become projected via meridians onto the surface of the skin, therapy to internal organs was possible by the stimulation of the skin alone. This is the theoretical basis for the complementary methods of acupuncture and moxibustion.

Wallnofer and von Rcttauscher (1965) describe the basis of acupuncture as follows:

As the teachings of acupuncture claim, each internal organ is in close affinity with its own definite spots, or points on the skin . . . . The insertion of the needle in these respective points is said to exert either a stimulating or an equalizing effect, thereby reinstating order and harmonious balance within the disturbed collaboration of the nerves . . . or the Yin and Yang, as the Chinese have it. (p. 128)

Acupuncture becomes an effective treatment for disease by restoring the yin-yang balance.

Closely related and complementary in effect to acupuncture was the method of moxibustion. While acupuncture is primarily a cold method, moxibustion is a hot method which seeks to heat points on the skin to produce changes in the function of internal organs. Both methods are based upon the same basic relation and in tandem can manipulate the yin-yang balance:

To bring Yin and Yang into proper balance is also the purpose of moxibustion . . . cauterization with moxa. While acupuncture is employed especially for diseases caused by an excess of Yang, the moxa method seeks to restrain an excess of Yin. (p. 144)

The contrast between surgery and acupuncture is a special case of the more general tendency for Western medicine to localize the cause of disease in a substratum of the body and to focus treatment on this point. Chinese medicine, on the other hand, working on the contrary assumption that disease is a general condition of the whole body, seeks to effect treatment by altering the functional relationships within this whole.

Strengths and weaknesses. These alternative medical strategies have different strengths and weaknesses in respect to function. Forkert (1976) has defined this relation quite clearly, noting the particular strengths of Western and Chinese medicine. Western medicine has its strength where the substratum condition can be met, where a disease can be localized in a particular organ or part of the body. For example, in the case of an accident, where a part of the body is injured, Western medicine is most effective with immediate remedial treatment to the injured part. However, when this substratum condition cannot be met, Western medicine reveals a weakness.

In contrast, the strength of Chinese medicine lies in another direction. It will be recalled that the substratum is unimportant to Chinese medicine; what is important is the functional relationships within the body as a whole. Thus, the Chinese doctor may begin to treat these functional relationships, his patients symptoms, immediately, with no need to localize his diagnosis. The practical consequence

is that therapy can be administered at an early stage of development without having to wait, as the Western therapeutic framework must, for the more advanced stages when a particular part of the body reveals the disease.

These factors produce a certain contrast in function: Chinese medicine tends toward early diagnosis and prevention while Western medicine tends toward late, localized diagnosis and reactive therapy. This difference becomes very important in some chronic diseases such as diabetes and cancer.

There is general agreement that serious organic diseases . . . are preceded by stages of functional disorders. If they are given specific diagnoses and treatment, they can be prevented from entering the organic stage, which in the opinion of Chinese doctors, represents an advanced if not terminal stage of every disease. (Porkert, 1976, p. 67)

It is interesting that Western medicine seems to be most useful and effective for contagious and accident-related illness, whereas, in a complementary fashion, Chinese medicine has its greatest strength in degenerative, chronic disease. From all indications, these two approaches, and thus their respective strengths, are being integrated today in the People's Republic of China.

#### Functional Unity of the Material and Non-Material

Again I must deal with three wholes: the unity of body and mind, the unity of psychic functions themselves, and the unity of the human being in the world. Each of these unities has implications for the human being's function in

traditional China.

Tai Chi. In examining the unity of mind and body, it is best to begin with a concrete example of this integration. I will begin with Tai Chi, a traditional exercise system which attempts to work with the unity of mind and body. There are currently many books in the popular press on the study of Tai Chi which attempt to introduce the reader to its forms and postures. Few of these volumes relate the fact that this exercise system is deeply embedded in the philosophy and culture of China, in particular the central classic of the I Ching. According to Lui (1972), the Tai Chi postures or forms are related in direct correspondence to the hexagrams of this book, such that in doing the various forms one is almost mirroring in microcosm the cycle of changes in Nature.

Of the many tales concerning the origins of Tai Chi, the one which I prefer relates the source of this practice to the inspiration of Nature. In this legend, a twelfth century sage, San-feng, observed from his window the gentle combat of a snake and crane. He saw in their agile movements, in a living form, the principles of the I Ching, with the latter's stress on the relation between strength and yielding. "The great master studied the crane and the snake, the wild animals, the clouds, the water and the trees bending in the wind. He codified these natural movements into a system of exercise." (Lui, 1972, p. 4)

This system not only prescribed bodily movements, but also demanded a unity of body and mind. As with many Eastern arts, a long period of study is required; while one may learn the basic physical movements of each form in but a few months, it takes many years or even a lifetime to fully integrate the body and mind. Here, the guidance of a master is necessary, a model who demonstrates that such a mind-body integration is possible.

The subtitle of Liu's book on Tai Chi is indicative of this purpose: "A Choreography of Body and Mind." Tai Chi is much more than merely a combination of physical dance movements, but is much closer to a meditation in motion where the mental and physical are brought into a dynamic, harmonious movement. One of the Tai Chi classics relates: "First in the 'will,' afterwards in the body." (Maisel, 1963, p. 211) Given this holistic point of focus, the same classic goes on: "It must be remembered; as one part moves, all parts move; if one part is still, all parts are still." (Maisel, 1963, p. 211) The purpose of Tai Chi is to coordinate the movements of these parts so that they form a fluid whole with no seam between mind and body, thought and action. In contrast, Western forms of exercise seem very shallow.

Unity of thinking and doing. The mind-body unity of Tai Chi translates quite easily into a unity of thinking and doing, thought and action, which is characteristic of Chinese thought. Most scholars of China, I think, would

agree that the Chinese embrace practicality over theory. This quality is even more pronounced when placed in comparison to the West where theory predominates quite as much over practice.

It is interesting to relate the observations of a relatively unbiased observer. Needham (1970) quotes an Arabic scholar of Damascus who lived about 830 A.D. who had a privileged position in which to view the two systems living as he did at the juncture of the two worlds. The scholar made this rather astute observation: "The curious thing is that the Greeks are interested in theory but do not bother about practice, whereas the Chinese are very interested in practice and do not bother about theory."

(p. 39)

At the basis of this observation is a very basic insight into the knowledge of the Greeks as opposed to the knowledge of the Chinese. Developing the system completely, the Greeks made a division between mind and body, thinking and doing, allowing them to take flights into abstraction. The Chinese viewed mind and body as unified and in so doing placed an emphasis on accomplishing things within this unified structure.

This difference manifests itself very early in the development of each system. We can, for example, compare Platonism with Confucianism on the issue of what constitutes knowing: "The Platonists were concerned with knowing in order to understand, while Confucians were more concerned

with knowing in order to behave properly toward other men."

(Munro, 1969, p. 54)

Underpinning these alternative purposes for knowledge is an alternative process of questioning:

In China, truth and falsity in the Greek sense have rarely been important considerations in a philosopher's acceptance of a given belief or proposition; these are Western concerns. The consideration important to the Chinese is the behavior implications of the belief or proposition in question. What effect does adherence to the belief have on people? What implications for social action can be drawn from the statement? For the Greeks, study was valued both for its own sake and as a guide to action . . . but bliss lay primarily in study for its own sake. In Confucianism, there was no thought of knowing that did not entail some consequence of action. (Munro, 1969, p. 55)

Before I examine specific examples of the unity of thinking and doing in the major traditions of China, I cannot avoid a very thorny thicket--relating this unity of the Chinese to pragmatic philosophies of the West. Even though this issue is difficult one, I think it can provide some valuable insights into the differences between East and West.

As soon as one mentions the unity of thinking and doing and the emphasis on the practical, one is immediately drawn to the philosophy of American pragmatism, to Dewey, Peirce, and James. There is a formal identity between the philosophies of these men and that of China, but some very important differences. Both stress the importance of the unity of theory and practice. However, there is a most important distinction. Pragmatism is a philosophy, *per se*,

and because of this is firmly committed to the purposes for knowledge in the West. As a philosophy, pragmatism attempts to deal with the characteristic metaphysical problems of the Western world.

In China, given the unity of mind and body, the unity of thinking and doing cannot be only part of a philosophical system but must relate to the whole person, to what one thinks as well to what one feels and, most importantly, to how one acts. Here lies the basic difference between the Confucian proclivity for the pragmatic and the pragmatic philosophies of the West. Wu (1971) writes:

Generally speaking, the unity of theory and practice in pragmatism is more concerned with, in addition to human survival, scientific and epistemological problems . . . . The term 'theory' as used in Confucianism is not to be understood in terms merely of conceptual framework or hypothesis. It should be conceived as deep conviction or even ultimate concern. 'Practice' in Confucianism is not to be interpreted in terms merely of something to be exercised or performed in daily life, like 'diet,' 'dance,' or 'table tennis'; it should be interpreted in terms of a deep moral sense; it is concerned with the total moral performance of the individual. From the Chinese viewpoint the total moral performance of the individual and the totality of his beliefs or theories should be in harmonious unity, without any gap or inconsistency. (p. 10)

This practicality is less the product of the discovery of philosophical truth than it is the result of a number of unities, including the unity of reason and emotion, which are all contained within one consistent whole that is the ideal to the Confucian.

It is possible to look at a central philosophical text of China, for example the I Ching, with the view that it was a theory of the universe on an abstract level. To do so is to impose Western priorities. The I Ching is first and foremost a book of divination which helped the user in the search for decisions for action. In short, one must be very careful not to treat manifest similarities as indicating similar latent processes.

The unity of theory and practice is a central theme in Confucianism. Wu (1971) notes that "Confucius is probably the first philosopher to have insisted on the necessary correspondence between words and actions." (p. 9) One of the basic building blocks of the Confucian social order, "The Rectification of Names," illustrates the need for a close correspondence between the title of the person and the actions of the person. Only when the title corresponded to the correct behavior would the social order function harmoniously. The Analects say: "So, to rectify names in a state means: 'Let the ruler be a ruler, the minister be a minister, the father be a father, and the son be a son.'" (Chan, 1967, p. 39)

It is in Taoism, however, that the full fruition of this unity is realized. In the above discussion on the nature of the Tao, I noted that the Tao is not simply a mental concept to the Chinese but encompasses both thinking and doing, while an approach only from the mind, from reason, must fail. It was in this context that I related

the story of Ting the butcher who so worked within the Tao, the unity of thought and action, that he could use the same chopper for 19 years and have it remain sharp. Certainly, any civilization has its craftsmen who transmit their craft directly from the master to the apprentice without the need for abstraction. The Taoists, however, carry this notion much further, beyond a mere skill--to quote Ting the butcher, to a full encompassing of the person within the Tao.

Needham (1956) writes that such "knack-passages," as he calls them, are quite common in Taoist literature. In all of these passages, there is expressed the conviction that the arts and crafts from one generation to another naturally involved the total education of both body and spirit of the learner. In this context, I would like to quote at length another famous knack-passage from Taoist writings:

Duke Human (of Chhi), seated above in his hall, was (once) reading a book, and the wheelwright Pien was making a wheel (in the courtyard) below. Laying aside his mallet and chisel, Pien went to the steps, and said, 'I venture to ask, Sir, what you are reading?' The Duke said, '(The words) of the sages.' 'Are those sages, then, alive?' Pien continued. 'They are dead,' was the reply. 'Then,' was the reply, 'What you my ruler are reading are only the dregs and refuse of bygone men.' The Duke, angered, said, 'How should you, a wheelwright, have anything to say about the book which I am reading? If you can explain yourself, very well; if you cannot, you shall die!' The wheelwright said, 'Your servant will look at the thing from the point of view of his own art. If my stroke is too slow, then the tool bites deep but is not steady; if my stroke is too fast, then it is steady but does not go deep. The right pace, neither (too) slow nor (too) fast, is the hand responding to (some influence which) the heart (sends forth). But I cannot tell (how to do this) by word of mouth--there is a knack in it. I

cannot teach the knack to my son, nor can my son learn it from me. Thus, it is that though in my seventieth year, I am (still) making wheels in my old age. But those ancients, and what it was not possible for them to convey, are dead and gone--so then what you, my ruler, are reading is but their dregs and refuse.' (Needham, 1956, p. 122)

Here, the unity thinking and doing as revealed by action in the present is to be valued even above the sacred documents of the sage-kings of antiquity.

This unity may be expanded to reveal a general tendency toward unity within Chinese education. Memory and repetition have been the core of the transmission of knowledge in China, requiring of the learner the use of both mind and body simultaneously. Consequently, education or apprenticeship was

. . . not a matter of intellectual understanding, not at all the appreciation of mathematical functions describing the behavior of deeply analysed physico-chemical entities. Yet to some extent, the skill of the artisans was handed down orally in the ubiquitous and invariable practice of 'learning by rote' mnemonic rhymes. (Needham, 1965, pp. 47-48)

This principle of learning by rote extends not only through the traditional crafts, but to all areas of education including medicine and proto-chemistry.

