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THE UNIVERSITY OF ALBERTA

THE FIELD OF THE PSYCHE
AND THE CULTIVATION OF HUMAN NATURE

BY

NICHOLAS B. TODD

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF

MASTER OF EDUCATION

IN

COUNSELING PSYCHOLOGY

Department of Educational Psychology

EDMONTON, ALBERTA

Fall, 1987

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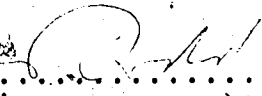
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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled The Field of the Psyche and the Cultivation of Human Nature submitted by Nicholas B. Todd in partial fulfillment of the requirements for the degree of Master of Education in Counseling Psychology.

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Date: OCT. 7, '87

ABSTRACT

Part One of this thesis proposes a theory of the individual which characterizes psychology as an attempt to apply in the field of the psyche the same principles and strategies which have met with success in the cultivation of external nature. It is argued that cultivation requires the establishment of a thinking entity which abstracts from the general flux of nature those patterns most likely to provide predictable, recurring gratification. These patterns are emphasized at the expense of other aspects of nature which are seen as irrelevant to, or interfering with, the desired patterns. Thus, the natural equilibrium is skewed in favour of those aspects of nature deemed most desirable by the thinking self. Using this strategy, mankind established a new relationship with nature based on the unprecedented expectation that it might accommodate him instead of he it.

The initial success of this expectation has been counterbalanced in recent decades by the increasingly serious environmental consequences resulting from our growing propensity to seriously disrupt the natural systems with which we interact. It is suggested that if psychology is to avoid being an inner adjunct to this essentially destructive process, it must find a way to free itself from the Cartesian imposition of a thinking self which sets itself over and against human nature.

In Part Two, five major schools of psychology-- those of the introspectionists, psychoanalysts, behaviorists, humanistic/existentialists, and the systemic theorists--are examined in terms of the theory developed in Part One. It is found that insofar as these schools have been consolidated into theoretical positions, they perpetuate the Cartesian discontinuity because they interfere with the natural flow of language in the same way that the thinking human being has disturbed the general flux of nature. Thus, only introspection is found to offer the possibility of a non-Cartesian psychology, since it does not seek to establish itself on fixed theoretical grounds. Using the philosophy of Ludvig Wittgenstein the possibility of a non-theoretical, and thus non-Cartesian, psychology hinted at by the introspectionists is explored.

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INTRODUCTION

This thesis began as an attempt to understand the concept of the individual. Understanding this concept seemed a worthwhile project for a student of psychology because some sort of conception of ourselves as separate personalities seems indispensable to psychology: if we were all homogenous in our patterns of thought, feeling and action there would be no need for the various attempts that have been made to determine the unifying principles which underlie our diverse characters. Thus attempting to understand the concept of the individual seemed a plausible way to develop a broader understanding of what psychology is all about.

In accordance with this original intention, Part I of this thesis constitutes a theory of the individual. This theory develops from a two-pronged investigation: Chapter One investigates the biological aspects of individuality, while Chapter Two looks at the cultural aspects of individualism. These two aspects proved to be closely enough related that it was possible to arrive at a unified theory which sees the individual as a byproduct of a certain attitude toward nature best exemplified by the activity of cultivation. It is argued that the concept of the individual arises from an inward turning of the process of cultivation and is in fact part of an attempt to apply in the field of the psyche the same principles and attitudes which have met

with success in our relationship with external nature. In other words, the concept of the individual is seen as an integral part of a culture-wide project aimed at domesticating human nature.

In the second part of the thesis it was originally hoped that this theory of the individual could be used to show that all the major schools of psychology are in one way or another attempts to further this implicit cultural project of domesticating human nature.

However, various developments led to the abandonment of this original intention. It is difficult to clearly explicate all of these, but two major factors seem to have been the following.

First, there was the realization that only those psychologies which could be called theoretical (i.e., that orient themselves around certain fixed propositions about human nature--e.g., that the mind contains a conscious/unconscious dichotomy, that each individual's "inner experience" is private and known only to themselves) could be considered analogous to the cultivator's fixation on those aspects of nature he considers most important (e.g., the crop of highest yield, best food value, shortest growing season, greatest hardiness, etc.). This realization emerged from the research into the history of individualism, which revealed a striking parallel in the way human

beings approached first external nature and then internal, or human, nature. Thus the course of psychology shows a movement from spontaneous observations to fixed theoretical positions which represents an internal recapitulation of the historical movement from hunting and gathering to cultivation. From this it became apparent that it is not essential that psychology operate as a theoretical discipline, but that this predilection simply represents a strategy we have fallen into out of ancient habit. This realization was driven home in Chapter Three during the examination of William James' The Principles of Psychology, a book which could be described as belonging to the pre-cultivation stage of psychology, before the great theoretical psychologies of the twentieth century had been founded. It was this reinterpretation of James' introspection that led to a reconsideration of the original assumption that psychology must necessarily aim at the domestication of human nature.

A second development which furthered this reconsideration of the original course of the thesis was the realization that the attempt to characterize theoretical psychology as a form of cultivation was itself a theory (i.e., a point of view which one seeks to fix), and thus perpetuated many of the same problems it was intended to denounce. This helped explain a certain sense of strain that had accompanied

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the development of the theory. Throughout the process, there was a sense of striving to establish once and for all that psychology was indeed a form of cultivation, but of never being able to conclusively do so. It was only after encountering the philosophy of Wittgenstein, as described in Chapter Five, that it became apparent that such a feeling of strain will always accompany the construction of a theory because a theory is always founded on certain key words or concepts which are only part of language and so must inevitably conflict with the whole field of language from which they have been abstracted. Like the plants in a garden, the natural tendency of the words we co-opt for our theories is always to return to a natural equilibrium with the surrounding environment, in this case the natural play of language which is their "original home" (Wittgenstein, PI, #116). These natural "meaning-fields" of language, like any large natural system, are comprised of an unending series of relationships through which each part is tied to all the rest and from which it cannot be abstracted without distorting the whole which lends that part its meaning. But every theory, in order to fix its basic tenets, depends on severing the natural web of language at some arbitrary point and thereby must eventually breed contradiction and confusion, though it may satisfy some initial, short-

term requirements. The inevitable discontinuity which every theory thus introduces into language is recognizable as the same discontinuity which has characterized man's relationship with nature ever since he began to think. This gap between a discrete thinking entity and the medium in which it operates was first formally recognized and made into an explicit philosophical principle by Descartes, but is evident as a sort of unconscious operating principle throughout the entire course of human thinking. To this day the ubiquity and powerful effects of this discontinuity remain largely undetected. Especially in our relations with language do we remain unconscious of the way that our thinking distorts the natural systems with which it interacts. From all of this, it became apparent how it is that even those theories which seek to renounce the Cartesian underpinnings of our present approaches to psychology are in fact perpetuating them, simply because of the way they treat the language out of which they are constructed. In Chapter Six this unwitting Cartesian conspiracy is illustrated with the example of two prominent systemic theorists.

Thus the encounter with the philosophy of Wittgenstein in Chapter Five is the occasion of a significant shift in the course of this thesis. Here the original intention of creating a theory is abandoned and instead the thesis is allowed to take its own

course. As has been observed to happen in other areas of human endeavor, once the original intention to shape the course of events in such a way that a desired end (in this case a theory) is achieved was let go, the strain which had accompanied the writing of the thesis was dissipated and it became much easier to accomplish the original goal--though it was no longer the goal! This paradoxical effect seems to be related to the difference between having to marshal language into a convincing solidarity around a preconceived position, and allowing a position to evolve, or arise spontaneously, from the natural play of the language-games involved in a given investigation. It is this latter phenomenon which becomes our model for a non-theoretical, and thus non-Cartesian, psychology.

A philosopher (Malcolm, 1963) once remarked that in order to feel the strength of a prevailing philosophical position "you must partly be its captive" (p. 98). This thesis was most instructive when it displayed the writer's own Cartesian conditioning, revealed in the original intention to build a fixed position in the field of language. The realization that any theory is Cartesian in the sense that it separates a center of thought from the field in which it operates emerged as the most important learning in the course of writing this thesis. It is hoped the following pages are in

some way able to convey this lesson and the significance
it bears for our understanding of what psychology is all
about.

PART ONE

A THEORY OF THE INDIVIDUAL

Chapter One

A NATURAL HISTORY OF THE INDIVIDUAL

The concept of the individual holds a powerful but enigmatic position in our culture, as indicated by the entry afforded it in the Dictionary of Philosophy and Psychology:

The concept of the individual is at once one of the most familiar and the most difficult both in the world of common sense and in the world of philosophy. That the beings which are to be found in the world, whether inanimate objects or living beings, whether material or mental, are individuals, i.e., are distinct, singular, and unique is a matter of common belief and report. But what constitutes individuality, or what is the principle of individuation, has been a matter of controversy both within the realm of special science and from the point of view of logical and metaphysical definition. (Baldwin, 1960, p. 534)

As Baldwin indicates, what gives this concept its widespread currency is its usefulness in describing a certain quality of all the things around us: namely, that however closely they may resemble other members of their class or species, they are never exact copies; there is always some sort of difference which distinguishes one individual from another. This insistence on the ultimate uniqueness of each thing around us provides an interesting counterpoint to the general tendency in Western thinking to remove from consideration as many features of things as can possibly be considered "incidental," thereby arriving at the great underlying regularities of nature upon which our science is supposed to be based. Furthermore, it

is notable that our respect for individuality is not uniformly applied to nature, but follows a gradient whereby we are least concerned with individuality when science is examining aspects of nature which we consider furthest from us, and most inclined to insist on individuality when we are ourselves the subject of scientific scrutiny. With the further observation that the rise of individualism as a philosophy occurred about the same time that evolutionary theory was beginning to sketch the place of man in the scientific world view, there arises the suspicion that the antithesis between these two attitudes is not accidental: in many ways it appears that the concept of the individual is a kind of buffer against the completion of the scientific picture of man. Though we will permit science to outline a portrait of man, we reserve the right to fill in the contours with an individual personality which is "nearly entirely composed of that which is scientifically accidental" (Bass, 1968, p. 33).