It must be remembered that the medium for recording knowledge in this system was the Chinese language which rested on memorizing the characters and learning the Confucian classics by heart. Needham (1956) recalls, from personal experience in the 1940s, the silence of the Chinese countryside being disturbed by the bee-like hum of school children reciting the classics by heart.

One would not be stretching a point to agree with Abegg (1952) that Asian culture is to a considerable degree built upon the basis of memory and the kinds of values associated with the latter. One could almost expand this to say that memory replaces the process of thinking in the Chinese mind. Many of the characteristics and accomplishments that the Westerner attributes to thinking are viewed as the products of memory in China.

This-worldly focus. Moving to the next plane, to the whole of the psychic functions themselves, I find that this unity also produces differences in function. For example, it is helpful to make the contrast between the method of prayer in the West and the method of meditation in Taoism and Ch'an (the Chinese predecessor to Zen Buddhism of Japan). Prayer rests upon a division between body and spirit whereby the human being requests something of God, and a division of psychic functions themselves whereby prayer acquires an extreme emotional component which is separate from the intellect; consequently, one often prays when reason fails and one is left in a Jobian condition relying on the will of God.

Meditation, on the other hand, is very much a centering process, built upon unities where the purpose is to harmonize and unify all functions. To do meditation in Ch'an (Zen), one generally first assumes the lotus position which is a centered and balanced posture of the body. One proceeds to center and balance the mind in a similar manner

allowing, in most cases, the natural development of thoughts and emotion until the mind becomes, as some Zen Buddhists say, an empty mirror. In meditation, one is integrating all functions in one act.

Each of these methods derive from the assumptions of their respective systems:

Whereas prayer is a primary feature of the Christian religion (if not in theory, at least in practice), meditation similarly characterizes Eastern Asian religions. Viewed psychologically, this shows the difference between the religiosity of the 'divided,' 'unintegrated' type of man and that of the 'total' type, for prayer has a strong emotional element, which explains references to 'fervent' prayer, while in the East meditation is a matter of total contemplation . . . . Thus it can generally be said: we think or feel, we philosophize or pray, while the East Asian tries to combine the two. (Abegg, 1952, pp. 40-41)

This unity of meditation leads directly to the unity of the soul and body in a this-worldly existence. This was the conception of the hsien for the Taoists, a person who exists in a material paradise for all time. This unity had direct implications for function.

Prior to the introduction of Buddhism, there was not a real notion of sin and punishment. (Eberhard, 1967) Such concepts rest on the assumption of division between this world and some other world where the person will be judged for his deeds. The Chinese were very reluctant to make such a differentiation, preferring this world as the only world. Prior to the Buddhist introduction of the concept of a world beyond, there was no real answer to the eternal question of why evil people enjoyed an unpunished earthly existence.

There was no notion of an after-life in which the person could be tried for the sins of this life. There was an absence of what Needham (1974) has called ethical polarisation in pre-Buddhist Chinese thought, nothing to provide for the judgment of the living after death, no provision whereby the sheep and the goats were brought to justice and separated into other-worldly heavens and hells.

Without the possibility of an other-worldly flight, the Taoists sought an eternal life in this material world. To accomplish this end, the Taoists developed a number of practices to achieve material immortality. Needham (1956) lists the following practices: respiratory techniques, helio-therapeutic techniques, gymnastic techniques, sexual techniques, alchemical and pharmaceutical techniques, and dietary techniques. Two things are apparent from this list--the Taoists were attempting to implement a wide variety of methods which focused on the whole person, and their methods anticipated many modern therapeutic methods.

A comparison can be made between alchemical and pharmaceutical techniques in the East and West as they relate to the search for immortality. Alchemists in both civilizations included as their purpose the development of elixirs for immortality. In China, however, the emphasis on these elixirs was much more extensive than in the West.

There was widespread evidence of a much greater degree of elixir poisoning in traditional China in comparison to Europe. (Needham, 1970) This higher incidence can be

attributed to two factors. One was the lack of any prejudice against the use of mineral drugs which existed in European alchemy but which did not in Chinese alchemy. Unlike their European colleagues, the Chinese alchemists persistently compounded dangerous elixirs of poisonous heavy metals like mercury, arsenic, and lead. In contrast, the European elixirs would more likely be compounded with more innocuous substances of an organic base.

An equally important factor was the dominance of the idea of a material immortality and an absence of thoughts about the possibility of an other-worldly existence after death. This latter situation, which did not have a counterpart in Europe, primed the traditional Chinese for any elixir that would offer any hope of producing this longed-after immortality.

In Europe, there was a clear possibility of human survival after material death, when the soul would depart the body and be transported to heaven, hell, or purgatory. In China, given only the context of the material present, all that could be experienced as real was the possibility of human survival in a material sense, as a Hsien. Needham writes:

Heaven or paradise in any seriously credible sense did not exist, but the visible world was eternal and uncreated, nor would it ever cease, and he who could make himself worthy might continue to enjoy it with sense-perceptions perpetuated but purified. This was the inner meaning of the proverbial salutation: wan shou wu chiang ('life, world without end!'). (Needham, 1970, p. 337)

Given this view of the unity of the body and soul forever as it is now in the present, the sophisticated Chinese of the time were left easy prey to the promises of any elixir which would make the goal of material immortality a reality. So widespread was the use of such elixirs among the rich and educated, that it is difficult many times to know whether to evaluate the writings of any one author on their own merits or as simply a by-product of the early stages of mercury poisoning.

## OVERVIEW

In traditional China, when the system did focus on what would be termed individual process, the emphasis was on the self as a unified whole. The Western separations between mind and body, soul and body, and the material and non-material worlds were not important distinctions to the Chinese. These unities were examined in a number of concrete areas.

Chinese medicine viewed the body from a perspective of functional relationships within a whole. Many times these relationships did not have referents in Western anatomical structures. Given this alternative experience of the body, diagnosis and disease were given alternative meanings. Diagnostic procedures such as pulseology were much more highly developed than in Western medicine. To the Chinese doctor, the condition of the pulse not only gave indication of the functioning of the heart, but numerous other relationships within the body. Disease was not viewed as being localized, but was conceived of as an imbalance of yin-yang relations within the whole body.

The functional consequences of this view of disease and the body fostered the development of holistic therapies which operated with the body left intact. For example, there was a general absence of surgical methods and an emphasis on acupuncture and moxibustion which could function without the need of removing a disease producing entity. This provided for a medical system which was very effective

in treating and preventing chronic disease.

In general, the Western distinctions of mind and body, reason and emotion, and soul and body were all viewed as integrated within the Chinese experience. Thinking, for example, could not be separated from feeling. In both Confucianism and Taoism, there was a rejection of the idea that the soul could flee this world for an other-worldly paradise. Confucians were required to make this world a paradise through their harmonious relationships within this world, while many Taoists sought the elusive goal of a material immortality in this life.

Functionally, practices such as Tai Chi attempted to foster the unity of mind and body. Thinking and doing were viewed as unified, with an emphasis on correct actions in Confucianism, and unity with the Tao which transcended mere skill, as evidenced by numerous knack passages in Taoist literature. Education tended to place high value on memory and associated abilities.

The this-worldly focus was revealed in the practice of meditation as opposed to the dualistic orientation of prayer in Western religions. The search for a material immortality left many Taoists easy victims to dangerous elixirs which promised eternal life in this world.

## CHAPTER VIII

### THE UNITY OF THE HUMAN BEING AND THE PROCESS OF QUESTIONING

We come now to the end of a journey into China. As I indicated in Chapter IV, the method employed, focusing as it does on three key relationships, does not do full justice to the underlying unity of experience and function that is characteristic of traditional China. My discussion has fragmented this unity, imposing Western divisions where divisions do not exist, always attempting to approximate a unity by ever more complex relationships between segmented parts. For the Chinese, in my opinion, all was continuous and integrated as a given condition and did not have to be constructed from a series of parts.

If one were to focus on the human body, for example, one would be confronted with wholes within a whole. In the Chinese framework, one cannot deal with a microcosm like the human body without at the same time dealing with the macrocosm that surrounds. This was the essence of the last chapter, where in dealing with the individual and the separation of the soul and body, we were drawn to the largest whole of treating the human being as integrated in the material world of the "here and now."

Equally, it is not enough to define this unity as a static structure, independent of any larger process. My purpose is to relate this unity to an underlying process of questioning. Each of the last three chapters has asked a question about one relationship of the human being. It is extremely easy to become so involved with examining the consequences of asking such a question in that context that one forgets that this question is related to a more general process of questioning which both determines and interrelates the specific question and the consequences to each other. My task in this chapter is to deal with these two issues and to generate a larger picture within which to work.

#### THE UNITY OF THE HUMAN BEING IN CHINA

In the following discussion, I would like to examine the unity of the unities, the underlying unity of the unity of the human being and Nature, the human being and others, and the unity of the individual. The assumption of unity along each dimension produces a unity among dimensions.

By way of introduction, I can note the ease with which one passes from one area to another of Chinese knowledge. For example, in the case of art, one flows quite freely from a consideration of calligraphy, to painting and even to the structural lines of the frame of a Chinese house. Each area is integrated and mutually reinforcing with the other. To be educated in the Confucian sense entailed the ability to

move freely from one area to the other; it was the unity of the generalist. The ideal man would have some medical knowledge so that if his parents were ill he could administer to them, but he was also required to be an artist of sorts and able to write poetry for his paintings. In every endeavor, there was always the unity of the Tao which served as a container for all creativity and provided constancy of activity in that one was always working with relationships between yin and yang.

This underlying unity of wholes can be appreciated within the context of a concrete example. I will take the two extremities of the unity--the individual body and the cosmos. Tai Chi at the level of individual exercise can be related to the cosmos through the trigrams and hexigrams of the I Ching:

The Cosmos is a great spacio-temporal conception, graphically represented by the Tai Chi. It proceeds rhythmically from an immutable and eternal principle (Tao) which is manifested either in the form of repose (yin), or in the form of movement (yang). The succession of the two principles yin and yang represented by continuous or broken lines makes it possible to form eight trigrams (pa-ku). These lead to a symbolic representation of the whole universe, valid on both a material and moral plane. It then becomes possible for an ingenious mind to draw from one single trigram the exposition of a physico-chemical phenomenon or historical facts, a topic of military tactics or sexual union, an anatomo-physiological diagram or a therapeutic formula. (Huard and Wong, 1968, pp. 231-2)

This unity suggests several things. First, one is presented with a unity of the small and the specific with the large and the general as Tai Chi blends with the cosmos

into one pattern. Secondly, one is reminded of the centrality of the I Ching. The yin-yang oscillations of Tai Chi become diagrammatically represented in the broken and unbroken lines of the hexigrams of the Book of Changes. Thus, the I Ching becomes the central whole to which all the other wholes relate.

The effect of this underlying unity of knowledge is to produce a hierarchy of wholes, with each whole mirroring the whole above and the whole below. Within this perspective, the whole of the cosmos is not unlike the whole of the human body. This microcosmic-macrocosmic thinking is central to Chinese thought.

Likewise, in the social world, the whole of the family is the model for all social relations. The microcosm of the family was viewed as the model for the macrocosm of the government. This same relation of wholes applies to many other areas. For example, Wu (1963) writes that: "The house is the basic cell in the organism of Chinese architecture, just as the family it houses is the microcosm of the monolithic Chinese society." (p. 31)

The total image is one of a hierarchy of wholes interrelated in terms of experience and function. Consider the oft-quoted passage from The Great Learning:

The ancients who wished to illustrate illustrious virtue throughout the kingdom, first ordered well their states. Wishing to order well their states, they first regulated their families. Wishing to regulate their families, they first cultivated their persons. Wishing to cultivate their persons, they first rectified their hearts. Wishing to rectify their hearts, they first sought to be sincere in their thoughts . . . their

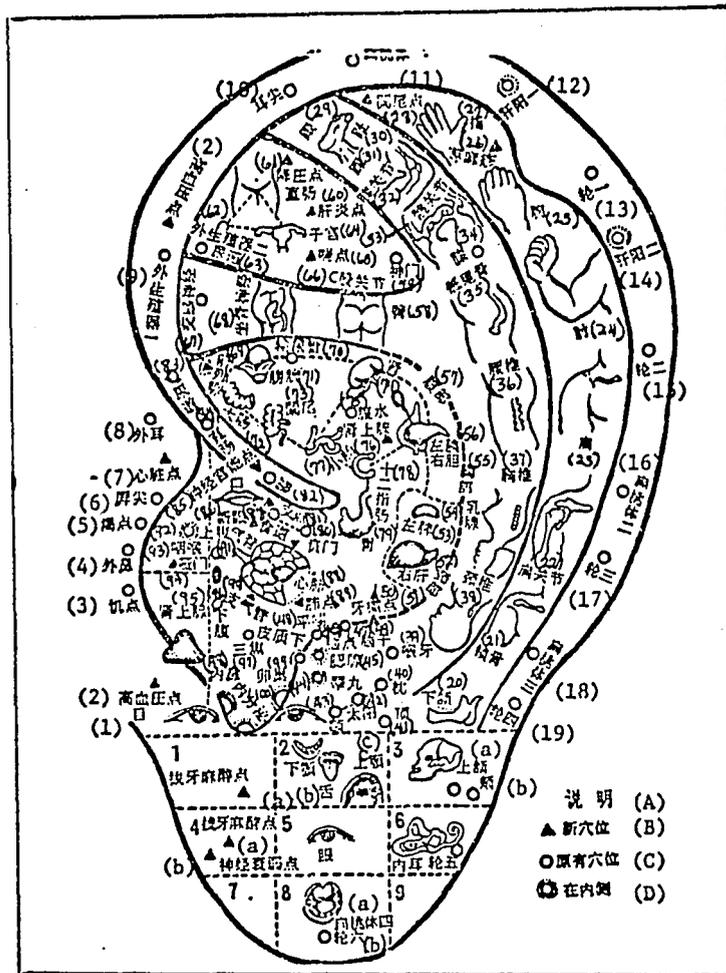


FIGURE 12

THE PINNA OF THE EAR REVEALING ACUPUNCTURE POINTS AS A MICROCOSM OF THE WHOLE OF THE BODY (AFTER FOGARTY, 1977)

thoughts being sincere, their hearts were then rectified. Their hearts being rectified, their persons were cultivated. Their persons being cultivated, their families were regulated. Their families being regulated, their states were rightly governed, the whole kingdom was made tranquil and happy. (Legge, 1926, pp. 411-412)

The same passage of The Great Learning continues: "From the son of Heaven down to the multitudes of the people, all considered the cultivation of the person to be the root (of everything besides)." The conclusion seems clear: the world is a series of wholes within wholes and the human being is the center most whole having responsibility to all others.

Let me attempt to draw all of these wholes together within the context of one concrete example--traditional Chinese medicine. Chinese medicine has appeared a number of times in the preceding chapters. I will recapitulate briefly. Along the dimension of the unity of humankind and Nature, I observed that the human being was related to Nature in a one-to-one correspondence via a universe analogy. As a result, pathology in the human being was functionally related to meteorological changes in Nature. The body itself was considered to have wholes within wholes, as the internal organs were projected onto the skin; this factor had consequences in function such as the development of acupuncture as a therapy.

It is possible to look at the skin itself as containing wholes within wholes. Figure 12 is a diagram of such a microcosm, the pinna of the ear as it appears in acupuncture. I note that the pinna is a detailed microcosm

which can be functionally related to a number of internal organs. It is possible that this hierarchy of wholes could be differentiated further revealing further wholes within wholes.

It is important to recognize the difference between the Chinese doctor's field of activity and that of his Western colleague. Functioning within a framework of divisibility, Western doctors can deal with their patients in a segmented fashion, treating only the body and one cause of disease generally localized in one part of the body. The traditional Chinese doctor, on the other hand, cannot deal with his patient or the patient's body as an isolated unit. The doctor is treating the whole person and all of the hierarchy of wholes which surround. The doctor, in treating the yin-yang relationships within the body of the patient, is at once dealing with the yin-yang relations in the larger cosmos. It must be remembered that an ethical orientation prevailed such that any disruption of Nature, including the illness of the body, was viewed as a failure of morals and the li of good human relationships.

This context placed a high degree of responsibility on the doctor:

. . . the ancient Chinese physician functioned not only as a healer of disease, but even more as a moral guide who helped his patient to acknowledge and rectify their infringements of moral and natural laws. Being a judge of man's behavior as well as of his health presupposed a high moral and ethical attitude on the part of the early physician and a fairly well organized state of the medical profession. (Veith, 1973, p. 22)

A similar expanding of responsibilities and function can be constructed in other areas. For example, the geomancer is not just siting a building in the immediate terrain; but, even though he might not have been aware of it, he was working with all of the wholes which surround the proposed building and had responsibility for the unity of Nature and the human world. This is the real implication of the phrase: "the underlying unity of knowledge and the human being in traditional China."

#### THE PROCESS OF QUESTIONING AS THE SOURCE OF UNITY

The unity of structure can be related as a product to the questions that are asked. I shall attempt to develop this linkage in the case of Chinese medicine. At the core of each relationship examined was a question. For example, "What is humankind's relation to Nature?" Given an alternative meaning to that of the West, I proceeded to examine the consequences on experience and function as they developed from this questioning.

However, in the consideration of each relation, there was absent an intermediate step--the mediating process of questioning between the key question and the consequences. For example, I discussed the general process of questioning in which the question "What is humankind's relation to Nature?" was given the meaning of unity, and then I examined the affect of this process on the experience and function of a geomancer. In this case, the intermediate relation--the

TABLE 1

AN EXAMPLE OF THE PROCESS OF QUESTIONING  
IN TRADITIONAL CHINESE MEDICINE

- 
1. "At what time of day did the symptoms first appear?"
  2. "What was the patient's mental state when the illness was first noticed?"
  3. "Were visitors present and what influence did they have on him?"
  4. "Have building operations been recently begun near by?"
  5. "Have there occurred cases of epidemic disease in the vicinity?"
  6. "Has there been unusual drought or damp, heat or cold?"
- 

(After Hume, 1975)

questions that the geomancer asked--was not made explicit.

The difficulty in making this relation fully explicit is that the actual questions that the geomancer asked are not readily available to us. As is the case with craftsmen anywhere, a craftsman can rarely make explicit in words the basis of his activities. This makes it extremely difficult to construct the complete process of questioning.

However, there is one area in which this condition does not hold--Chinese medicine. It seems to be true among doctors of both the East and West that a record be kept of the questions asked of a patient. By using these questions for the Chinese doctor, I will attempt to construct the full process of questioning.

In Table 1, Hume (1975) presents us with a look into the character of the process of questioning of a Chinese doctor. These would be the typical questions that a doctor called to an ill patient would ask. As I inspect this table, I find that some questions are fairly universal. For example, the first question--"At what time of day did the symptoms first appear?"--is certainly a general question that any doctor, East or West, would ask.

The same analysis could be given in a lesser degree to questions five and six, "Have there occurred cases of epidemic disease in the vicinity?" and "Has there been unusual drought or damp, heat or cold?" It is not difficult to see that these questions would be important to any medical system which attempts to be effective.

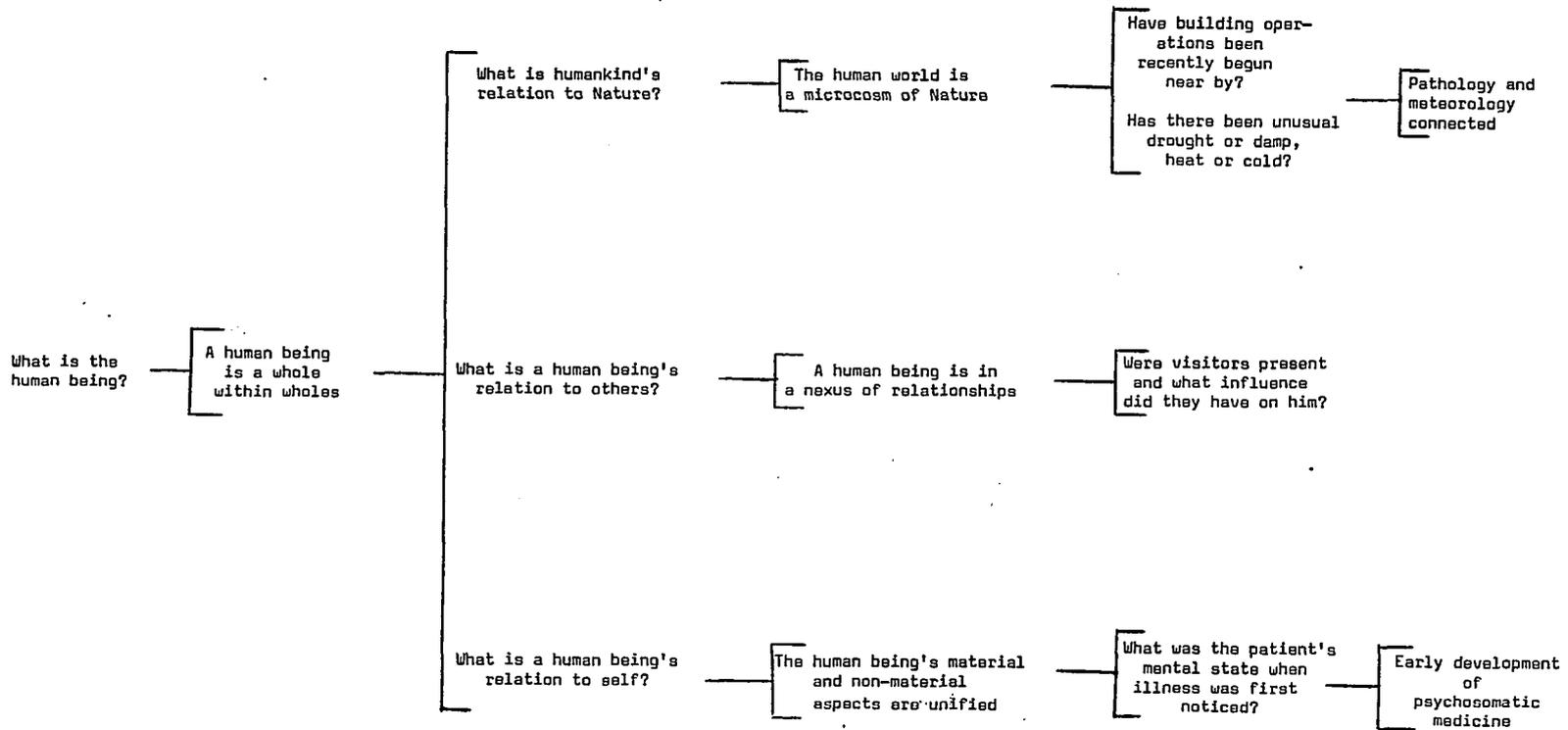


FIGURE 13

THE DERIVATION OF THE QUESTIONING IN CHINESE MEDICINE  
FROM THE ASSUMED CONTEXT OF UNITY

The remaining questions, however, appear to be unusual from a Western medical perspective, and some downright bizarre. Certainly, question number two--"What was the patient's mental state when the illness was noticed?"--is today, given the development of psychosomatic medicine in the West, a logical question to ask. Question number three--"Were visitors present and what influence did they have on him?"--it is certainly a more unusual question but not outright bizarre. The Western mind can still comprehend this question and the importance of asking it. However, with question number four--"Have building operations been recently begun near by?"--we are propelled, at least by Western standards, into the bizarre. Why should any doctor ask if building operations had been undertaken in the area? At this point, the process of questioning departs from Western patterns.

In Figure 13, I have attempted to link this intermediate process of questioning of the doctor to the general process of questioning. Beginning with the question, "Have building operations been recently begun near by?", the question that provides the context for all questioning is the question "What is the human being?" Within the context of unity in traditional Chinese knowledge, this question produces a meaning that the human being was a whole within wholes. In this context, the question "What is humankind's relation to Nature?" acquires the meaning that the human being is unified with Nature. On

the next level, questions concerning this relation become significant. Consequently, the question "Have building operations been recently begun near by?" becomes a most significant question because it relates the human being to Nature.

In a similar fashion, I can derive the other two questions. The question "Were visitors present and what influence did they have on him?" is dependent on the unity of the human being to others and is derived from the unitary meaning of the question "What is the human being's relation to others?" This context of questioning becomes a significant question because the framework places importance on the relation of the human being to others.

Finally, I can look at the question concerning the mental and physical. This question becomes significant because the mind and body were considered as related and unified as a product of the meaning of the question "What is the human being's relation to the self?"

In this context, it is possible, from this process of questioning, to derive experience and function. For example, the question about building operations in the area, relating the human being to Nature, becomes formalized in medicine to the relating of pathological conditions to meteorological changes in Nature. In a similar manner, questions concerning the mental state of the patient become formalized into an early development of psychosomatic medicine.

In the above, I have taken the time to develop a special case of the full process of questioning in Chinese medicine. If the questioning were equally available in other areas, at least theoretically, it would be possible to generate a complete system for that area. In principle, it would be possible to generate an alternative system in the West--given the assumption of divisibility--which would account for the questioning and actions of the Western doctor.

In either framework, the important conclusion of this investigation is that the process of questioning derives its character from the assumed context, and this process then places limits on function and experience.

## OVERVIEW

The unity along the three dimensions of the human being to Nature, to others, and to the self were themselves unified to produce one unity of the Tao. At the center of this hierarchy of wholes is the human being who has the responsibility to maintain the unity of the other wholes, beginning with self-cultivation.

This unified framework is the result of the Chinese process of questioning. The full linkage between the assumption of unity and the assumed context, and the consequences on experience and function were developed completely for the case of Chinese medicine. The doctor's questioning was linked to the general process and to the consequences in experience and function.