All of this leaves psychology in a peculiar position. Since it aspires both to be scientific and to account for the "finite individual minds" which make up our separate personalities (James, 1890/1950, p. vi), psychology has situated itself directly between the antithetical attitudes represented on the one hand by the scientific viewpoint and on the other by the respect

for individuality. Inasmuch as it seeks to synthesize these two currents of thought into a single set of principles psychology sets itself up for failure, for even from the discussion so far it is apparent that a "science of individuals" is a contradiction in terms. This may help explain why psychology has always been dogged by philosophical and methodological confusion. It possible that psychology exists only because there is an antipathy between these two attitudes, otherwise we would not know it because it would be subsumed by science and/or philosophy. It will be part of the purpose of this chapter to demonstrate how psychology is related to the essential tension between the scientific view and the principle of individuality by exploring the biological aspects of individuality. It will be seen that however the scientific view seeks to quash the importance of the individual, man insists with remarkable ingenuity on restoring its prominence. It will be argued that this persistent resistance to the scientific picture of man stems from a certain attitude toward nature which demands that we separate ourselves from it in order to achieve certain ends. This attitude, in which science, individualism and psychology all have their roots, will be the subject of the second chapter.

The Individual in Evolution

A peculiarity one encounters early in the process

of trying to understand the concept of individuality is that though an individual is defined by the fact that it is discernibly different from everything around it, we cannot see what individuality is simply by looking at one individual. Like the meaning of a word, the significance of an individual is not self-contained but is revealed in the relationships that individual has with various aspects of the world around it. Attempts to understand the individual, then, invariably look beyond it. In psychology, for example, Freud sought to understand the individual through the sexual relations that bind him or her to the human species; the behaviorists through the behavioral patterns that relate man to the rest of the animal kingdom; and the phenomenologists through the relationship of the perceiving subject with the perceived world. The same principle will apply in our investigation of biological individuality: the meaning of the individual is most clearly seen by considering its role in nature as a whole. In this respect biology is fortunate in having at its disposal the broadest theoretical framework science has yet developed for understanding the relationships of living things, the theory of evolution. It is through understanding the role of the individual in evolution that we can best arrive at the biological meaning of the individual.

In an early study of the question of biological individuality Julian Huxley (1912) noted that the meaning of the individual was most intelligible as part of the total movement of living matter toward an ever greater independence from "the forces of inorganic nature" (p. 28): "We have seen the totality of living things as a continuous slowly-advancing sheet of protoplasm out of which nature has been ceaselessly trying to carve systems complete and harmonious in themselves" (p. 152). According to Huxley, the movement of life can be seen as a quest for the perfect individual, who would be, in his marvelous phrase, "the subduer of space and time" (ibid., p. 21). This quest, however, runs into "the limitations of the material with which life has to work" (ibid., p. 152). A finite extension in time and space defines all living creatures; it is evidently not possible to construct from protoplasm an individual who will carry on life's project sufficient unto itself. "Since," says Huxley (ibid.), "through practical difficulties, Life has not been able to reach this perfection, she has had to content herself with the next best, continuance of the kind of individual as opposed to the individual itself" (p. 21). This solution, with its mechanism of reproduction, allows life to escape its material limitations and pursue an evolution toward ever more perfect individuality. No longer need life seek a

permanent residence, but is free to pass from one individual to the next, gradually improving the quality of its host through the dynamics of natural selection. Thus it emerges that the individual is only a vehicle through which life pursues an ulterior motive. As Paul Halmos (1952) put it, "individuality is the tool of the species and not its purpose" (p. 12). The first lesson of evolutionary theory, then, is that individuality has no intrinsic meaning, but carries significance only in relation to the evolutionary process.

Huxley's conceptualization of the role of the individual in evolution contains anthropomorphic and teleological elements distasteful to modern biological theory. However, with only slight revamping it comes very close to more modern statements of the same theme (e.g.: Alexander, 1981; Dawkins, 1976; Hamilton, 1964; Leigh, 1977; Williams, 1966; Wilson, 1975). For example, E.O. Wilson (1975) tells us that

in evolutionary time the individual organism counts for almost nothing. In a Darwinist sense the organism does not live for itself. Its primary function is not even to reproduce other organisms; it reproduces genes, and it serves as their temporary carrier . . . part of an elaborate device to preserve and spread them with the least possible biochemical perturbation. (p. 3)

In modern biological theory the genes have taken over life's place as the beneficiary of evolution, a conceptualization made scientifically tenable by the breaking of the genetic code (Watson, 1968) and recent

insights into self-replicating, irreversible processes as organizing principles of the natural world (Prigogine & Stengers, 1984). The spirit of Huxley's interpretation, however, remains intact: the biological individual has significance only in terms of its relationship to the process of life, its evolution toward an ever more refined organization. Except as a carrier of genes, the individual has no part in evolution! P.B. Medawar (1957) emphasizes this point in the following passage:

It is deeply necessary for a clear understanding of evolution to distinguish between the genetical structure of a population, which is quite wonderfully malleable and responsive to the impress of the environment; and the genetical makeup of the individual, which . . . is almost miraculously stable. (p. 14)

The individual does not evolve; evolution occurs between individuals, when mutation and recombination of genetic material takes place. As Bateson (1972) puts it, adaptation is a stochastic process occurring at the "boundary points" between individuals (p. 264).

We have now reached a point where the psychological implications of biological individuality have become more apparent. The individual organism, which at first appears to be the basic currency of life, bears significance only in relation to the process of life. Each particular phenotype is an "extremely temporary manifestation . . . the result of

an interaction between genotype and environment that produces what we recognize as an individual" (Williams, 1966, p. 23). That is to say, individual human beings are secondary to an ongoing evolution in which, as we will see, they necessarily play only a passive role. The particular manifestations we call human individuals are, in this sense, the best that life could do in a given situation. The same can be said of the whole human species: we are a makeshift compromise in the search for "the subduer of space and time." This is far from the premises on which human beings have built their self-image. Man has never been a creature inclined to gaze willingly upon his own insignificance. Rather, as Freud (1916/1974) noted, he has always considered himself a special creature, installing himself at the center of the universe and relinquishing his "naive self-love" to only the hardest blows of science, which, whatever its shortcomings, has been one means through which man has reluctantly yielded his megalomania before the "scarcely imagined vastness" of his own insignificance (p. 326). Copernicus dethroned man from the center of the universe and Darwin from the center of creation before Freud went inside to unseat the ego. But, as J.S. Bruner (1957) remarked, "if we have learned anything from the last half century of psychology, it is that man has powerful and exquisite capacities for defending himself against violation of his cherished

self-image" (p. 278). Each of these insurrections has been marked by profound and fierce resistance, ranging from blatant censorship to subtle persuasion. Two centuries was not enough time to allow resistance to the Copernican revolution to subside to the point where Galileo could adopt it as the basis for a new astronomy.¹ After more than a century the theory of evolution arouses scarcely less, albeit more subtle, resistance. It is not surprising to find, then, that man has forged a subtle path of escape from what our survey of evolutionary theory has told us--that individual human beings are of little intrinsic significance.

The Lamarckian Conceit

Lamarckism in biological evolution. In the early nineteenth century, Jean Baptiste de Lamarck proposed a theory of evolution which embodied the ancient human yearning to be the master of our own destiny. "Lamarck proposed that environmental impact could directly affect the genes of the single individual" (Bateson, 1979, p. 131), that characteristics acquired during one's lifetime could be passed on to the next generation (e.g., the brawny arms of a first generation blacksmith could be expected to appear among his children). The appeal of this hypothesis lies in the fact that it allows the individual a causal role in evolution, as it

infers he may direct the course of his development through judicious selection of experience and the diligence of his personal efforts. This appeases "a certain deep-seated sense of the fitness of things [which] is gratified by the belief that an animal's own activities, accomplishments and endeavors should contribute to the heritage of its young" (Medawar, 1957, pp. 13-14). Lamarckism offers man the prospect of a kind of evolutionary karma, through which he may gradually approach a greater and greater biological perfection.

Unfortunately for man's battered self-image, Lamarckism has been thoroughly disqualified as a principle of biological evolution. Though some debate continues (e.g., Steele, 1979), "[e]xperimental studies have yielded no scientifically acceptable evidence that acquired characteristics are inheritable" (Munn, 1971, p. 56). More compelling than the experimental evidence, however, is the philosophical inconsistency of Lamarckism with evolutionary theory. Bateson (1979) points out that if the hypothesis of acquired characteristics were true, it would assure a quick demise for any given species, as the whole gamut of somatic adaptations undergone by each individual would be imposed on its offspring, resulting in a drastic loss of adaptive flexibility. Thus "the whole process of evolution and living would become tied up in the

rigidities of genetic determination" and eventually grind to a halt (p. 169)! What saves the evolutionary process from this premature end is just that adaptation depends on random events (mutation and recombination of genetic material) and is thus a stochastic, as opposed to deterministic, process. It is necessary for evolution to continue that each individual organism maintain enough somatic flexibility to protect its genotype from environmental perturbation. If the genetic material were more malleable it would begin to reflect the nuances of local environmental circumstances and eventually succumb to the inevitable shifts in these conditions. Lamarckism is thus both experimentally and philosophically disqualified as a mechanism through which man might exert control over his destiny. One might expect that with it would have died any hope of retaining the self-determination usurped by evolutionary theory. But with its usual acuity, human self-interest has devised an ingenious means of propping up the corpse of Lamarckism "into a sitting position" (Medawar, 1957, p. 26). There is a unique feature of human evolution that allows this resurrection of the Lamarckian conceit-- cultural evolution.