## CHAPTER IX

### IMPLICATIONS FOR THE ASSUMPTION OF AN INHERENT NATURE TO HUMAN BEINGS

My various meanderings into the philosophy of science and into Chinese knowledge will now be applied to the problem of challenging the assumption of an inherent nature to human beings.

### A CHALLENGE TO THE ASSUMPTION OF AN INHERENT NATURE TO HUMAN BEINGS

Before the assumption can be challenged and shown to be limited, some statement should be made about what the implications of this assumption are and how it is used within the Western framework of knowledge.

#### Characteristics of the Assumption

The assumption really presents two arguments: first, that the human being has a nature which is inherent and has some independence from the process by which this nature is known; secondly, it is assumed that this assumption can, in principle, be the basis for a universal and complete framework of the human being. I will examine these two assertions in turn.

As noted in Chapter II, the assumption that the human being has an inherent nature is a special case of the more general assumption that the universe has an inherent nature

that can be known. This entire framework rests on the assumption of division between the knower and the known. For this framework to function, there must be an independence between the knowing process and the object that is known by this process.

In this context, it becomes apparent why the findings of quantum mechanics which, in the early part of this century tended to challenge this independence, are so unnerving. If the nature of light, for example, changes its characteristics exclusively on the basis of the experimental situations in which it is placed, this challenges the notion that light has an inherent nature. After all, it is this inherent nature that is to serve as a self-corrective mechanism whereby one's methods can be tested and knowledge advanced.

I would maintain that an analogous situation is presented in the case of an inherent nature of the human being. The nature of the process of questioning seems to change the nature of the human being that comes to be known. When one obtains contradictory results, what is normally brought into question is one's methods, variables, and theories, but not the question of whether or not the human being has an inherent nature. It is assumed that this inherent nature will act as a corrective and allow the selection of different methods and variables.

The second argument is a derivation of the first. It is felt that the assumption of an inherent nature of the human being can, in principle, become the basis for a complete framework of the human being. The present failure to have such a framework is not with the assumption of an inherent nature, but with our current inability to elaborate this framework fully.

To draw an analogy, if a coin is tossed, it will sometimes come up heads and sometimes tails. This observation seems to challenge the assumption of determinism whereby all events must have a defined cause. Now, the statistician can use the laws of probability to predict on each toss the probability of a head or a tail. In principle, however, this use of probability is only an immediate expedient due to our present ignorance of all variables that affect the outcome of the toss. Thus, the framework of determinism for the coin toss is at present incomplete, but, in principle, can be made complete if all the knowledge of the variables were available.

Now, returning to the assumption of an inherent nature to human beings, the psychologist uses probability and statistics to describe human behavior; but, I would suggest, this is only an immediate expedient, for, in principle, when the inherent nature is completely known, when all the variables are available, the prediction will be complete and there will no longer be need for statistics.

Within this analysis, the present incompleteness of the framework is a function of the incomplete articulation of the framework and does not establish the inadequacy of the framework itself. In general, then, when the inherent nature of the human being is known, there will be a complete framework based on this nature.

#### The Challenge of the Results

I would suggest that the results of the method challenge both arguments. In respect to the first argument, the results suggest the relation between the process of questioning and the nature of the human being that is known. In detail, the results indicate that the same questions placed in alternative assumed contexts, defining alternative processes of questioning, have material consequences for the nature of the human being that comes to be known. There is a link between the process of questioning and the nature of the human being.

In this manner, the results challenge the independence of human nature from the process of knowing through which it is viewed. If this is the case, how can that which we experience as being fixed and structured (perceived to be "inherent") in human beings be understood? Much of the force of the assumption results from looking at the human being through a singular process of questioning. It is only in the context of alternatives that the full impact of this encapsulation becomes apparent.

Let me take some examples and develop them using the results of the method. It will be recalled in the above, I placed the question "What is the human being?" in the alternative contexts of the West and traditional China. The same question generated different meanings: in traditional China, the human being was experienced as a whole in unity with Nature and with other human beings. In the following sections, I developed the implications of this process of questioning for experience and function.

As the first example, the results can now be used to challenge the notion prevalent among some philosophers of the West that loneliness is inherent to the human condition. One must ask, "Is loneliness inherent in human nature or is it intrinsic to the Western process of questioning?" One way of looking at things is that the assumption of divisibility generates a process of questioning in the West which produces an experience and function of human beings which places them in isolation from others. If we ask the same questions in the context of the assumption of unity, an alternative process of questioning is generated which leads to an experience and function of the human being in relation to others. Given this parallel development of the two processes of questioning, the loneliness of the human being in the West is less a product of the nature of the human condition and more the product of viewing the human being from a singular process of questioning.

Hsu (1970), for example, has come to about the same conclusion about the universality of loneliness. He writes that Westerners seem to assume that loneliness is essential to the human condition, but, when this assertion is placed in the context of the alternative system of the traditional Chinese, it is found not to be essential to the human being at all:

The central theme of Wolfe's voluminous writings ('Which of us is not forever a stranger and alone?') is to be found with varying degrees of emphasis throughout Western literature, though it has become most explicit in contemporary American writing . . . . These writers all appear to assume that this is the human tragedy--that is, the condition of all mankind. In Chinese literature the one kind of loneliness is that which occurs when lovers, or families are separated. There is absolutely no expression of the idea that "aleness" is the essential condition of man or of struggling youth. (p. 87)

Another example can be drawn from alternative conceptions of the relation of human beings to Nature. In the Western framework, it is often assumed that there is inherent in human nature the need to explore and investigate one's environment. The human being is given the license to explore even the hidden places of Nature, for it is often assumed that in these places great discoveries are to be made which will advance human knowledge. In the Western context, this function toward Nature is almost the quintessence of what it means to be "human."

Contrast this "inherent" characteristic of human nature with the function of the Taoist and Confucian toward Nature. For the Taoist, the human being was unified with Nature,

while for the Confucian human society, not Nature, was the central concern; in either case, the exploration of the universe that surrounds was negatively valued and there was little inquisitiveness about the sources of knowledge hidden in remote areas of the world.

It will be recalled that the Confucian was embedded in a web of human relationships and responsibilities. For the Confucian to journey from this womb to a far corner of the world, let alone the stars, was considered a banishment from the civilized world itself. Bauer (1976) writes of the Confucian evaluation of the concept of a "journey":

While it is true that the "journey" could evoke the welcome assumption of an official position in the provinces or, at a later time, the adventure of the state examinations in the capital, distant journeys, particularly to uncivilized areas, let alone to foreign countries, suggested war, exile, removal from office, or even flight. Not only movement itself, but also the encounter with the other, the new, which is of the very essence of a journey, was profoundly disquieting to Confucianism. The exhortation: "Stay at home and earn an honest living," could easily have been formulated by Confucians. (p. 181)

Given this context, it is difficult for me to imagine a Confucian looking skyward on a starry night with positive feelings about a journey to those distant worlds. Yet in the West, we find such aspirations the very destiny of humankind.

Taoists, in many cases without the encumbrance of Confucian family responsibilities, would often journey to a distant mountain to become hermits. Yet, this journey was less an exploration of Nature than it was a removal to a

distant place where one could more fully appreciate a communion with the Tao. As the Tao Te Ching explains, the sage did not have to discover the secrets of Nature through any journey at all:

One may know the world without going out of doors.  
 One may see the Way of Heaven without locking  
 through the windows.  
 The further one goes, the less one knows.  
 Therefore the sage knows without going about,  
 Understands without seeing,  
 And accomplishes without any action.  
 (Chan, 1963, p. 162)

While not everyone could hope to attain sagehood, the Taoists also provided an image of the ideal society based on the above principles. Lao Tze describes this community:

Let there be a small country with few people.  
 Let there be ten times and a hundred times as many  
 utensils  
 But let them not be used.  
 Let the people value their lives highly and not  
 migrate far.  
 Even if there are ships and carriages, none will  
 ride in them.  
 Even if there are arrows and weapons, none will  
 display them.  
 Let the people again knit cords and use them (in  
 place of writing).  
 Let them relish their food, beautify their  
 clothing, be content with their homes, and  
 delight in their customs.  
 Though neighboring communities overlook one  
 another and the crowing of cocks and  
 barking of dogs can be heard,  
 Yet the people there may grow old and die without  
 ever visiting one another.  
 (Chan, 1963, p. 175)

It is difficult for me to find in either of these traditions a reflection of inherent qualities in human nature to explore and discover the secrets of Nature.

I could present several other instances from the results of the method to show where an "inherent" aspect of human nature in the West becomes less "inherent" when compared to the experience and function of the human being in traditional China. In short, it is very easy to infer some aspect to be inherent in the human being when one approaches human nature exclusively from a singular process of questioning.

In respect to the second argument, the results suggest a relational character of knowledge about human beings. The process of questioning and the human nature that results are inextricably intertwined. Building a complete framework on an assumption of an inherent nature would appear to require that this relational quality be collapsed or at least accounted for by some variables inherent in human nature.

It is difficult for me to see how any configuration of variables can ever, in principle, approximate this relational process. It has been my feeling from the beginning of this inquiry in Chapter I that the current incompleteness of the framework of the human being is not the result of the current levels of articulation of this framework, but lies in the assumptions and structure of the framework itself. At last, I can give this statement more substance.

The results of the method place me in a dilemma. On one hand, I need the current framework based on the assumption of an inherent nature within which to function,

and, on the other hand, I also recognize the limitations of the very same framework. This dilemma appears to me to be analogous to the dilemma of the quantum physicists in the early part of this century. What was required was a complete reformulation of the theories about the nature of the universe and a reversal of some well established principles. At least for me, the results suggest the need for a similar reformulation of theories about human nature. Before I suggest the broad outlines of what this reformulation could be, it would be best to deal with some of the alternative interpretations of the results short of a reformulation.

#### ALTERNATIVE INTERPRETATIONS OF THE RESULTS

If I may further extend the analogy with quantum mechanics, even given the experimental evidence, some physicists have not taken the position that a complete theoretical reformulation is necessary. Unlike Bohr and Heisenberg, these physicists hold out hope that variables will be discovered which will be able to explain the current anomalous findings. They have become advocates of a "hidden variable" solution. A similar position could be taken in respect to the results of my method.

#### The Hidden Variable Solution

In the case of quantum theory, Bohm (1957) has suggested that the relation between knowledge and the nature of quanta can be understood in classical terms by the

postulation of hidden variables which would again establish the laws of causality. In an analogous manner, the critics of my interpretation could postulate hidden variables yet to be discovered which would invalidate the relational qualities of questions and the knowledge of human beings, and reassert the framework based on the assumption of an inherent nature. Of course, such a discovery of variables would also invalidate my arguments against the completeness of the framework based upon this assumption.

As quantum physicists were quick to point out in the case of Bohm's postulation of "hidden variables," the burden of proof is clearly with advocates of this position. In an analogous manner, the burden of proof is on those who would assert "hidden variables" inherent in the nature of human beings which would explain the results.

It is difficult to speculate about what these hidden variables could be, but it is not difficult to identify the dimensions along which they may be contained. The only variables that readily present themselves are variables of the organism, environmental variables, or some combination of the two. I will now examine some examples of ways of accomplishing this.

One could account for the differences between China and the West in terms of physiological or anatomical variables. Ornstein's thesis (1972) could be extended for this purpose. It is asserted that different hemispheres of the brain have different functions. The characteristics of Western

function suggest a dominance of the left hemisphere with its emphasis on logic and analysis, while the holistic and relational characteristics of Chinese knowledge could be the result of right hemisphere dominance.

Along the dimension of environmental variables, one could account for the differences in the two frameworks in terms of geographical or climatic conditions. Fung (1966) suggests that the differences lie in the geographical structure of the two land areas. The Greeks were living in a maritime country which depended on trade over the oceans. The Chinese, on the other hand, were a continental people engaging primarily in farming. Each of these conditions can be related to the characteristics of the social structure and to the nature of knowledge in each system.

Perhaps the most elaborate and comprehensive consideration of such matters is the work of Wittfogel (1957). He tries to derive the characteristics of the Chinese framework from the environmentally induced need to manage water for farming purposes. China becomes, in his view, an "hydraulic" society which has elaborated a social system to deal with this one environmental imperative.

The major problem with any of these variables or combination of variables is that they seem so shallow and superficial when one examines the depth of differences between the two systems. It is difficult to see how any combination of variables can account for the full diversity of the two frameworks. Again, I always have the feeling of

trying to approximate a holistic process from the context of discrete elements a task that would appear to be extremely difficult.

#### The Cultural Solution

By far the simplest and most direct alternative interpretation of the results would be to use the concept of "culture" as an explanatory principle. The differences that I have generated in human nature between the West and traditional China could be explained as simply a difference in culture. The results could be quickly dismissed as trivial, the obvious assertion made that the two systems are different cultural areas and, therefore, should produce different human beings.

The first impression that such a solution leaves with me is similar to the impression that the concept of instinct leaves with many biologists. Culture seems to explain everything and yet explains nothing. Just on these grounds, the concept of culture could be questioned. However, there is a deeper reservation which rests upon the fact that culture is a Western construct.