Lamarckism in cultural evolution. It is to cultural evolution that man owes his dominant position in the natural world: "Tradition is, in the narrowest

technical sense, a biological instrument by means of which human beings conserve, propagate and enlarge upon those properties to which they owe their present biological fitness and their hope of becoming still fitter" (Medawar, 1957 p. 142). And what is most gratifying to the human individual is that "this newer evolution is so obviously Lamarckian in character" (Medawar, 1960, p. 99). The individual may hope to learn useful skills from his culture and pass them on to his children; he is thus no longer limited by the immutability of his genetic makeup. In this sense, culture allows the individual to survive his biological time span and make considerable progress toward the conquest of both time and space. "In tradition and in books an integral part of the individual persists, and a part which still works and is active, for it can influence the minds and actions of other individuals in different places and at different times" (Huxley, 1912, p. 26). It is as if "the upward progress of terrestrial life toward [its goal of perfect] individuality . . . finds wings, and, laughing at matter, flies over lightly where it could not climb" (ibid.). Bronowski (1973) offers some perspective on this dramatic cultural upsurge:

The history of man is divided very unequally. First there is his biological evolution . . . then there is his cultural history. . . . It took at least two million years for man to change from the little dark creature with the stone in his

hand, Australopithecus . . . to the modern form Homo Sapiens. That is the pace of biological evolution--even though the biological evolution of man has been faster than that of any other animal. But it has taken much less than twenty thousand years for Homo Sapiens to become . . . artists and scientists, city builders and planners for the future. . . . that is the pace of cultural evolution; once it takes off, it goes as the ratio of those two numbers goes, at least a hundred times faster than biological evolution. (p. 59)

What allows this tremendous acceleration of the evolutionary process is the fact that cultural evolution may proceed without awaiting random biological events such as the mutation and recombination of genetic material. This means that evolutionary change may occur within, as opposed to between, individual lifetimes, which in turn allows the individual to perceive himself as the agent of such change. Thus, the process of cultural evolution seems directly accessible to individual intervention; any individual may conceivably contribute to his culture (with a book, idea, invention, etc.) in such a way that it is forever modified and so ultimately influence man's biological fitness. Culture thus allows man to transcend his genetic immutability and accrue two great psychological dividends: (1) a sense of individual importance, and (2) a sense of control over his destiny.

It is its apparent independence from the stochastic processes that inform biological evolution that distinguishes cultural evolution and allows man to

believe that, in this arena at least, he may determine his destiny. In all other respects, cultural evolution is remarkably similar to biological evolution, as

Medawar (1960) points out in the following passage:

In both styles of evolution we can witness an adaptive radiation, a deployment into different environments: there are wireless sets not only for the home, but for use in motorcars or for carrying about. Some great dynasties die out--airships, for example, in common with the dinosaurs they were so often likened to; others become fixed and stable: toothbrushes retained the same basic design and constitution for more than a hundred years. And, no matter what the cause of it, we can see in our exosomatic appendages something equivalent to vestigial organs; how else should we describe those functionless buttons of the cuffs of men's coats? (p. 98)

Cultural evolution thus proceed according to the general "laws"⁴ of all evolution, but being non-genetical is no longer bound to biological individuals and therefore may advance much more rapidly--hence the commonplace observation that man has gone from the horse and buggy to the moon in a single generation.

The evolutionary nature of material culture is fairly easy to discern. It is less obvious in non-material culture, the system of languages, symbols and thought that is the distinctive feature of man (von Bertalanffy, 1981; Huxley, 1948). This is perhaps because we are so deeply immersed in our "universe of symbols" (von Bertalanffy, 1981, p. 1) that we do not think of it as anything other than "what is" (and therefore as an entity in the world that has sufficient

Independence from it to evolve in relationship to it).

But the world of symbols does not coincide with the world at large; there is always an abstraction from "all that is the case" (Wittgenstein, quoted in Kenny, 1973, p. 4).⁵ And, as von Bertalanffy (1981) goes on to note, it seems to be the world of symbols in which we prefer to live: "Except in the immediate satisfaction of biological needs, man lives in a world, not of things but of symbols" (p. 1). Thus man lives in his own world, only occasionally aware that this is a kind of parallel universe, but indirectly in contact with the rest of nature.

Though evolution is easier to discern in material culture, it is nonetheless evident in the symbolic universe. Bateson (1972), Bronowski (1973, 1978), Cassirer (1944, 1953-57), Monod (1971), and von Bertalanffy (1981) are but a few of the more distinguished scholars to have examined this aspect of evolution. Generally, the origins of symbolization are seen to lie in mythical and magical thinking where, for instance, the animal symbolized in a cave painting might be thought to embody some essential aspect of the animal, the control of which exerted a corresponding control over the fate of the actual animal (von Bertalanffy, 1981, p. 75f.). Thus, manipulation of the symbol exerted control in the biological world. As Bronowski (1973) points out, there is an actual power at

work here, not just an imagined or mythical connection-- it is "the power of anticipation: the forward looking imagination" (p. 54).. Because he could anticipate and thus plan for the hunt, the symbolizing man greatly enhanced his chances of success.⁶ Thus was initiated "a formidable and oriented selective pressure the likes of which no [non-symbolic] species could ever experience" (Monod, 1971, p. 133). Without filling in the history of the intervening years, we can see the rapidity and pervasiveness with which this evolution became the main thrust of man's overall evolution, superseding the slow progress of biological evolution and providing the force majeure behind material culture.

More than even material culture, the evolution of symbolic culture appears well within the control of individual human beings. Each of us, on a daily and hourly basis, manipulates various systems of symbols (most notably language) with an accompanying sense of control and direction. It seems indisputable that through his own efforts an individual may exert an influence on the course of his culture, and so ultimately on the biological status of his species. Surely here the Lamarckian hope, "the possibility that individual evolution may lead to collective evolution" (Ferguson, 1980, p. 76), is realized. However, in the following section it will be shown how the evolution of

the symbolic life of man, which may also be called the evolution of his consciousness, is a strictly biological evolution, governed as all such evolution must be, not by human intention, but by "chance and necessity" (Monod, 1971). Thus its apparently Lamarckian character offers man an illusion of but no real control over his biological fate. In other words, the evolution of consciousness follows the laws of all material evolution.

The fallacy of cultural Lamarckism. The persistence with which man has maintained the Lamarckian conceit that at least some part of evolution falls under his control is becoming more apparent. Under the pressure of advancing scientific understanding Lamarckism has been obliged to relinquish its original position in the sphere of biological evolution and seek refuge in cultural evolution. Here, especially with respect to symbolic culture, the conviction that an individual may intentionally influence the course of evolution is held almost without reservation. Thus, whatever influence the individual lost at one end of the spectrum of evolution, he has gained at the other. In this manner the antithesis between our scientific understanding and our need to assert the principle of individuality has been maintained.

This antithesis, when it represents the opposition of two equally valid descriptions of the world, is

perhaps vital to maintaining a balanced and dynamic human understanding. However, it will be argued here that the attempt to rehabilitate Lamarckism as a principle of cultural evolution stems not from a valid antipathy between two competing descriptions of reality, but from a psychological need to maintain a sense of control over nature. In this section it will be demonstrated how the existing scientific understanding of evolution compels us to abandon the Lamarckian conceit even in the sphere of cultural evolution.

One way to appreciate the fallacy of cultural Lamarckism is by seeing how we have been misled by certain assumptions that underlie the distinction between biological and cultural evolution. One of the most important of these assumptions is that biological evolution is a material process, while cultural evolution is a mental process. This distinction between the mental and the physical, one of the hallmarks of Western culture, allows us to assume that a different kind of evolution may occur in culture than occurs in nature. Thus the arguments that disqualify Lamarckism in biological evolution need not necessarily apply to cultural evolution. One way to demonstrate the fallacy of cultural Lamarckism, then, is to demonstrate that the underlying assumption of a discontinuity between

material and mental evolution--between consciousness and matter--is false. If we are able to establish the continuity of consciousness and matter; then it becomes inconsistent to maintain that incompatible mechanisms of change are operating in what is essentially one domain. For this difficult task we have a powerful ally--the approach to consciousness elaborated by modern physics in the development of quantum mechanics.

Consciousness became a concern of physics when the exploration of microscopic phenomena reached the level at which the effects of observation produced measurable distortion of the objects of study. In attempting to isolate subatomic particles, physicists discovered that the act of observation disturbed the sought-for particles to such an extent that gaining orthodox knowledge of their existence in terms of space and time was not possible. Their relationship with us was discovered to be indeterminate, and whatever knowledge could be gained as to their nature was always a function of how they were observed. Thus the observer and the observed were found to be inextricably linked: "it was not possible to formulate the laws of quantum mechanics in a fully consistent way without reference to the consciousness" (Wigner, 1967, p. 172).

The advantage of considering consciousness from the perspective of quantum mechanics is that it approaches consciousness simply and directly; as it were, from the

outside. That is, it makes no assumptions about the nature of consciousness, except to note that the entering of impressions into consciousness (i.e., the act of observation) produces a discernible effect on nature. Through quantum mechanics physics finally approaches in the subatomic realm the edges of consciousness, as if it were just another constituent of the natural world whose turn for study had come. This is a prodigious feat of abstraction, but for all the potential for self-deception inherent in such a peculiar approach, it is this detachment that allows the maximum possible objectivity in approaching the subject--which is the subject! Quantum mechanics has therefore evolved concepts that are "undoubtedly more concrete than those of any other language for discussing epistemology" (ibid., p. 196).