Kroeber and Kluckhohn (1952), in their classic investigation into the concept of culture including well over one hundred definitions and meanings, while reluctant to provide a broad definition themselves, do conclude with the assertion that culture is a "logical construct" within knowledge. The social scientist uses this construct, as other scientists use their constructs, to explain phenomena.

Thus, culture must be grouped with other constructs used in the Western framework:

Culture is a general category of nature, and expressly of human nature. As such it is comparable to categories like energy, mass, evolution. As a general category it is both substantive (or classificatory) and explanatory. (Kroeber and Kluckhohn, 1952, p. 185)

It can be seen from this quotation how deeply embedded in the Western framework the concept of "culture" is. Culture becomes something objective, a product of the known, as the concept of mass is to the physicist.

The concept is dependent on the Western framework. For example, the assumption of divisibility is made such that it is possible for human beings to be separated from other human beings. It assumes that isolated pockets of humanity can exist which can develop their own culture standing in opposition to other cultures. The experience of Chapter VI has provided the possibility of a different perspective on this assumption. Within the context of unity in traditional China, civilization or culture was always singular in meaning. For the Chinese there was only one civilization which focused on the "One Man," the Son of Heaven, who had the responsibility for interfacing all humankind with Nature. There was no place in this framework for the Western concept of different cultures.

It is difficult to see how the concept of culture, dependent as it is on the Western framework, can be a subsuming construct which would explain both frameworks. There is always the irresistible tendency for most

Westerners, in dealing with China, to simply extend the Western framework to become the general framework subsuming the Chinese as a special case. I hope that this inquiry has indicated the full alternative character of the Chinese framework and the limitations of an approach which attempts to expand Western constructs to encompass this system.

#### IN SEARCH OF ORIGINS

If I am pressed further and required to account for the differences, I would speculate about the possible source of the differences as they are generated not from a complex interaction of variables or from explanatory constructs, but as they develop from the process of questioning itself. It must be stressed that the material to be presented is speculation, not historical fact. This speculation is presented at the Western request to know the first causes of things, a thirst which the Chinese mind seldom shared.

The contemporary aspects of Western knowledge have their roots, not in contemporary conditions, but in the underlying conceptual framework upon which these conditions rest. This underlying framework predates modern times. In the discussion in Chapter II, I suggested that the contemporary process of questioning within Western knowledge does not differ in essentials from the process of questioning of the Greek philosophers. I further suggested that the basis for this process of questioning could be found to develop from the assumptions made by the pre-Socratic philosophers.

Specifically, these philosophers assumed a certain divisibility between the knower and the world to be known, and a divisibility within the world itself between appearance and substance. The origins of the process of questioning and the assumption for this process can be traced to the early centuries of the development of Western knowledge. To paraphrase Whitehead, all of Western knowledge is but a footnote to the framework which was formulated in its essential structure by the Greeks.

It would seem that a search for origins would best begin with this process of questioning as it developed from this formative period. The period surrounding the 5th century B.C. was a remarkable time in the history of humankind. It was a time of philosophical ferment not only in the major areas of Greece and China, but also in the other pockets of civilization in Iran, Israel, and India. It was from this boiling cauldron of conflicting ideas that the basic foundations of each framework developed.

If we examine this period in Ancient Greece, we discern a conflict of ideas. On one side I find the beginnings of what was to be the Western framework of knowledge. With the Eleatic school of philosophers, Parmenides and his follower Zeno, one finds the beginnings of an explicit articulation of Western thought--a clear division between change and permanence, and with this, the development of a logic to support this position. At the basis of this was the assumption that the world has a permanent stuff to be known.

There was a dissenting voice, a philosopher who embraced change over permanence. Heraclitus, called by many the "obscure," perhaps because his position departed so drastically from that of his contemporaries, rejected the dualistic premise of a division between permanence and change and asserted that what was fundamental was not a "stuff," but a process (Warner, 1963). Change itself was considered to be the permanence of the world. In the philosophy of Heraclitus, I find the beginnings of a system which begins to look very much like that of the Chinese. Capra (1975) carries this comparison further by calling Heraclitus, the "Greek Taoist" (p. 116). He sees in the philosophy of Heraclitus the same emphasis on change and cycles of change as is found in the philosophy of Lao Tze.

If we examine the same period in China, one is presented with a similar and parallel conflict of ideas. Again, one can discern one group of thinkers who became representative of the Chinese framework and a dissenting group, followers of the philosopher Mo Ti (Mo Tse) and the school that he founded, Mohism. What is remarkable is that this system appears to most scholars as almost Western in its characteristics.

For example, Mo Ti was the only Chinese who could be said to have founded a religion in the Western sense of the word (Shih, 1963). This religion had many characteristics which ran parallel to Christianity. Abegg (1952) writes of Mo Ti: "By comparison with the doctrines and philosophies of

life which have prevailed in China for centuries, Mo Ti with his intellectual affinities with the West strikes us as distinctly un-Chinese." (p. 227)

I can only briefly touch upon the philosophy of this school. For a more complete consideration the reader is directed to Mei (1934). Aided by the closely related school called the Logicians, Mo Ti advocated a "proto-Western" position which included such novelties, by Chinese standards, as the experimental investigation of Nature and the development of logic. In this latter case, one finds the spontaneous development of logical paradoxes which are quite similar to the those suggested by Zeno, indicating the development of thought along Western lines.\*

As with the philosophy of Heraclitus in Greece, the philosophy of Mo Ti was against the dominant current of the framework--in this case, the traditions of Taoism and Confucianism. One could then build a full parallelism in both civilizations: the budding unity of Heraclitus vs. the dominant divisibility of the Eleatics, and in China, the unity of the Confucians and Taoists vs. the budding divisibility of the Mohists and the Logicians. Given this setting, it is possible that any particular characteristic

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\*For further information on this remarkable parallel development, see Shih (1963, p. 120) and Needham (1956, pp. 194-5). Needham (1956) writes on this correspondence: "Zeno's floruit was -450; the Chinese paradoxes must have been under discussion about -320. I find it very hard to believe in any transmission or influence at such a time. It would not be unnatural that the paradoxical form should arise spontaneously at that particular stage of thought, but the temporal coincidence remains remarkable." (p. 190)

of either civilization could have developed. For example, we tend to view science as a product of Western civilization. However, the seed was present at this period in China as well. Needham (1956) observes:

When one puts together the resemblances of the early Taoists to the pre-Socratics, and those of the Mohists and Logicians to the Eleatics and Peripatetics, and moreover, when one takes into account the enormous gaps known to exist in the ranks of the ancient Chinese writings which have come down to us, one is left with the impression that there was little to choose between ancient European and ancient Chinese philosophy so far as the foundations of scientific thought were concerned; and, indeed, that in certain respects the advantage lay with the Chinese. (p. 203)

At this time, both civilizations were at a point of balance requiring a small deflection to alter the course of their future development.

The factor that has provided for alternative processes of questioning and has given each civilization its character is, in my opinion, the alternative resolution, in Greece and ancient China, of these parallel conflicts of ideas. In the West, the views of Parmenides have predominated over those of Heraclitus. In traditional China, I find the alternative resolution. The work of the Mohists and Logicians became completely suppressed by the dominant Confucian persuasion. So complete was this suppression, according to Abegg (1952), that "there is no mention of his name [Mo Ti] in any chronicle, or in any of the innumerable and voluminous Chinese histories." (p. 227)

Alas, the Western thirst for causes is never fully quenched! One would ask what the cause for this alternative resolution of ideas was? Unfortunately, such problems must be left with the historians of this remarkable period to resolve.

## OVERVIEW

The results challenge two assertions made by the assumption that human beings have an inherent nature. Much of what has been assumed to be inherent in human nature is a function of viewing the human being from a singular process of questioning. A framework based on this assumption is limited in its ability to deal with the relational aspects of the process of questioning and the human function and experience which result.

The attempt to explain the differences between China and the West via traditional arguments of hidden variables, and using the concept of "culture," were found to be inadequate. It was suggested that the differences could be traced to an alternative resolution of a parallel conflict of ideas early in the development of each civilization.

## CHAPTER X

### GENERATING AND APPLYING AN ALTERNATIVE ASSUMED CONTEXT

To this point in this inquiry, I have concentrated primarily on the negative aspects of the results as they apply to the psychologist's framework of the human being and specifically to challenging the assumption that human beings have an inherent nature that can be known. I would like to concentrate now on the positive implications of the results, as these results suggest an alternative assumed context for questioning about human beings.

#### AN ALTERNATIVE ASSUMED CONTEXT AS A GENERAL PROCESS

The differences between China and the West have been the major focus of the discussion. However, the method has not only highlighted differences but also similarities between the two frameworks. These similarities can become the basis for generating a more general process which views China and the West as special cases.

#### The General Process

In the last chapter, the analysis of the results concentrated on the differences between knowledge and the nature of the human being in traditional China and the West. If we now ask the question, "What similarities have been generated by the method?", the results can be made to assume

a different aspect and serve a different purpose.

In the West, the results suggest that the assumed context of Western knowledge provided the basis for a process of questioning about human beings and in turn affected human function and experience. In a parallel manner, the assumed context of traditional China affected human function and experience with alternative consequences. I find in both areas the identity of one process, a basic similarity. From this perspective, both traditional China and the West can be viewed as special cases of the general process whereby the questions asked (i. e., the process of questioning) act in a pronounced fashion on the perception of human experience and function (i.e., human nature).

It is not necessary to construct an alternative assumed context, for the method has generated such an alternative through its very function. At the heart of this alternative assumed context is the assumption that human nature is a function of the process of questioning through which it is viewed. This assumption can form the basis for an alternative assumed context of questioning.

Within the special case of the Western assumed context, questions which relate to what the inherent nature of human beings may be are given central importance. From this focus, the questions that one asks derive as indicated in Chapter II. Within the assumed context here being suggested, the questions we ask about human beings and the human nature we desire to have ideally become the focal

questions from which all other questions derive.

If human nature is not inherent in human beings and is related to the questions we ask, we take the responsibility for the process of questioning and the human nature that results. I must again recall the insightful comment made by the quantum physicist Heisenberg that "We must remember that what we observe is not nature itself, but nature exposed to our methods of questioning." (Heisenberg, 1958, p. 81) If I may extend Heisenberg's comment, what we observe of human beings is not human nature but human nature exposed to our process of questioning. This latter phrase is the defining condition for an alternative assumption and context.

I am not the first, nor, I hope, the last, to suggest the importance of this relation in the study of human nature. For example, in education, a very similar proposal is advanced by Postman and Weingartner (1969) in respect to the current views about students in the teaching situation. They write: "We have to remember that what we observe children doing in schools is not what they are, but children exposed to us by our methods of teaching." (p. 80) Similar realizations could no doubt be produced from other areas.

#### Integrating the Specific Process in the General

At this point, one would ask what is to become of the sizable commitment to the traditional assumed context and all of the information produced from this process of questioning. If one truncates the general process to one dimension, all of the aspects of the Western process of

questioning can be generated. Within this special case, there is no difference between the two. However, the alternative does have other dimensions of questioning which are not available in the special case. We have a choice at this point: one can truncate the process of questioning and limit the questions that will be asked about human nature, or one can expand this process of questioning to ask questions that are not usually asked and indeed make one uncomfortable. This choice has implications for everyone and for the questions that the psychologist asks in particular.

The pragmatic results of this alternative mode of inquiry for the psychologist can be realized most directly by the questions that are asked. As noted above, the psychologist is basically asking only specific refinements of one question, "What is the human being?", a question that has its source in the Western assumed context. The result of this, as Dubin (1969) has recognized, is that "psychologists seem to be afraid to ask really important questions." (p. 277) This is not a criticism of psychologists as much as it is a criticism of the assumed context in which psychologists are forced to work, a context which assigns the questions that are to be answered.

The result is that, as Dubin concludes, the psychologist is channeled into one process of questioning, and this process of questioning quickly degenerates into a highly specific mode of questioning largely dependent on the

methodology which is currently available:

Thus, it seems to me that we all are far too eager to ask questions as 'What can be easily answered?' 'What else can I do with my test?' 'What aspects of behavior can I study with my computer or with my apparatus?' or what problems can I find that I can fit this method to? (p. 277)

In short, within the current assumed context, the process of inquiry is subservient to the process of questioning, with the latter being a sacred process which itself is free from criticism; while within the alternative, the process of inquiry is directed toward the process of questioning and has as its purpose the criticism of the questions we ask and an active manipulation of these questions. The choice is really between having control over this process or continuing to work within the process without being able to explore its full potentials and being limited to only one dimension.

#### APPLICATION TO THE PROBLEM

The alternative just presented can serve as a solution to the problem which initiated this inquiry. It will be recalled that the problem was defined in Chapter I as the limitation of psychology's framework to encompass human potentials. I proceeded to illustrate the problem by examining its two dimensions: the limitations of the framework's capacity toward the potentials of others and toward the potentials of human beings as knowers. In both instances, it was concluded that the attempt to encompass human potentials completely within the traditional framework

resulted in either a paradox of reflexivity or, more acutely, in an image of the human being without human potentials. Those aspects of the human being that we associate with being human become systematically excluded by the framework.