What quantum mechanics has done is to place consciousness back into the realm of nature. It has erased the boundary between mind and matter and demonstrated this separation to be an artifact, a product of human thought. This notion is perhaps best expressed by David Bohm in his theory of the implicate order. Bohm (quoted in Webber, 1978) proposes that what we take to be reality is only a superficial explicate dimension of a vast background of energy he calls the implicate order:

the present state of theoretical physics implies that empty space has [immense] energy and matter is a slight ripple on this tremendous ocean of energy, having some relative stability and being manifest. . . . my suggestion is that this implicate order implies a reality immensely beyond what we call matter. Matter is itself merely a ripple in this background. (p. 30)

The fundamentally new notion in Bohm's theory is that of "undivided wholeness, in which the observing instrument [including consciousness] is not separate from what is observed" (Bohm, 1980. p. 134). "Ultimately, the entire universe (with all its 'particles', including those constituting human beings, their laboratories, observing instruments, etc.) has to be understood as a single undivided whole, in which analysis into separately and independently existent parts has no fundamental status" (ibid., p. 174). From this it is clear that no fundamental distinction between consciousness and matter can be maintained; the separation of the two in thought and language is artificial, made by man rather than nature.

Bohm (1980) explores the relationship between consciousness and matter in great detail. He points out that when Descartes made his famous distinction between the two, he relied on God, the omnipotent third party "outside and beyond both," to provide the "clear and distinct notions" that inform the two and govern their relationship. "Since then, the idea that God takes care of this requirement has generally been abandoned,

but it has not commonly been noticed that thereby the possibility of comprehending the relationship between matter and consciousness has collapsed" (p. 197). This may explain our perplexity at trying to relate the two, and why attempts to do so frequently invoke the "spiritual aspect" of man (e.g., Teilhard de Chardin's conception of evolution as proceeding toward an "Omega Point" of worldwide spiritual consciousness). But if matter and consciousness are conceived as different explications of an underlying implicate order, it is possible to "comprehend their relationship on the basis of some common ground" (ibid., p. 197). Thus Bohm (quoted in Webber, 1978) proposes that

consciousness . . . is in the implicate order as all matter is, and therefore it's not that consciousness is one thing and matter another, but rather consciousness is a natural process . . . that manifests in some explicate order as does matter in general. . . . consciousness is possibly a more subtle form of matter and movement. (p. 33)

Consciousness, then, cannot be ultimately separated from all other material processes and thus may be expected to follow the general laws that apply to material nature, including the laws of evolution.

Demonstrating the continuity of matter and consciousness brings into question the widely held distinction between biological and cultural evolution. This distinction is maintained by the deeper and more pervasive division between matter and consciousness which is at the heart of "the great 'schizomorphic'

structure of Western intelligence" (Gilbert Durand, quoted in Smith, 1982, p. 104). Thus, it has been implicitly assumed that (non-material) cultural evolution, which occurs in that domain of consciousness, is exempt from the laws which govern material (biological) evolution. This allows mechanisms such as Lamarckism, which have been ruled out as organizing principles of the natural world, to operate in a special domain, which is man's alone. This confers to man a special place in nature, a harbor in which he has protected various self-aggrandizing concepts which could not survive the heavy seas of scientific scrutiny. When the distinction between matter and consciousness is dissolved, however, the distinction between material and cultural evolution must also disappear. It then becomes inconsistent to exempt certain phenomena from our general scientific understanding simply because they are held to be within the domain of consciousness. Given the evidence from quantum mechanics negating this distinction we may now look again at cultural evolution, bearing in mind that a mechanism of change such as Lamarckism is very unlikely to operate in only one part of the total field of evolution.

We begin this reprise by asking again what we mean when we call cultural evolution "Lamarckian". As we have seen, we mean that it is independent of the

stochastic processes of change in the biological organism, in the sense that it may proceed without reliance on random mutation and recombination of genetic material. Cultural change may thus occur within an individual lifespan (as opposed to between individual lifespans) and thus appears accessible to control by the individuals of a culture. Through this mechanism, life seems to have escaped its bondage to biological material and become independent of the unit of its currency, the individual. But what is not generally seen is that cultural evolution is not independent of its currency, the units of thought. Just as biological evolution proceeds by working on a population of given individuals (themselves products of evolution, but evolutionarily static), so cultural or mental evolution proceeds by working on a population of given units of thought—(symbols, words, ideas, concepts, images, etc.--which are similarly static (i.e., they are material and therefore conditioned)).⁷ Because we do not often perceive the material nature of consciousness, we do not see its static, conditioned nature, and tend rather to think of it as an infinitely flexible medium, apart from matter and therefore capable of apprehending its most subtle aspects. But the developments in subatomic physics show that we are nearing a threshold in our investigation of nature where the physical mechanisms of thought are of roughly the

same subtlety as the phenomena being investigated, with the result that the investigator has been turned back on himself. E.P. Wigner (1967) summarizes this recursive aspect of the quantum theory:

According to quantum mechanical theory, all of our information about the world derives from "measurements". . . . In order to obtain any information of the outside world, in order to make any measurement or observation, it is necessary that one already possess a crude knowledge of his surroundings. It is true that this crude knowledge usually comes from other observations but this only transfers the problem one step further back . . . the acquisition of our original and most crude knowledge is surrounded in mystery. It is probably not only contemporaneous with, but also part of the awakening of our consciousness. . . . Furthermore, this original knowledge was probably not acquired by us in the active sense: most of it must have been given to us in the same mysterious way, and probably as part of, our consciousness [italics added]. (p. 197)

In pursuing quantum mechanical phenomena the physicist is driven back to the origins of his own thoughts. And he finds there that he may claim no credit for their inception; his role in their genesis was passive. The individual thus bears the same relationship to cultural evolution that he does to biological evolution: He is the vehicle which transports units of information toward their next transformation. All that is required of him from a biological and cultural point of view is that he function as a medium through which the vast stochastic processes which have produced and informed him may continue.

Wigner (ibid.) provides the further insight that the

units comprising thought will always be realized, because they are products of evolution, in terms of their usefulness to us (p. 199). That is, the units of thought can reflect only those aspects of reality that may be evolutionarily useful, though Wigner recognizes great variability in how necessary each unit might be. What takes place in human thinking, then, is a kind of inward evolution, a natural selection from given units of thought. Bateson (1979) has recognized this and talks of "two great stochastic systems . . . one within the individual called learning; the other outside . . . called evolution" (p. 165). Thus, "the mental processes generate a large number of alternatives and there is a selection among these determined by something like reinforcement" (ibid., p. 164).

The perception of the mental processes as a stochastic system paralleling biological evolution provides the final tool necessary for dismantling the Lamarckian facade of cultural evolution. As Bateson suggests, there arise from mental activity a great number of alternative ideas, concepts, images, etc., amongst which there will be a selection of the most useful. From the previous discussion of stochastic processes it is clear that what is going to be most useful will be unpredictable; there must be a chance or random element involved which allows the flexibility

characteristic of viable, evolving systems. In cultural evolution, then, the next new idea or concept cannot be predicted, much less determined in advance, but must be allowed to come into being in the due course of systemic change. Our subjective sense of guiding or controlling cultural evolution, then, cannot correspond to the actual state of affairs. Instead we can see this sense of control as being itself a product of mental evolution. That is, the entity that appears to be "choosing" and "directing" the course of cultural evolution--variously called in our culture the "I," the "me," the "self"--is an epiphenomena of the stochastic processes of mental evolution. This entity does not form the course of thought, but is formed from the course of thought. The reason for this we have already encountered in Wigner's work--it is useful to us.

The usefulness of constructions such as the self is that they provide their "owner" with a sense of control and self-direction which allows a modus vivendi (the individual as autonomous agent--the subject of Chapter Two) which has been, in some respects, very successful. This success reinforces the psychological value of these entities and over time they come to "exist" more and more concretely, so that now the development of a strong sense of self is a highly esteemed goal in Western culture. Thus develops the ironic situation whereby it has become evolutionarily expedient to evolve in man a

sense of control over evolution! In a most extraordinary transformation, the youngest child of evolution has become its apparent master.

The fact that cultural Lamarckism, the precept that man controls his culture, is not even questioned is testament to how well nature has done her job. It is taken as a matter of fact that man is a determining agent in the course of his cultural evolution and thus ultimately of his biological fitness. Thus is man provided with a cornerstone of great psychological security: the concept that human culture, which has transformed the world, is at his command as he meets an unpredictable future. As Lewis Mumford (1967) puts it, it is through such means that "the human mind has in an increasing degree overcome [the] biological limitations of the brain: its frailty, its isolation, its privacy, its brief life-span" (p. 29). Yet it has been the task of this chapter to demonstrate that this sense of control over culture (and thus evolution) must be an illusion. There is no entity which directs thought into the forms of culture, but rather such entities are generated by thought as useful cultural forms. Nor can this illusion be considered as merely a benign adaptive mechanism. The growing ecological crisis in which Western man now finds himself tells us that a radical revision of our present mode of living would be highly

advisable. Perhaps it is time to abandon the Lamarckian conceit.

Conclusion

In surveying biological individuality we have relied heavily on evolutionary theory. This is because "evolutionary biology is the only natural science with any truly general theories about life" (Alexander, 1981, p. 510). As such it is perhaps the only available means of explaining rather than just describing, order among the complex diversity of the living world.⁸ Indeed, so deeply does evolutionary theory probe into life that theoretical biologist G.C. Williams (1966) maintains that it provides

an abstract criterion whereby life may be defined and recognized. We are dealing with life when we are forced to invoke natural selection to achieve a complete explanation of an observed system. In this sense the principles of chemistry and physics are not enough. At least the one additional postulate of natural selection and its consequence, adaptation, are needed. (p. 5)

Evolutionary theory strongly suggests that the role of biological individuals is secondary to the ongoing process of evolution. Individuals are not an end of evolution, but the means through which it is realized; not a fundamental biological unit, but only a temporary solution (literally a sophisticated, self-organizing physico-chemical solution incubating the genes) through which life perpetuates itself. For this purpose some individuals will prove better than others, but only ~~in~~

relation to the selective pressure of the environment. Since the fluctuations of the environment are unpredictable (because "neither organism nor environment contains information about what the other will do next" (Bateson, 1979, p. 198)) no intrinsic superiority may be attributed to a given individual; the most unlikely candidate for survival may prove the most durable given sufficient environmental change. All that life (or the genes) requires is that sufficient diversity between individuals exist to ensure its perpetuity in the face of unforeseen environmental change. Thus it is the difference between individuals that is significant, not the individuals themselves! Bateson (1979) has discussed how difference, which "being of the nature of relationship, is not located in space or time" (p. 109), may nonetheless prove to be a fundamental concept in understanding how life is organized. A relationship of differences, in the form of an arrangement of heterogeneous parts, was also Huxley's (1912) first criterion for defining an individual. Yet we live in a society which places great emphasis on the intrinsic worth of individuals and have drawn various conclusions as to what qualities characterize a superior individual (this latter tendency is especially relevant when considering the role of psychotherapy in our culture; as we will see, it is the attempt to cultivate these qualities that attaches psychology to one of mankind's

oldest traditions). This would appear to constitute what Bateson (1972) called an "epistemological error" (p. 479), an incorrect assumption about the nature of the world upon which subsequent action and cognition is based. The results of such misguided activity he has described as "greed, monstrous over-growth, war, tyranny, and pollution" (1979, p. 241).

It is because of the stochastic (unpredictable) nature of evolutionary change that it is very definitely non-Lamarckian in character. We have seen that the inheritance of acquired characteristics would rigidify and finally sabotage the process of biological adaptation. Yet the Lamarckian hypothesis holds great psychological appeal because it imputes to human beings a sense of individual importance and of control over their destiny. Thus it has found refuge in cultural evolution, where it is held to be "quite clear, of course, that man has begun to control his own evolution" (Munn, 1971, p. 169). But we have shown that this apparent clarity is based on distinctions that are false, in the sense of being taken for actual divisions of nature rather than artifacts of thought. And, as Bohm (1980) has emphasized: "To be confused about what is different and what is not is to be confused about everything" (p. 16). Thus, in conceptualizing evolution, the artificial distinction between matter and

consciousness has produced confusion by allowing man suppose that a different mechanism might account for change in cultural evolution as opposed to biological evolution. When the distinction between consciousness and matter is erased, as the evidence from physics suggests it must be, the unity of the total field of evolution becomes apparent and there is no refuge for the Lamarckian conceit.

We may now begin to ask, what are the implications of our survey of biological individuality for a theory of psychotherapy? First, it is evident that any theory which maintains the Lamarckian is likely to perpetuate confusion. That is, any therapy which holds that psychological change can be directed toward a more ideal state, which can be determined by thought, fails to take adequate account of both the nature of change in living systems (evolution), and of the nature of thought. Such therapies depend on drawing at some point in the field of consciousness a distinction between what must be changed and what need not be, so that some part of thought (be it in the therapist, client, or both) acts as an agent of change upon the rest. An artificial distinction creates the changer and the changed, when both are aspects of the hydra-headed course of thought and both are involved in vast stochastic systems which are themselves constantly changing and which have produced in man the very idea

that he may divide off a corner of thought and use it to manipulate the rest! Thus is perpetuated "a mode of thought that implies unending development of chaotic and meaningless conflict" (Bohm, 1980, p. 16).

If we operate from the Lamarckian conceit that we can somehow guide or shape the processes of psychological change then we can only perpetuate this train of confusion and contradiction, since we partake in the underlying tradition of setting ourselves against nature from which both the conceit and the confusion arise. In the practice of psychotherapy, then, we will want to avoid any theory positing a set of conditions (goals) toward which a client may "grow" or "evolve" and/or any position maintaining that the course of change can be planned, directed, or even foreseen. Rather, we must work toward a mode of therapy which relinquishes all authority to the inscrutable stochastic designs of nature. The next step in approaching such a therapy lies in a fuller explication of the cultural history of individualism. Only through understanding the grip this concept holds on the Western psyche can we hope to escape its grasp and move beyond it.

Chapter Two

A CULTURAL HISTORY OF INDIVIDUALISM

An interesting characteristic of the concept of individuality is its vagueness. Though, as we have seen, it represents a powerful current in our thinking--strong enough even to oppose our scientific world view--individualism has never emerged into a clear and distinct philosophy. As Stephen Lukes (1973) noted in his excellent survey of the concept, "'Individualism' is a word that has come to be used with an unusual lack of precision," sometimes even referring to a variety of disparate concepts within the same passage (p. ix). Indeed, it sometimes seems as if we would prefer not to clarify the meaning of this concept. As was the case with Lamarckism in biological and cultural evolution, one gets the impression that there is a kind of intellectual resistance at work which causes us to find indirect expression for a tendency in our thinking we would rather not examine too closely. This chapter will attempt to uncover what lies behind the confusion surrounding this concept. Following Lukes, an attempt will first be made to reduce this confusion with an investigation of the semantic history of the term individualism, but then, looking much further back into human history than does Lukes, a further attempt will be made to uncover the psychological roots of individualism.

Semantic Origins

"Individualism" is a nineteenth century word derived from the Latin individuus, meaning "undivided or indivisible" (Reese, 1980, p. 250). It was taken into English from the French term individualisme, first used by Alexis de Toqueville to refer to a "kind of moderate selfishness, disposing men to be concerned only with their own small circle of family and friends" (Pennock, 1972, p. 162). Once coined, this term was quickly employed to cover a bewildering array of social, political and philosophical trends. Lukes (1973) has done an admirable job of sorting and classifying these trends, starting with a distinction between the French and German conceptions of individualism.

As indicated by de Tocqueville's original use of the term, the French conception of individualism was somewhat disparaging, lamenting "the social, moral and political isolation of individuals from social purposes and social regulation, the breakdown of social solidarity" (Lukes, 1973, p. 15). Thus, "the characteristically French sense of 'individualism' is negative, signifying individual isolation and social dissolution" (ibid., p. 22). In contrast to this, the German tradition of individualism was essentially positive, signifying "the notion of individual uniqueness, originality, [and] self-realization" (ibid., p. 17). It was this tradition which

quickly became "virtually synonymous with the idea of individuality" in Western culture (ibid., p. 18).

Georg Simmel exemplified this movement when he wrote in 1917 of "the individualism of difference, with the deepening of individuality to the point of the individual's incomparability, to which he is 'called' both in his nature and in his achievement" (quoted in ibid., p. 18). The task of this "specific, irreplaceable" individual was "to realize his own incomparable image" (ibid.). Thus there arose an "individualism of uniqueness . . . as against that of singleness" (ibid.) in which "the individual's fundamental duty . . . was to cultivate his own differentness so as to distinguish himself from all other men and thus contribute to the diversity of the world" (Coates & White, 1970, p. 54). It is this Germanic conception of individualism which best characterizes what is generally thought of as Western individualism.

Though the explicit formulation of individualism as a philosophy and/or way of life belonged to the nineteenth century, its roots lie much deeper in human history. To uncover these roots requires first a fuller understanding of the complex of ideas that constitutes individualism.

As can be seen in the Germanic tradition, "individualism stresses the self-directed, self-contained and comparatively unrestricted individual or ego"

(Pennock, 1972, p. 162). Thus the assumption of an autonomous center of mental activity is basic to individualism. This in turn suggests that the conception of the self is an important philosophical precursor of individualism and indicates one direction to follow in tracing back the history of individualism beyond its semantic roots.

Another significant idea incorporated in the conceptual framework of individualism is that of "the supreme and intrinsic value, or dignity, of the individual human being" (Lukes, 1973, p. 45). This "ultimate moral principle" (ibid.) was "the great contribution to individualism" of Christianity (A.D. Lindsay, quoted in ibid.) and "has come to pervade modern ethical and social thought in the West" (ibid., p. 48). This high estimation of ordinary human beings also indicates the close relationship of individualism to humanism, which, if not the same thing, "are at least first cousins" (Morris, 1972, p. 3). Thus another root of individualism goes back through the traditions of Christianity and humanism.

A third "unit-idea" of individualism emphasized by Lukes (1973) is that of privacy, the idea of "a private existence within a public world, an area within which the individual is or should be left alone by others and able to do and think whatever he chooses" (p. 59). Lukes

points out that this concept, which we take for granted, was "largely absent from ancient civilizations", and even as late as the Middle Ages (ibid.). Hannah Arendt (1959) has written that in such societies

A man who lived only a private life, who like the slave was not permitted to enter the public realm, or like the barbarian, had chosen not to establish such a realm, was not fully human. We no longer think primarily of deprivation when we use the word 'privacy', and this is partly due to the enormous enrichment of the private sphere through modern individualism. (p.35)

Another root of individualism, then, runs through those developments that led to the conception of a personal private life held to be separate from the communal life around it.

These three unit-ideas--autonomy, dignity, and privacy--describe the central core of individualism which will be investigated here. Taken together, they largely describe the type of person which we know as the modern individual: a self-determining, intrinsically worthwhile being acting from private motivation and deliberation. Given this portrait of the individual, we can begin to determine when this type of person first appeared.

The Cultural Ancestry of the Individual

The "conventional account" of the emergence of this type of individual "attributes it to the Italian Renaissance of the fifteenth century" (Morris, 1972, p. 5). Before this time, the medieval emphasis on "the overriding importance of law, and of the church as a

legal institution" (Lukes, 1973, p. 46) meant that there was an "absorption of the individual by the community or by society" (Ullman, 1967, p. 32). However, various scholars (see Devane, 1948, p. 16f.) have pointed out that the Renaissance was not so much the birthplace of individualism as it was a "transition period between the medieval and modern ages in which . . . authoritarian and individualistic principles and concepts existed side by side" (Groethuysen, quoted in *ibid.*, p. 17). Though the Renaissance saw the emergence of those qualities prized by the modern individual, there was as yet no distinct philosophy deserving of the name "individualism." Rather than individualism, the philosophy which best characterizes this period of history is humanism.