The alternative framework just suggested has the capacity to deal with both aspects of the problem. Within the alternative, the only limits placed on human potentials are those imposed by the human being's own process of questioning. Likewise, the acute issue of incorporating the knower and the known within the same framework is obviated, for the alternative postulates a unified process which is uniform and continuous for both the knower and the human being who is known. I will now examine the implications of the alternative along each of these dimensions.

#### The Alternative and the Potentials of Others

The traditional psychological framework has a limited capacity for encompassing human potentials because these potentials must be contained within the dimensions of something inherent in human nature. The alternative framework of the human being obviates the problem by viewing human beings as constructing their own potentials within their process of questioning, the only limit being that they remain within some process of questioning.

Since human potentials are linked to something inherent in human nature within the Western framework, these potentials are viewed as being intrinsic to this nature.

The human being, in final analysis, becomes something inert, an elaborate manikin. As I have tried to suggest in the preceding chapters, the human being is engaged in a process more profound and active than this view would indicate. Within the traditional framework, the purpose is to discover what this inert, intrinsic structure is, resulting in recourse to ever more complex models of what this manikin may be in an attempt to close the gap with observed human potentials.

In Chapter I, I presented some of the difficulties involved in such a program; but these difficulties have not impeded the search which has produced a mosaic of possible models. Here are but a few:

Man is a telephone exchange, a servomechanism, a binary digital computer, a reward-seeking vector, a hyphen between S and R process, a stimulation-maximizer, a food, sex or libidic energy converter, a 'utilities' maximizing game player, a status seeker, a mutual ego-titillator, a mutual emotional (or actual) masturbator, a hollow cocoon seeking ecstasy through the liquidation of its boundaries in the company of other cocoons similarly seeking ecstasy. (Koch, 1974, p. 6)

One could, of course, add to Koch's list. However, as the list is expanded and one includes more and more increasingly elaborate models of human nature, the goal of encompassing human potentials, instead of approaching realization, seems, as with attempt to reach absolute zero, to recede at an even faster pace and seems even more beyond one's grasp. I attempted in Chapter I to illustrate that the problem of human potentials cannot be solved in an additive manner by simply combining different variables and

models in an eclectic manner. The problem lies with the assumption upon which the framework is based and is intrinsic to the structure of the current framework.

The alternative obviates the problem of encompassing the potentials of others by viewing human beings as constructing their own potentials through their process of questioning. It is hoped that this inquiry has established that at the heart of human nature is a process, a process in which human beings construct themselves. Since human beings construct their own potentials from this process and the human being can alter the flow of this process through the questions asked and the assumed context in which they are asked, a framework based on this assumption has the capacity for almost infinite variation in human potentials. The only limitation imposed on human potentials within the alternative is that the human being must remain within some process of questioning. In short, the major point of departure for the alternative is the conviction that the human being's potential is to alter human potential.

The alternative, of course, frees the knower from forever looking for some secret to human nature, from the search for the model that "fits," and which will account for all human potentials. I would submit that the human being has no secret nature to be discovered, for this nature is the same as that of the knower. One constructs knowledge from a process of questioning. This discussion brings us full circle to a consideration of the other dimension of the

problem--the potentials of the human being as a knower.

#### The Alternative and the Potentials of the Knower

I elaborated at length, in Chapter I, the separation between the human being as a knower and the human being that is known. I quoted Gouldner (1970) as saying that they are thought to compose two breeds of men. On the one hand, we have the human being as a knower displaying one process of knowing, characterized by rationality and autonomous action. On the other hand, we have the human being as known displaying yet another process, characterized by motivation and determinism. The current framework, then, confronts us with alternative processes for the two categories of human beings and, consequently, different orders of potentials. The problems centering around reflexivity, turning one process back upon the other, defined the paradoxes of this approach most acutely.

This situation is quite analogous to the role of the observer in the Newtonian universe. Within this framework, the observer was to exist in a God-like framework of absolutes separated from the universe being observed. The revolution of relativity has removed the human being from such a privileged status, and has brought the observer into the world being observed. In an analogous manner, playing upon the assumed divisibility that underlies Western knowledge everywhere, the psychologist, the social scientist, and, ultimately, the Western knower are assumed to be in a privileged position in respect to other human

beings. The main thrust of this inquiry has been an assault on this aloofness.

The point where the alternative challenges this course of events is, at its heart, the assumption that there are two processes, that the knower has different potentials from the human being who is known. Within the alternative framework, I am suggesting, the two processes are collapsed into one process. In both cases, there is the unity of one process: as knower or known, the psychologist or scientist constructs knowledge from assumptions and questions giving definition to a process of questioning. This process then affects one's experience and function.

It follows that human beings as knowers or as the known have the same potentials, being limited only by the questions they ask and the assumed context in which they are asked. Psychologists as knowers have all the limitations and potentials of other human beings they are attempting to know.

#### APPLICATION TO AN AREA OF PSYCHOLOGY

The core of the alternative framework here suggested, in direct application to what a psychologist does, is that psychologists are constructing human nature by the questions they ask about human beings and the situations in which the psychologist places human beings. To apply the alternative to an area of psychology would entail presenting evidence that psychologists are becoming aware of this relation.

From the very beginning of this inquiry, it was necessary, in order to define the problem, to examine the total psychological framework beyond the limits of the customary boundary conditions between areas of psychology and between psychology and other disciplines. It was only within this perspective of the total field and, in many cases, the extrapolation of the current levels of articulation to ideal levels of development, that any experience of the problem could be generated.

Now, as I attempt to apply the results of this inquiry to a specific area of psychology, I am confronted with the inverse of the problem. The results apply to the total framework and are not limited to the domain of one specific area of psychology. For example, it is difficult to see the effects of the construction of human nature in the area of the physiology of perception in, say, experiments on retinal gradients. Yet, the questions being asked by this experimenter are in fact derivable from the general process of questioning within the larger framework of psychology.

The problem is that as one fragments the framework into smaller and smaller components and sub-disciplines, one also tends to obscure the relationships that are so central to the alternative that I am suggesting. This situation makes it extremely difficult to examine the theories and data of one area of psychology and immediately apply the alternative in a meaningful fashion.

With these difficulties and limitations firmly in mind, I will attempt to apply the alternative to social psychology. This field is a particularly fertile one for dealing with these relationships because the subject of study is the relatively complex aspects of human behavior and involves the effects of one person on another.

A major conclusion of this inquiry was the realization that investigations into human nature are relational and reflexive activities which involve both the knower and the known. Approaching from an experimental and empirical direction on this issue, some psychologists are beginning to assert that psychological research is a relational and reflexive activity. Gadlin and Ingle (1975) have suggested that psychological research should be considered in this light even though this view runs counter to the current Zeitgeist:

Conducting research means entering into relationships with people, and these relationships significantly affect the outcome of the research. Our present methodology prescribes these relationships as impersonal ones, leads us to minimize the effects of 'personal' factors, turns our attention away from a consideration of the relationships, and facilitates treating our subjects as objects. Alternatively, we are suggesting that there is no way in which human research cannot be relational and that psychological methodology must attend to the relational quality of research; this is the beginning of reflexivity. (Gadlin and Ingle, 1975, p. 1008)

They go on to expand this notion of reflexivity to viewing both the psychologist and the human subject as contained within one process and subject to the same

process:

Additionally, reflexivity can be created by acknowledging that the study of human behavior necessarily includes the behavior of psychologists. This recognition implies, of course, that the psychologist is as prone to psychological processes as anyone else and should be especially self-conscious of this fact when acting as a scientist. (Gadlin and Ingle, 1975, p. 1008)

These statements are remarkably close to the spirit of the alternative framework for psychology that I have suggested.

As a consequence of the relational and reflexive structure of psychological research, the psychologist, and the social psychologist in particular, may be viewed as constructing a human nature that one's subjects then internalize, and which the social psychologist then validates empirically as human nature. In this way, one is limiting what human nature can be. Empirical validation does not mean that something is inherent in human nature, only that a certain result is repeatable given a structured means of approach. Argyris (1975) gives the following example:

For example, if students read textbooks that purport to describe human nature and if these textbooks include dissonance and attribution theories, then the psychological processes that compose these theories may form the basis for the model of man implicit in these theories. We are told in these texts that human beings strive to reduce post decisional dissonance or frequently make attributions of others. The student reading these generalizations may understandably come to conceive of human nature as including dissonance mechanisms and attribution activities. Such an inference would be supported empirically. But it does not follow that dissonance reduction and attribution are part of human nature in the same sense that  $1/2 gt^2$  is part of the physical universe. The latter is hypothesized to

characterize an essential quality of the physical universe. The former can be shown to be an artifact, a convention that can be altered if other concepts of human nature are developed. (pp. 473-74)

One can see an application of the major structural elements of the alternative framework of human nature in these comments.

## OVERVIEW

The results of the method generate an alternative assumed context for questioning which encompasses the Western and the Chinese frameworks as special cases. The alternative assumes that human nature is a function of the process of questioning from which it is viewed.

This alternative was used as a solution to the problem of encompassing human potentials. The only limit placed on human potentials within the alternative is that one must remain within some process of questioning. The knower and the known become viewed as being within the same process and as having the same potentials.

The alternative was applied to a field within psychology. Psychologists, notably social psychologists, have expressed views about reflexivity and the construction of human nature which are congruent with those of the alternative suggested.

## FUTURE PERSPECTIVES

As I look back upon the distance that this inquiry has covered, the speculations that have been made, the expanding of some principles beyond the limits to which they are normally taken and the placing of factual elements into, sometimes, quite obscure contexts, I ask myself, "For what reason has this inquiry been undertaken?"

I can only answer for myself. To me this inquiry makes a positive statement about the responsibilities of the knower as a psychologist and as a human being. As a knower, I must assume the responsibility for my nature and that of others beyond just discovering what that nature is.

This inquiry would imply that if we so focus and limit the questions that we ask about ourselves and others, we can come to discover and validate a theory of what human beings are and what we ourselves are. It is possible to do this, and this is a fair description of what is currently happening in Western knowledge.

This is currently being done, but should it be done? This inquiry suggests that we have a choice. The psychologist can expand the questions that are asked and the resultant human nature that can be constructed and experienced. When one asks questions about what human nature is, one will discover what is contained within one's questioning, which in turn limits what the human being can

be.

The key to approaching what can be is the recognition that the limits of what the human being can be are not given by something inherent in human beings, but in their process of questioning and in our process of questioning when we view that nature. This inquiry has attempted to show that at this point in time the Western process of questioning is quite invariant. There is one assumption and one central question from which the structure of the questioning derives. The total effect is a dominance of the notion that human beings have an inherent nature that is to be known.

The only place in the contemporary world where I can find an example of the wide scale attempt to construct human nature in an alternative manner is in the People's Republic of China. It is my experience and that of many others who have visited China in the last few years that there is a concerted effort in that society to remake human nature. If one is to accept at face value what one reads, gone is the assumption that certain characteristics such as intelligence and creativity are inherent in some individuals and not others. Working on such principles of the mutability of human nature, this country has, since the revolution, transformed an entire society.

As one examines this construction of a new human being in contemporary China, one begins to ask different questions, questions about the questions that we ask about human beings in this society, and questions about what

questions the Chinese themselves are asking. William Hinton writes of this challenge:

What can one say about a society that really takes seriously the idea that everyone has untapped potential, that everyone can be creative, that intelligence is not fixed, that human nature can be transformed? What can we make of the idea that creativity is not a private matter--a question of this or that individual genius doing his or her own thing--but arises from cooperation, from combining the intelligence and efforts of many? Or, for that matter, of the idea that education should teach people to think; that exams should test one's ability to think, or, even the collective ability of a group to think; that discipline is rooted in a voluntary commitment to decisions and rules that are comprehended and agreed upon? And how can we deal with the idea that education should be combined with productive labor while productive labor everywhere should generate education--every school a factory, every factory a school--with the further implication that education should never stop and that no one is too old to learn? (Gamberg, 1977, p. xiii).

It is always tempting for the Westerner to regard contemporary China as a resolution to Western problems. While the Chinese must be applauded for the enormous changes in human nature that have been produced since 1949, these changes themselves have been generated from and limited by a Marxist view of the human being which views human nature as a function of social and economic conditions and not as a function of the boundary conditions of one's process of questioning. It was this Marxist ideal of the human being which has acted as the guiding force for this transformation.

As Mao said in pre-revolutionary days in Yanan:

Is there such a thing as human nature? Of course there is. But there is only human nature in the concrete, no human nature in the abstract. In class society there is only human nature of a class character; there is no human nature above classes. We uphold the human nature of the

proletariat and of the masses of the people, while the landlords and bourgeois classes uphold the human nature of their own classes, only they do not say so but make it out to be the only human nature in existence. (Mac Tse-Tung, 1967, p. 90)

Much of the transformation that has been possible in China was the result of this relationship where social conditions were changed and a new human nature constructed.