Humanism. We have already remarked on the close relationship between humanism and individualism. The humanist assertion of "the essential dignity and worth of man and his capacity to achieve self-realization through the use of reason and the scientific method"

(Webster's Third New International Dictionary)

encompasses the three aspects of individualism we have emphasized--autonomy, dignity and privacy. Only the latter is not obviously contained in the above

definition, but clearly there can be no autonomy unless

there is a private domain, separate from the lives of other individuals, in which the individual may operate.

Thus humanism is an important philosophical precursor of

individualism in which those qualities prized by the modern individual were already finding expression.

There is, however, a generally perceived difference between individualism and humanism. Humanism expresses a more general admiration of man than does individualism, more of a "sympathy with, and delight in mankind" (Morris, 1972, p. 8), while individualism emphasizes the specific, irreplaceable individual, elevating him above the general regard for mankind. Thus the "hard core" of individualism, which separates it from humanism, "lies in the psychological experience . . . of a clear distinction between my being and that of other people" (Morris, 1972, p. 3). However, this difference is not so much one of kind as it is of degree. The individualist's experience of a clear distinction from his fellow man can be seen as a natural consequence of the humanist emphasis on autonomy, as the exercise of this autonomy must necessarily separate one man from another--one cannot act both autonomously and in concert with one's fellows. Thus even along this primary dimension of distinction, humanism and individualism are linked. This suggests that individualism is a later form of humanism in which the pursuit of autonomy has produced its natural consequence--a focus on private as opposed to public life.

Autonomy thus emerges as a critical philosophical

postulate which both unites and differentiates humanism and individualism. Corliss Lamont (1949) provides a concise summary of this important humanist principle:

Humanism believes, in opposition to all theories of universal predestination, determination or fatalism, that human beings possess true freedom of creative action and are, within reasonable limits, the masters of their own destiny. (p. 20)

The radical assertion of humanism was that man could become autonomous from the world around him. For the first time men conceived of themselves as free agents, casting off millennia of subordination to a series of masters ranging from environmental necessity through various gods to feudalism. This cleared the way for reason to claim the stewardship of man and set the stage for the ensuing scientific and industrial revolutions. So successful was this development that humanism has become the dominant thrust of all human culture, as David Ehrenfeld (1978) emphasizes in the following passage:

Humanism is at the heart of our present world culture--we share its unseen assumptions of control, and this bond makes mockery of the more superficial differences among communist, liberal, conservative, and fascist, among the manager and the managed, the exploiters and the preservers. (p. 20)

What unites humanists worldwide is "faith in our ability to control our own destiny" (ibid., pp. 9-10), to exercise our autonomy from the background of nature.

A critical aspect of the concept of autonomy is its presupposition of a division between the agent which is perceived to act autonomously and the background against

which it exercises that autonomy. In order for autonomy to be realized, there must be an entity which acts more or less independently of a relatively fixed background. Thus autonomy implies division. As William Galt (1940) makes clear in the following passage, this means that the development of humanism and subsequently individualism has been a movement into fragmentation, as the individual must establish autonomy not only from the background of nature, but also with respect to other individuals:

there is [in Western culture] a weaning of the child from the sense of biological continuity and solidarity with his kind, and the establishment within him of a sense of personal identity, motivation and authority which of its nature must be in conflict with the identity and motivation of others of his social group [italics added]. Expressed differently, the total social behavioral pattern which is the biological heritage of the human infant, as it is of other animal species, is disrupted, and an undue individuation takes place. This individuation, which in the course of time sets up an autonomous individual with private hopes, desires, wishes, gains and losses, of necessity brings about severe conflict when the desires of two or more elements or individuals happen to interfere with one another. (p. 405)

The stronger our sense of individuality, the more surely we are divided both from nature and each other.

Man and nature. We have now traced the origins of individualism back through humanism to one of the latter's primary sources: the human impulse to master nature. With fire, agriculture, technology--in short, with his culture--man could maintain a nurturing environment over a wide range of otherwise inhospitable

habitats and through the seasonal and diurnal variations of any particular habitat. Nature thus became the background against which man exercised his autonomy. Humanism is a natural extension of this drive toward a perceived independence from nature, a sort of phylogenetic equivalent to the adolescent's rebellion against his parents. As Ehrenfeld (1978) points out, humanism has always contained "a strong anti-nature (at least raw Nature) element" (p. 6). In isolating this fundamental aspect of humanism we have arrived at a theme which can be followed far back into man's history and organize our examination of the deepest roots of individualism.

The cultural sire of humanism was the classical heritage of Greece and Rome. It was the "rebirth" of this more or less forgotten legacy that constituted the Renaissance. It would seem a likely place, then, to continue our search for the origins of the human estrangement from nature that we have identified as central to the etiology of individualism.

Even a brief examination of the Greek view of nature reveals that the estrangement was by this time already well established. Aristotle, the finest Greek naturalist, held that "[i]t is evident that plants are created for the sake of animals, and animals for the sake of men" (quoted in Durant, n.d., p. 531). Whatever his acuity in

surveying and classifying the variety of the natural world, Aristotle's whole outlook was already shaped by the assumption that all of nature was ultimately a means to the end of man. Thus, "the archaic but still enormously popular doctrine of final causes" (Ehrenfeld, 1978, p. 7) already had a firm grip on the Greek psyche, telling them that man was a creature apart toward whom the rest of creation was oriented. Perhaps the single most renowned maxim summarizing this view was offered by Protagoras: "Man is the measure of all things". As Durant (n.d.) noted of this terse announcement, it is here "that individualism has found a voice and a philosophy" (p. 360).

Evidently, then, the origins of man's estrangement from nature "go back beyond the ancient Greeks" (Ehrenfeld, 1978, p. 7). Before turning an eye to pre-history, it is worth noting the unbroken line connecting the Greek attitude toward nature with later humanist attitudes which still dominate our outlook today. Christianity gave great impetus to the doctrine of final causes, asserting that "the features of the natural world--mountains, deserts, rivers, plant species, climate--have all been arranged by God for certain ends, primarily the benefit of humanity" (Ehrenfeld, 1978, p. 7). Thomistic doctrine, for instance, maintained that "the entire universe acts as a medium whereby the individual man is perfected, man possesses the priority

of final cause with respect to the means" (Neimeyer, 1951, p. 29). According to St. Thomas, "animals and plants and other things of this kind are only secondarily part of the universe, because they rather pertain to its well-being than its primary integrity" (quoted in *ibid.*, p. 30). "Thus the idea of using a Nature created for us, the idea of control, and the idea of human superiority became associated early in our history" (Ehrenfeld, 1978, p. 8). The tradition continues unabated into our own day. Clarence Glacken expressed it in modern idiom when he observed that we regard nature as "a gigantic toolshed" (quoted in *ibid.*, p. 177). Even our newfound environmental concern is based on the assumption that we are superior to nature and must act as its caretaker (*ibid.*, chap. 5).

If the Greeks were already estranged from nature, where might the origins of this separation lie? We can begin to answer this question by considering what is known of man's earliest relationship with the natural world.

According to the modern consensus (Pilbeam, 1984), creatures of the genus Homo have been on earth for at least two millions years. For almost the entire length of this time man's relationship with nature was relatively constant, and is aptly characterized by the phrase "hunter-gatherer". Man took a living from nature

As nature made it available; his welfare was not separate from the rhythms and cycles of his surroundings. In this respect man's relationship with nature did not differ from that of his immediate hominoid ancestors, or indeed any other living creature, but there were two important features which did distinguish the first hominids from their natural heritage and provide a clue as to how man came to establish his unique relationship with nature.

Paleontological and archaeological evidence indicates that the early hominids were distinguished from their immediate hominoid ancestors by an increased cranial capacity and "a shift in diet to include more animal food" (Pilbeam, 1984, p. 96). The significance of these features is that they indicate the central part played by hunting in the genesis of man. Hunting has been the strategy of a great number of animal species who over time developed the biological equipment to allow excellence in the pursuit and killing of prey. Man began his hunting without the benefit of such resources, and so, as Bronowski (1973) relates in the following passage, was obliged to develop new strategies:

A slow creature like man can stalk, pursue and corner a large savannah animal that is adapted for flight only by co-operation. Hunting requires conscious planning and organization by means of language as well as special weapons. (p. 45)

If hunting is to be more than "a hit or miss scramble for food", it requires "forethought, a studious, carefully rehearsed strategy [based on] intimate knowledge . . . of

the hunted creature" (Mumford, 1967, p. 118). In other words, to become successful in the hunt, man had to begin to think.

Thinking about nature. J. Krishnamurti (in Krishnamurti & Bohm, 1985) offers a simple but insightful definition of thought: "thinking is the response of memory" (p. 56). This definition seems especially useful when considered in the context of early man. Memory, in the form of stored knowledge of the habits and movement of game, would be a great resource to the biologically inferior man in his early attempts at hunting. Through intimate association with his quarry, man would come to know its past, and thought would suggest that this past is likely to be repeated at some future time when conditions were right. Thinking can thus be seen as the ability to project the past into the future; a seeking for continuity, the attempt to repeat desirable experience, is of its essence. Freud expressed this insight in his remark that all thinking "is merely a detour from the memory of gratification" (quoted in Marcuse, 1955, p. 31). A less illustrious but no less striking comment on the nature of thought was offered to Admiral Peary by one of his Eskimo guides. When Peary asked him what he was thinking, the guide replied: "I do not have to think, I have plenty of meat" (cited in Durant, 1954, p. 6).