One must ask if this is the only ideal which has the potential to guide the construction of a new human nature. The Marxist view of the human being places certain boundary conditions on the questions that can be asked and limits the human nature that can be constructed.

If this inquiry stands for one thing, it stands for the principle that there must not be any preset boundary conditions for the questions asked about human nature. It is only within such an open process of questioning that the full potentials of the human being can hope to be realized.

## APPENDIX

### LEIBNIZ AND CHINESE KNOWLEDGE

The philosophy of Leibniz stands out among other Western philosophies as being in many ways unique and reminds one of how a Chinese thinker would construct his world more than of the way a Western thinker does. This has suggested to me that Leibniz may have been stimulated to develop such non-Western ideas from contacts with Chinese knowledge. Since the work of Leibniz is central to much of the work of the later European philosophers, it could be speculated that, via Leibniz, there was a major infusion of Chinese concepts into Western knowledge, or more precisely, an infusion of the Chinese framework of unity into the Western framework of divisibility. The following all too brief consideration of this speculation attempts to follow this intuition.

There can be no question, in my opinion, that Leibnizian philosophy is fettered to the Western framework of divisibility and its attendant philosophical problems which derive from this assumed context of questioning. Leibniz was very much interested in the traditional problems of Western philosophy that the assumption of division presents--the relation of God to the human world and the relation of mind to body. As Carr (1960) has recognized,

these two divisions were interrelated for Leibniz such that in the mind-body relation he found in miniature the God-world relation. Leibniz hoped that by solving the mind-body problem a general metaphysic could be produced that would solve all problems concerning reality.

While the purpose and problem for Leibniz were defined by the Western framework, his approach to these problems was quite unorthodox by Western standards. Leibniz suggested a radical redefinition of the idea of a substratum to the world, abandoning the traditional Western notion of a static substratum in favor of an active subject (Carr, 1960). This radical reformulation of the concept of substance is essential to an understanding of his concept of the monad. Using this as a basis, Leibniz obviates many of the oppositions in thought and suggests an alternative which subsumes the dualisms. For example, his doctrine of "pre-established harmony" obviates and subsumes the opposition of the causation theory and the doctrine of occasionalism in relating God to the world.

All of this tends to suggest that Leibniz, while definitely working within a Western framework, has generated unique solutions which one finds difficult to derive from completely Western sources. This tends to point to a non-Western, possibly Chinese, source of influence on his thought. I am certainly not the first to see in Leibnizian ideas, not the divisions of the West, but the unity characteristic of Chinese knowledge. For example, Reichwein

(1967) writes:

The doctrine of a 'pre-established harmony' has its Chinese counterpart in the Tao of the World. Leibniz believes, like the Chinese sages, in the world of reality as a Unity, as a continuously rising scale of spiritual beings developing progressively. (p. 79)

There is some historical evidence to support the assertion that throughout his life Leibniz was very involved with "things Chinese." Lach (1945) indicates that at an early age Leibniz was quite familiar with Chinese materials that were being conveyed to Europe from China by Jesuit missionaries. As time went on, Leibniz became very involved in the controversy raging in Europe concerning the interpretation of Confucian rites within Catholic theology. The stimulus of China was present. The real question is the degree to which the ideas of his philosophy were a direct result of this Chinese stimulus and to what degree his ideas were independently developed.

Hughes (1943) writes that with the one exception of the existence of God, the position of Leibniz would be in almost complete agreement with that of a Neo-Confucianist. He suggests the thesis that Leibniz was to a great degree absorbing the Chinese materials presented to him by the Jesuits. He writes:

The natural inference, and I think, within limits the right one, is that the Chinese influence went very deep in him [Leibniz], deeper than he knew, since the spirit of the man was such that he gladly and easily accepted what he read in the Jesuit books. (p. 20)

Mungello (1971), on the other hand, asserts the somewhat opposing view that the Chinese influence was less important in the development of his ideas and that Leibniz only sought confirmation of his ideas in Chinese thought. Mungello writes that "confirmation, not derivation, of his key principles seems to have been what Leibniz sought in China." (p. 20)

It is beyond the scope of the present inquiry to consider this issue further. We can conclude, however, that beyond the historical problems involved in evaluating the particular weight of Chinese knowledge in the development of the philosophy of Leibniz, there was an infusion of Chinese-like thought into European philosophy at that time. The degree to which his unique contribution was developed independently or as a result of the Chinese stimulus may forever remain a moot point.

Needham (1956) suggests the interesting thesis that Leibnizian philosophy was instrumental in disseminating the Chinese philosophy of organism into European thought. It was this philosophy which was central to the collapse of the monopoly of the barren mechanistic philosophy in European thought. With this collapse, new theoretical heights of science and philosophy were possible. The development of the organic philosophy necessary for these theoretical triumphs can be traced, according to Needham, to Leibniz and, ultimately, to the Sung Neo-Confucianists. He writes:

The great triumphs of early 'modern' natural science were possible on the assumption of a mechanical universe--perhaps this was

indispensable for them--but the time was to come when the growth of knowledge necessitated the adoption of a more organic philosophy no less naturalistic than atomic materialism. That was the time of Darwin, Frazer, Pasteur, Freud, Spemann, Planck and Einstein. When it came, a line of philosophical thinkers was found to have prepared the way--from Whitehead back to Engels and Hegel, from Hegel to Leibniz--and then perhaps the inspiration was not European at all. Perhaps, the theoretical foundations of the most modern 'European' natural sciences owe more to men such as Chuang Chou, Chou Tun-I and Chu Hsi than the world has yet realized. (Needham, 1956, p. 505)

This is a very interesting line of thought along which there has been little in the way of systematic scholarship. I have long felt that many of the theoretical developments of the West could not have been executed from only the Western framework of divisibility. The Chinese framework, on the other hand, with its assumption of unity, provides a certain freedom which cannot be found in the Western framework.

It is indeed an intriguing thought that perhaps Western theoretical triumphs have their source not with the pre-Socratics, nor with Plato or Aristotle, but with the Taoists, Confucians, and Sung Neo-Confucians of traditional China. It is at once a humbling and gratifying thought which tends to indicate the unity of world knowledge.

While we are at this point in the currents of world knowledge, I cannot hesitate to make yet a further speculation concerning the contemporary world. It is an enticing thought that perhaps, in the guise of Marxism, the Western modified traditional Chinese framework has again returned to China. Maoism, as it derives from the work of

Marx and Engles, would seem to enter at this point on the chain developed above. It is revealing to a note a comment made to Peyrefitte (1977). He quotes one Chinese communist theorist as saying, "Research may in time show that in fact Marx borrowed from China. He took it straight from Hegel, and Hegel--along with Fichte and Schelling--seems to have derived it from Asiatic thought." (p. 56)

The feeling that this discussion leaves with me is similar to that which I have often had when viewing a huge machine. Many times, I can see the relation between different moving parts, of piston to rod, but the final purpose of the machine remains a mystery. A comforting assumption is that world knowledge, through these cross-currents, is evolving, generating its dynamism from the continued cross-fertilization between China and the West.

## BIBLIOGRAPHY

- Abegg, L. The Mind of East Asia. London: Thames, 1952.
- Allport, G. Becoming. New Haven: Yale, 1955.
- American Psychological Association. Guidelines for nonsexist language. American Psychologist, 32, 1977, 487-497.
- Argyris, C. Dangers in applying results from experimental social psychology. American Psychologist, 30, 1975, 469-485.
- Balazs, E. Chinese Civilization and Bureaucracy. New Haven: Yale, 1964.
- Bannister, D. Psychology as an exercise in paradox. In D. Schultz (Ed.). The Science of Psychology: Critical Reflections. New York: Appleton-Century, 1970. Pp. 2-21.
- Bauer, W. China and the Search for Happiness. New York: Seabury, 1976.
- Binyon, L. The Flight of the Dragon. London: Murray, 1927.
- Binyon, L. The Spirit of Man in Asian Art. Cambridge: Harvard, 1936.
- Bodde, D. The Chinese view of immortality. Review of Religion, 1942, 6, 369-83.
- Bodde, D. China's Cultural Tradition. New York: Holt, 1957.
- Bodde, D. and Morris, C. Law in Imperial China. Cambridge: Harvard, 1967.
- Bohm, D. Causality and Change in Modern Physics. London: Routledge, 1957.
- Boyd, A. Chinese Architecture and Town Planning. London: Tiranti, 1962.
- Breuer, H. Columbus was Chinese. New York: Herder, 1970.

- Bridgman, P. The Way Things Are. Cambridge: Harvard, 1959.
- Bronowski, J. The logic of the mind. In W. Coulson and C. Rogers, (Eds.). Man and the Science of Man. Columbus: Merrill, 1968. Pp. 31-49.
- Bronowski, J. The Ascent of Man. Boston: Little, 1973.
- Buck, P. China, As I See It. New York: Day, 1970.
- Capek, M. The Philosophical Impact of Contemporary Physics. New York: Van Nostrand, 1961.
- Capra, F. The Tao of Physics. Berkeley: Shambhala, 1975.
- Carr, H. Leibniz. New York: Dover, 1960.
- Carruccio, E. Mathematics and Logic in History and in Contemporary Thought. Chicago: Aldine, 1964.
- Chan, W. The natural way of Lao Tzu. In W. Chan (Ed.). A Source Book of Chinese Philosophy. London: Oxford, 1963. Pp. 136-176.
- Chan, W. The story of Chinese philosophy. In C. Moore (Ed.). The Chinese Mind. Honolulu: University of Hawaii Press, 1967. Pp. 31-76.
- Chen, K. Buddhism in China. Princeton: University Press, 1964.
- Chen, K. The Chinese Transformation of Buddhism. Princeton: University Press, 1973.
- Cheng, C. Model of causality in Chinese philosophy. Philosophy East and West, 26, 1976, 3-20.
- Chiang, H. Psychology of the Tao and its Modern Implications. Unpublished Doctoral Dissertation. Brandeis University, 1971.
- Chiang, Y. Chinese Calligraphy. Cambridge: Harvard, 1973.
- Chihara, C. Wittgenstein's analysis of the paradoxes in his lectures on the foundations of mathematics. Philosophical Review, 1977, 86, Pp. 365-380.
- Chu, T. Law and Society in Traditional China. Paris: Mouton, 1965.
- Churchman, C. The Systems Approach. New York: Dell, 1968.

- Cooper, W. and Siven, N. Man as a medicine. In S. Nakayama and N. Sivin (Eds.). Chinese Science. Cambridge: M.I.T., 1973. Pp. 203-272.
- Creel, H. Sinism: A Study of the Evolution of the Chinese World View. Chicago: Open Court, 1929.
- Creel, H. Confucius, the Man and the Myth. New York: Day, 1949.
- Croizier, R. Traditional Chinese Medicine in Modern China. Cambridge: Harvard, 1968.
- Daye, D. Reflexivity and metalanguage games in Buddhist causality. Philosophy East and West, 1975, 25, 95-101.
- Debono, E. Lateral Thinking. London: Oxford, 1970.
- Dreyfus, H. What Computers Can't Do. New York: Harper, 1972.
- Dubin, R. Theory Building. New York: Free Press, 1969.
- Duhem, P. The Aim and Structure of Physical Theory. Princeton: University Press, 1954.
- Dumoulin, H. A History of Zen Buddhism. London: Faber, 1963.
- Eberhard, W. The political function of astronomy and astronomers in Han China. In J. Fairbank (Ed.). Chinese Thought and Institutions. Chicago: University Press, 1957. Pp. 33-70.
- Eberhard, W. Guilt and Sin in Traditional China. Berkeley: University Press, 1967.
- Edwards, P. (Ed.). The Encyclopedia of Philosophy, Vol. 7. New York: Macmillan, 1967.
- Fairbank, J. Problems of method and content. In J. Fairbank (Ed.). Chinese Thought and Institutions. Chicago: University Press, 1957. Pp. 1-14.
- Fairbank, J. A preliminary framework. In J. Fairbank (Ed.). The Chinese World Order. Cambridge: Harvard, 1968. Pp. 1-19.
- Feyerabend, P. How to be a good empiricist. In B. Baumrin (Ed.). Philosophy of Science. New York: Wiley, 1963. Pp. 3-39.