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Memory, then, and its response as thought, appear to be among the most important of those factors which set man on his particular evolutionary path. This helps explain why the shift to animal food and the increase in brain size were concurrent and are generally considered to be "linked causally" (Pilbeam, 1984, p. 96). Since it is widely held that the "brain alone makes possible the reception and storage of information, functions which underlie all mental processes" (Munn, 1971, p. 161), the larger brain of the early hominids suggests an increased capacity for memory with consequently greater probability of success in the hunt. The increased ability to procure food would in turn reinforce the reliance on memory and thought and so would emerge a strong selective orientation. Eventually, probably with the emergence of Homo Sapiens, this pattern became associated with "the ability to symbol" (White, 1959, p. 3) and an increasing degree of abstraction became possible. This development marked the efflorescence of culture that man generally uses to define himself (ibid.). Thus, the "universal base of culture [is] the hunter's knowledge of the animal that he lived by and stalked" (Bronowski, 1973, p. 50). The entire structure of human culture can thus be seen as a consequence of the unique ability of human beings to make of the past a guide to the future; in other words, to open up the dimension of time. After this momentous development man competes as a four-dimensional creature

amongst those limited to three.

Since thought seeks to repeat in the future what memory has stored as the past, it will clearly be a factor of continuity, obliging the thinker to move in the direction of that which has previously brought gratification. As Bronowski (1965) notes: "It is memory that gives us the power of foresight: we push into the future with the images in which we have fixed the past" (p. 84). Thought brings about an order based on the past and seeks to perpetuate this order through repetition. For this reason, Mumford (1967) observes that "habitation was . . . man's nurse. . . . the achievement of order by increasingly formalized repetitive acts [is] basic to the whole development of human culture" (p. 64). Thought seeks to "subdue finite change by making the pleasing aspect of . . . existence as permanent as possible", to "control the fickle transiency of experience" (Suhr, 1959, pp. 98, 167). This "coercion of the finite into something resembling the infinite" (ibid., p. 102) means that the world of the thinking man, what von Bertalanffy (1981) calls the "universe of symbols" (p. 1), must exist at a distance from the natural world, which is in a constant state of unpredictable flux. Thus man became, in von Bertalanffy's words, "a denizen of two worlds. He is a biological organism . . . [but] at the same time,

he creates, uses, dominates and is dominated by . . . the universe (or universes) of symbols" (ibid., p. 17)

We can now see the tip of the wedge that has driven a split between man and nature. As thought rose to prominence in the evolution of man, it imposed its peculiar pattern whereby the past, stored as memory, is sought in the future. This means that the thinking man had to leave the ceaseless flux of the natural order and establish his own order, based on thought, which functions only by largely ignoring that flux. Thus man began to inhabit his own world, but indirectly in contact with the biological one. The new stability which man had found in his relationship with nature was achieved only at the cost of distancing himself from it.

The cultivation of nature. The process through which thought rose to prominence as an adaptive strategy was an exceedingly slow one. For nearly two million years, well over 99% of man's history, there was evidently only a very gradual development of the faculty of memory and consequent refinement of hunting technique. We can see this in the archaeological record, which shows that the first stone tools remained essentially unchanged for over a million years (Bronowski, 1973, p. 40). Even the development of language and the ability to symbol, which must have greatly enhanced the efficacy of thought, did not have a marked impact until approximately 10,000 years ago when a

fundamental breakthrough occurred which augured the triumph of thought--the Neolithic or agricultural revolution. Gordon Childe (1956/1981) describes this slow progression toward revolution:

Throughout the vast eras of the Ice Ages man had no fundamental change in his attitude to external Nature. He had remained content to take what he could get, though he had vastly improved his methods of getting and had learned to discriminate in what he took. Soon after the end of the Ice Age man's attitude . . . to his environment underwent a radical change fraught with revolutionary consequences for the whole human species. . . . This revolution that transformed human economy gave man control over his own food supply. Man began to plant, cultivate, and improve by selection edible grasses, roots, and trees. (p. 68)

These ostensibly modest activities marked a radical change in man--the age of cultivation had begun.

The agricultural revolution is widely recognized as one of the "most interesting and important periods in history" (White, 1959, p. 281). Bronowski, for example, calls it "the largest single step in the ascent of man" (1973, p. 64). Probably the best indicator of the fundamental significance of this period for man is the subsequent "enormous" increase in his population (Childe, 1956/1981, p. 48: cf. White, 1959, p. 290f.; Brown, 1970, p. 119). There would not be a similar burgeoning of humanity until the Industrial Revolution (Childe, 1956/1981, p. 35). Through "a new kind of relationship" with nature, man had in effect learned to harness solar energy "in the form of plants and animals" (White, 1959,

pp. 281, 284), thereby providing himself with fuel for an unprecedented cultural upsurge.

It is curious that while the shift to a carnivorous diet had marked the rise of thought in man, the shift back to a vegetarian economy marked its triumph. The advent of agriculture brought about a new stability in the relationship between man and nature. The predictable regularity of the vegetable world is much more amenable to the stability and continuity sought by thought than is the relative complexity of animal behavior, and so agriculture represents a way of life in which thinking plays a much more important part than it did in the hunting and gathering economy which had previously been the mainstay of human welfare. While thinking could enhance the effectiveness of hunting and gathering, such an economy still depended primarily on the providence of nature. With agriculture, man began to anticipate what would be needed, and to arrange things in such a way that nature would be much more likely to provide it. Thus agriculture represents a new expectation on the part of man that nature might accommodate him rather than he accommodate it.

The subsequent dramatic increase in human population is testament that this expectation was largely fulfilled. However, this success was achieved only at the cost of changing the relationship man had with nature. The new expectation that nature might accommodate him instead of

he it meant that man accepted an unprecedented estrangement from nature, as he now began to consider his own welfare as something apart from the natural circumstances around him; his course would henceforward be separate from the general ebb and flow of nature.

We can see this new separation of the Neolithic man from nature by contrasting the respective lifestyles of cultivation and hunting and gathering. In cultivation there is a clear separation between the cultivator and the cultivated. In hunting this separation is much narrower, as the hunter may become the hunted, the devourer the devoured, with alarming swiftness. With cultivation arises the notion of unilateral control, hence White's (1959) definition of agriculture as "the name we give to various ways of increasing man's control over the lives of plants" (p. 285). The newfound ability to direct and modify the slow rhythms of the vegetable world provided an unprecedented ratification for the continuity sought by thought. Living in one place, amid orderly and predictable circumstances, man could begin to project this continuity for the course of a lifetime, and a new conception of an enduring human presence became possible. Even the full stop of death could be dealt with by this new human vision, simply by projecting a continuity beyond the grave. It is therefore probably no accident that the great religious traditions, with their

various forms of afterlife, arose shortly after the advent of agriculture.

From agriculture to the self. We have completed a brief survey of human history, following back the roots of individualism to the humanistic man/nature split, and then examining the rise of man in an attempt to uncover the origins of this split. The conclusion of the investigation is this: Thought is the wedge that has divided man from nature. In its perpetual quest to interpret the future as an extension of the past, thought imposes continuity where in nature there is only flux. As thought was able to predict and control the lives of plants, the thinker began to appear more and more as the unchanging center managing and directing the natural cycles. From this process of differentiating a stable center of thought was born the germ of an extremely important concept in the history of the individual--the self.

It was not for many centuries after the agricultural revolution that man began to become aware of himself as a center of thought apart from nature. This awareness was a product of the second great cultural revolution, the Industrial/Scientific revolution of the seventeenth and eighteenth centuries. As discussed previously, the significance of this revolution in terms of the historical trends being examined here is that it involved the application of thought to inanimate matter, the most

constant constituent of the natural world, and thus further differentiated the thinking entity from the background against which it operated. With this development the gap became wide enough to be itself the object of awareness and speculation. A fundamental distinction was drawn between thought and matter, and the thinking entity eventually became known as the self.

The thinker most closely associated with the formal distinction between thought and matter is Rene Descartes. The pervasive influence of his thinking on the intellectual history of the West has been widely acknowledged (see, e.g., Schultz, 1969). Descartes made explicit the implicit cultural project of separating a stable, autonomous center of thought from the rest of nature. Drawing his inspiration from his humanistic forebears, Descartes reasoned that "Archimedes, in order that he might draw the terrestrial globe out of its place and transport it elsewhere, demanded that only one point should be fixed and immovable [italics added]; in the same way I shall have the right to conceive high hopes if I am happy enough to discover one thing only which is certain and indisputable" (quoted in Durant, 1961, p. 639). This discovery took the form of the famous "Cogito ergo sum." With this brief pronouncement Descartes gave the self its declaration of independence from nature; henceforward Western man would look into

himself to find the essence of his being.

Descartes was keenly aware of the importance of continuity in the establishment of a thinking self which maintains itself as "fixed and immovable" against the flux of nature. The whole basis of our culture, law, and understanding of each other assumes this identity of the self through time: "identity persisting through change . . . is a mark of selves. . . . the self is a continuant" (Castell, 1965, p. 60). As Clark Moustakas (1956) noted: "All psychological phenomena can be understood as illustrative of the single principle of unity or self-consistency" (p. 7). Descartes' declaration of an inner essence which defies the general flux of nature opens up a whole new dimension for thought. As long as the inner observer is fixed, the rest of human nature must pass before it. Thus psychology becomes possible because man has now become divided from his experience! As the Neolithic man became divided from the nature he first learned about and then manipulated, so the modern Western man becomes divided from his own psyche, which he will likewise seek to manipulate after the accumulation of sufficient psychological knowledge. In this progression we see the extraordinary process by which thought fragments human existence.

Thus Descartes' thinking self is a major development in the history of individualism. As Durant (1960) put it: "The Renaissance had rediscovered the individual;

"Descartes made him the hitching post of his philosophy" (p. 639). Descartes gave Western man an "inpost", a secure inner viewpoint from which the thinking self could begin its work of ordering the vagaries of human nature. The private inner world of the individual becomes a new frontier for thought to explore and subdue. The enthusiasm with which this task was taken up is reflected in William James' (1890/1950) remark of two and a half centuries later that "the entire common sense of mankind [contains] the belief in a distinct principle of selfhood" (p. 330).