- Fogarty, J. (trans.) Barefoot Doctor's Manual. New York: Running Press, 1977.
- Freedman, M. Chinese Lineage and Society. New York: Humanities, 1966.
- Frege, G. The Foundations of Arithmetic. Oxford: Blackwell, 1959.
- Fried, M. China: an anthropological overview. In J. Meskill (Ed.). An Introduction to Chinese Civilization. New York: Columbia University Press, 1973. Pp. 343-378.
- Fry, R. Chinese Art. London: Eatsford, 1935.
- Fung, Y. A Short History of Chinese Philosophy. New York: Free Press, 1966.
- Gadlin, H. and Ingle, G. Through the one-way mirror. American Psychologist, 30, 1975, 1003-9.
- Gamberg, R. Red and Expert. New York: Schocken, 1977.
- Gouldner, A. The Coming Crisis of Western Sociology. New York: Basic, 1970.
- Guenon, R. The Reign of Quantity. Baltimore: Penguin, 1972.
- Guthrie, W. The Greek Philosophers. London: Methuen, 1950.
- Hanson, N. Perception and Discovery. San Francisco: Freeman, 1969.
- Heisenberg, W. Physics and Philosophy. New York: Harper, 1958.
- Heyerdahl, T. Kon Tiki. New York: Rand McNally, 1950.
- Holcombe, C. The Real Chinamen. New York: Dodd and Mead, 1895.
- Hsu, F. Americans and Chinese. New York: Natural History Press, 1970.
- Huang, A. Embrace Tiger, Return to Mountain. Moah, Utah: Real People Press, 1973.
- Huard, P. and Wong, M. Chinese Medicine. New York: McGraw, 1968.

- Hughes, E. The Great Learning and the Mean-In-Action. New York: Dutton, 1943.
- Hume, E. The Chinese Way in Medicine. Westport, Conn.: Hyperion, 1975.
- James, W. The Principles of Psychology. New York: Holt, 1952.
- Jourard, S. Disclosing Man to Himself. Princeton: Van Nostrand, 1968.
- Jung, C. Synchronicity: An Acausal Connecting Principle. Princeton: University Press, 1973.
- Kasner, E. and Newman, J. Paradox lost and paradox regained. In J. Newman (Ed.). The World of Mathematics, Vol. 3. London: Allen, 1956. Pp. 1936-56.
- Kelly, G. A Theory of Personality. New York: Norton, 1963.
- Kilmister, C. Language, Logic and Mathematics. New York: Barnes and Noble, 1967.
- Kline, M. Mathematics and the Physical World. New York: Crowell, 1959.
- Koch, S. Psychology as science. In S. Brown (Ed.). Philosophy of Psychology. New York: Harper, 1974. Pp. 3-40.
- Koestler, A. The Case of the Midwife Toad. New York: Random, 1971.
- Korzybski, A. Science and Sanity. Lakeville: International Non-Aristotelian Society, 1958.
- Kroeber, A. and Kluckhohn, C. Culture: a critical review of concepts and definitions. Papers of the Peabody Museum, Vol. XLVII, 1, 1952.
- Kuhn, T. The Structure of Scientific Revolutions. Chicago: University Press, 1962.
- Lach, D. Leibniz and China. Journal of the History of Ideas, 6, 1945, 436-455.
- Lai, T. Chinese Calligraphy. Seattle: Washington University Press, 1973.
- Latourette, K. The Chinese: Their History and Culture. New York: Macmillan, 1964.

- Legge, J. The Sacred Books of China: The Texts of Confucianism. Oxford: Clarendon Press, 1879.
- Legge, J. The Sacred Books of China: The Texts of Confucianism. London: Oxford, 1926.
- Legge, J. The Sacred Books of China: The Texts of Taoism. Oxford: University Press, 1927.
- Legge, J. The Chinese Classics, Vol. I. Hong Kong: University Press, 1970.
- Lin Yutang. My Country and My People. New York: Day, 1935.
- Lin Yutang. The Importance of Living. New York: Day, 1940.
- Lovejoy, A. The Great Chain of Being. Cambridge: Harvard, 1957.
- Luard, E. Chinese attitudes to the West. In R. Iyer (Ed.). The Glass Curtain between Asia and Europe. New York: Oxford, University Press, 1965. Pp. 102-119.
- Lui, D. Tai Chi Ch'uan and I Ching: A Choreography of Body and Mind. New York: Harper, 1972.
- Mach, E. On thought experiments. Philosophical Forum, 4, 1973, 449-457.
- Maisel, E. Tai Chi for Health. New York: Holt, 1963.
- Malinowski, B. Sex and Repression in Savage Society. New York: Harcourt, 1927.
- Manaka, Y. and Urguhart, I. The Layman's Guide to Acupuncture. New York: Weatherhill, 1972.
- Mancall, M. The Ch'ing tribute system. In J. Fairbank (Ed.). The Chinese World Order. Cambridge: Harvard, 1968. Pp. 63-89.
- Mao Tse-Tung. Talks at the Yen-an forum on literature and art. In Selected Works of Mao Tse-Tung, Vol. 3. Peking: Foreign Language Press, 1967. Pp. 69-98.
- March, A. An appreciation of Chinese geomancy. Journal of Asian Studies, 27, 1968, 253-267.
- Marcuse, A. One Dimensional Man. New York: Harper, 1964.
- Maslow, A. The Psychology of Science. New York: Harper, 1966.

- Mather, R. The conflict of Buddhism with native Chinese ideologies. Review of Religion, 1955, 20, 25-37.
- May, R. The emergence of existential psychology. In R. May (Ed.). Existential Psychology. New York: Random, 1960. Pp. 17-60.
- Mei, Y. Motse, the Neglected Rival of Confucius. London: Probsthain, 1934.
- Mei, Y. The status of the individual in Chinese social thought and practice. In C. Moore, (Ed.). The Status of the Individual in East and West. Honolulu: University of Hawaii Press, 1968. Pp. 337-346.
- Meskill, J. History of China. In J. Meskill (Ed.). An Introduction to Chinese Civilization. New York: Columbia University, 1973. Pp. 3-338.
- Minick, M. The Wisdom of Kung Fu. New York: Morrow, 1974.
- Moore, R. The wider lessons of Chinese law. Philosophy East and West, 26, 1976, 229-235.
- Mu, Fu-sheng. The Wilting of the Hundred Flowers. New York: Praeger, 1962.
- Mungello, D. Leibniz's interpretation of neo-Confucianism. Philosophy East and West, 21, 1971, 3-22.
- Munro, D. The Concept of Man in Early China. Stanford: University Press, 1969.
- Munro, D. The Concept of Man in Contemporary China. Ann Arbor: University of Michigan Press, 1977.
- Munsterberg, H. The Landscape Painting of China and Japan. Rutland, Vermont: Tuttle, 1955.
- Murray, H. Explorations in Personality. Oxford: University Press, 1938.
- Nagel, E. and Newman, J. Godel's Proof. New York: University Press, 1958.
- Nakamura, H. The Ways of Thinking of Eastern Peoples. Honolulu: East-West, 1964.
- Needham, J. Science and Civilisation in China, Vol. 1. Cambridge: University Press, 1954.
- Needham, J. Science and Civilisation in China, Vol. 2. Cambridge: University Press, 1956.

- Needham, J. *Science and Civilization in China*, Vol. 3. Cambridge: University Press, 1959.
- Needham, J. *Science and Civilization in China*, Vol. 4, Part 1. Cambridge: University Press, 1962.
- Needham, J. *Science and Society*. In M. Goldsmith and A. Mackay (Eds.). *The Science of Science*. London: Souvenir, 1964, pp. 127-149.
- Needham, J. *Science and Civilization in China*, Vol. 4, Part 2. Cambridge: University Press, 1965.
- Needham, J. *Clerks and Craftsmen in China and the West*. Cambridge: University Press, 1970.
- Needham, J. *Science and Civilization in China*, Vol. 4, Part 3. Cambridge: University Press, 1971.
- Needham, J. *Science and Civilization in China*, Vol. 5. Cambridge: University Press, 1974.
- Northrop, F. *The Meeting of East and West*. New York: MacMillan, 1946.
- Ornstein, R. *The Psychology of Consciousness*. New York: Viking, 1972.
- Palos, S. *The Chinese Art of Healing*. New York: Herder, 1974.
- Papineau, D. *Ideal types and empirical theories*. *British Journal of the Philosophy of Science*, 1976, 27, 137-146.
- Peyrefitte, A. *The Chinese*. New York: Bobbs-Merrill, 1977.
- Phillips, R. *The Concept of Prayer*. London: Routledge, 1965.
- Pirsig, R. *Zen and the Art of Motorcycle Maintenance*. New York: Bantam, 1974.
- Polanyi, M. *Personal Knowledge*. Chicago: University Press, 1958.
- Popper, K. *Conjectures and Refutations*. New York: Harper, 1965.
- Porkert, M. *The Theoretical Foundations of Chinese Medicine: Systems of Correspondence*. Cambridge: M.I.T., 1974.

- Porkert, M. The intellectual and social impulses behind the evolution of traditional Chinese medicine. In C. Leslie (Ed.). Asian Medical Systems. Berkeley: University Press, 1976. Pp. 63-76.
- Postman, N. and Weingartner, C. Teaching as a Subversive Activity. New York: Delta, 1969.
- Priest, A. Aspects of Chinese Painting. New York: Macmillan, 1954.
- Price, L. Dialogues of Alfred North Whitehead. London: Reinhardt, 1954.
- Prodan, M. Chinese Art. New York: Pantheon, 1958.
- Progoff, I. Jung, Synchronicity, and Human Destiny. New York: Julian, 1973.
- Raphael, B. The Thinking Computer. San Francisco: Freeman, 1976.
- Reichwein, A. China and Europe. Taipei: Ch'eng-wen, 1967.
- Reincourt, A. The Soul of China. New York: Harper, 1965.
- Royce, J. Man and His Nature. New York: McGraw, 1961.
- Rowley, G. Principles of Chinese Painting. Princeton: University Press, 1959.
- Sadovsky, V. Problems of a general systems theory as a metatheory. Ratio, 16, 1974, 33-50.
- Scharfstein, B. The Mind of China. New York: Basic, 1974.
- Severin, F. Humanistic Viewpoints in Psychology. New York: McGraw, 1965.
- Shah, I. Reflections. Baltimore, Maryland: Penguin, 1971.
- Shih, H. The Development of the Logical Method in Ancient China. New York: Paragon, 1963.
- Skinner, B. Walden II. New York: McGraw, 1965.
- Smith, H. The Religions of Man. New York: Harper, 1958.
- Sowerby, A. Nature in Chinese Art. New York: Day, 1940.
- Spectorsky, A. The Exurbanites. Philadelphia: Lippincott, 1955.

- Stevens, S. Psychology and the science of science. Psychological Bulletin, 1939, 36, 221-263.
- Sullivan, M. The Birth of Landscape Painting in China. Berkeley: University Press, 1962.
- Tillich, P. Existentialism and psychotherapy. Review of Existential Psychology and Psychiatry, 1961, 1, 8-16.
- Toulmin, S. Foresight and Understanding. Indiana: University Press, 1961.
- Tuan, Y. Discrepancies between environmental attitude and behaviour: examples from Europe and China. Canadian Geographer, 12, 3, 1968, 176-191.
- Van Kaam, A. Assumptions in psychology. In F. Severin (Ed.). Humanistic Viewpoints in Psychology. New York: McGraw, 1965. Pp. 175-182.
- Veith, I. Traditional Chinese medicine. In G. Risse (Ed.). Modern China and Traditional Chinese Medicine. Springfield: Thomas, 1973. Pp. 13-29.
- Wallnofer, H. and von Fottauscher, A. Chinese Folk Medicine and Acupuncture. New York: Bell, 1965.
- Warner, R. The Greek Philosophers. New York: Harper, 1963.
- Watts, A. Tao: The Watercourse Way. New York: Pantheon, 1975.
- Wei-Ping, W. Chinese Acupuncture. Wellingborough, England: Health Science Press, 1962.
- Wertheimer, M. Productive Thinking. New York: Harper, 1959.
- Whitehead, A. Science and the Modern World. New York: Macmillan, 1925.
- Whitehead, A. and Russell, B. Principia Mathematica, Vol. 1. Cambridge: University Press, 1957.
- Wiener, N. God and Golem, Inc. Cambridge: M.I.T., 1964.
- Wilde, J. and Kimmel, W. The Search for Being. New York: Wayne, 1962.
- Wilhelm, H. Change. New York: Pantheon, 1960.
- Wilhelm, R. Chinese Economic Psychology. New York: International Secretarial Institute of Pacific Relations, 1947.

- Wittfogel, K. Oriental Despotism. New Haven: Yale, 1957.
- Wong, K. and Lein-te, W. History of Chinese Medicine.  
Shanghai: National Quarantine Service, 1936.
- Wright, A. Buddhism in Chinese History. Oxford: University  
Press, 1959.
- Wright, A. Studies in Chinese Thought. Chicago: University  
Press, 1967.
- Wu, J. The paradoxical situation of Western philosophy and  
the search for Chinese wisdom. Inquiry, 14, 1971,  
1-18.
- Wu, N. Chinese and Indian Architecture. New York:  
Braziller, 1963.
- Yang, C. Chinese bureaucratic behavior. In D. Nivison and  
A. Wright (Eds.). Confucianism in Action. Sanford:  
University Press, 1959. Pp. 134-164.
- Yu-wei, H. Filial piety and Chinese society. In A. Moore  
(Ed.). Philosophy and Culture East and West.  
Honolulu: University Press, 1962. Pp. 411-427.