From Descartes' modest attempt to find within "one thing only which is certain and indisputable" the self has risen to vast and overweening significance. J.H. Van den Berg's perceptive essay, "The Subject and his Landscape" (1961, chap. 5), chronicles the growth of the self. Beginning by contrasting the psychological knowledge of Augustine and Rousseau, Van den Berg (*ibid.*) notes that "Rousseau means to speak of the self of the individual, the "self" which is of significance because of itself" (p. 227). But as Van den Berg goes on to say, however opulent it may have appeared to Augustine, this inner self of Rousseau's was impoverished by today's standards:

James Joyce used as much space to describe the internal adventures of less than a day than [*sic*] Rousseau used to relate the story of half a life. The inner self, which in Rousseau's time was a

simple, soberly filled, airy space, has become ever more crowded. Permanent residents have even been admitted; at first, only the parents, who could not stand being outside any longer, required shelter; finally it was the entire ancestry. As a result the space was divided, partitions were raised, and curtains appeared where in earlier days a free view was possible. The inner self grew into a complicated apartment building. The psychologists of our century, scouts of these inner rooms, could not finish describing all the things their astonished eyes saw . . . Everything had been put into it. The entire history of mankind had to be the history of the individual. Everything that had previously belonged to everybody, everything that had been collective property and had existed in the world in which everyone lived, had to be contained by the individual. It could not be expected that things would be quiet in the inner self. (p. 232)

Van den Berg brings out one of the most striking features of the growth of the self--it presents a mirror image to history. Everything we perceive as having shaped historical man is, as it were, moved back inside. Thus, in the exploration of the psyche, the entire outward experience of man is recapitulated as psychological knowledge. In this manner the whole process through which man became divided from external nature is repeated as an inward estrangement. Having thus swallowed our own formula for exile, it is no wonder that twentieth century Western culture is dominated by the theme of alienation and accompanied by "the groaning of an overfilled inner self" (ibid., p. 235).

The Cultivator of the Fourth Dimension

It has been our contention that the development of the self depends on the differentiation of a center of thought which is able to maintain a relative stability

and autonomy with respect to that aspect of nature with which it is concerned. Against its original background of the animal world the hunter's thought was limited by the sentience and motility of his quarry. The shift to agriculture allowed a greater predictability, so that the thinker could begin to forecast continuity through the course of a lifetime and even beyond. With the extension of this process to the background of inanimate matter during the Scientific/Industrial Revolution thought achieved its greatest successes, and there arose the conception of an ordered universe completely accessible to thought. At the same time the increasing separation of the thinking substance (res cogitans) from the rest of nature (res extensae) brought about an inner fragmentation as Descartes began the process of differentiating within those things which could be considered "certain and indisputable" from those things, such as sense impressions, which could not. Thus thought began to isolate itself from its inner environment, accumulating psychological knowledge as the basis for a putative cultivation of the field of the psyche. Just as the human being became the cultivator of external nature, so the self would become the cultivator of human nature.

It is of interest to speculate as to what it is that brought about this inward turning of thought. Apart from

a general optimism about the omnipotence of thought bred by its resounding success in harnessing the material world, there was a specific development of this time which must have greatly enhanced the sense of continuity essential to the development of the self. Almost simultaneously with Descartes' speculations, the first pendulum clocks were being developed. G.J. Whitrow (1980) notes the significance of this event:

The invention of a successful pendulum clock in the middle of the seventeenth century had a tremendous influence on the whole concept of time, for at last mankind was provided with an 'accurate' timekeeper that could tick away continuously for years on end. This must have greatly strengthened belief in the homogeneity and continuity of universal time. (p. 59).

The developing conception of universal time meant that man had found an immense background against which the flux of all natural change could be reckoned. Since, according to this conception, all change in the history of the natural world has occurred within time, it should in principle be measurable and thus suitable provender for thought. The quicksilver of mind, then, might finally be contained.

To understand fully the import of a projected universal time for the development of psychology, it is necessary to consider closely the relationship between time and thought. From what has been noted about the origins of thought as the means by which the past (as memory) appropriates the future, it is clear that time

and thought are in some sense related. The natural world existed in an eternal present until memory came into being, recording the patterns of the past and seeking their recurrence in the future. Again, Whitrow (ibid.) comments on the significance of this development:

The primitive idea of time as rhythmical repetition became the basis for its division, and ultimately for its measurement Although restricted, the ancient conception of time was thus of immense significance for the growth of civilization. Increasing emancipation of human thought from the domination of immediate sensory impressions involved closely related developments in man's awareness of time and in his idea of the universe. Whereas primitive man tended to visualize all natural processes purely subjectively and to regard them as being at the mercy of arbitrary . . . forces . . . civilized man was inclined to direct his thought more and more to the contemplation of a universal world-order Thus, out of man's primeval awareness of rhythm and periodicity there eventually emerged the abstract idea of world-wide uniform time. (pp. 57-58)

From Whitrow's description we can see that not only are time and thought related, but that there seems to be a positive correlation between them. The opening up of the dimension of time corresponds directly with the developing conception of a "universal world-order"; as the former expands, so the latter matures.

Thus the "Age of Reason" was based on the establishment of "Absolute, true and mathematical time" which "of itself and from its own nature, flows equably without relation to anything external" (Isaac Newton, quoted in ibid., p. 33). This conception of time formed the most vast and complete background against which

thought had yet operated. Man could begin to envisage an enormous panorama of time, from before the distant origins of the universe to beyond its far-removed heat death. And, since the universe now had a beginning and an end in time, it must in some sense be finite. It therefore becomes fully accessible to thought and reason, for if something is limited there is no reason why thought, given enough time, cannot progress to a complete understanding of it. And the uniform background of time allows a quickening of thought, as it greatly enhances the process of measurement by which thought feeds itself. That is, thought continually modifies itself by comparing the present with the past. This process of measurement requires a uniform background, of which time is the example par excellence. As long as the continuum of time is intact any event occurring in the present can be compared with what has happened in the past, if only in terms of its duration. Thus time provides a universal standard of measurement, a framework into which all of nature can be fit, and so in a literal sense makes thought into the ruler of the universe. The connection between measurement and our nascent conception of time as periodicity is evinced in the fact that "in the Indo-European languages we find that most words for month and moon derive from the same root, me, producing in Latin, for example, menis and metior, 'to measure'" (Whitrow, 1980, p. 57). The connection between a continuous background

and measurement is also expressed in the popular idiom where something showing marked continuity is "something you can count on." Pertinent here is the suggestion from both these sources that the "me" (measurer), or continuing identity, is what is real and reckonable in the individual person. At any rate, with the projection of a universal time the universe became, in principle, completely accessible to thought.

Thus it seems that thought is finally prepared for the journey inward. As long as the background of time is intact, thought can presume to know even the soul of man; for if the soul in fact exists, its movements must be traceable against the grid of time. But there is a fundamental flaw in this scheme which to this day has been largely overlooked. This flaw has to do with the difference between this new background of thought and those backgrounds against which it had operated in the prototypical activities of hunting, agriculture, and technology. The crucial point is that in all these activities the background is situated in nature, whereas time is not to be found in nature--it is itself a creation of thought. As Lewis Mumford (1967) makes clear in the following passage, time is property imported into natural systems by the thinking human being:

The immensities of space and time . . . are 'empty conceits except as related to man. The word 'year' is meaningless as applied to a physical system by itself; it is not the stars or planets

that experience years, still less measure them, but man. This very observation is the result of man's attention to recurrent movements, seasonable events, biological rhythms, measurable sequences. . . every attempt to give objective reality to the billions of years the cosmos supposedly passed through before man appeared, secretly smuggles a human observer into the statement, for it is man's ability to think backward and forward that creates and counts and reckons with those years. (p. 33)

In contrast to the animal, vegetable and mineral kingdoms time is not a background which can be found "out there". Thus, in its increasing reliance on time, thought no longer simply differentiates itself from nature but now begins to differentiate itself from itself.

Thus we see that time is an exile of thought, cast out in a literally self-imposed bifurcation of the stream of consciousness. It is the self that requires the background of time in order to establish an identity. As Bohm (Krishnamurti & Bohm, 1985) points out "we feel that we, as the self, exist in time. Without time there could be no 'me'" (p. 68). Indeed, as Bohm (ibid.) elaborates:

Time, and separation as individuality, are basically the same structure [The individual] is divided from others. He extends out to some periphery . . . and also he has an identity which extends over time. He wouldn't regard himself as an individual if he said today I am one person, tomorrow I am another. So it seems that we mean by individual someone who is in time. (p. 197)

Thus Bohm provides the psychological corollary to the Newtonian conception of an ordered universe sketched against the background of time. The creation of a

personal sphere of order (an identity) is the attempt to replicate inwardly what thought has achieved outwardly. But, again, the fallacy is that outwardly thought must prove itself through contact with nature,³ whereas psychologically there is no identity except in time, and therefore no external frame of reference which might provide a corrective influence.

Thus, as it enters the psyche, thought loses contact with nature. Where originally it had operated against backgrounds which, though abstracted from the whole of nature for practical purposes, were still in actuality a part of it, now thought takes as a frame of reference its own artificial dimension. All the major psychological theories are dominated by time: whenever we try to explain the essence of an individual we make reference to his history. There is no alternative: as Bohm has emphasized, the individual is a being in time, we cannot find him elsewhere. Thus our psychological explanations (as opposed to descriptions) of individual personalities inevitably interpret present behavior in terms of past experience. This means that our psychological theories never leave the domain of time and so are denied the contact with the actuality of the living world which guides the evolution of our general understanding of nature. Whereas our general concepts of nature must evolve, however slowly, in relationship with the

actuality to which they are applied, our psychological explanations inhere completely within the artificial dimension of time and so have lost contact with the nexus of natural relationships which nurture and sustain the whole corpus of human understanding. It is therefore hard to connect these explanations with the rest of our understanding of the natural world; there is always a gap between our psychological explanations and our general understanding of nature, a gap corresponding to that between the natural and symbolic universes.⁴ This may be one reason why we have such difficulty defining human nature. The attempt to describe human nature proceeds best when made in comparison with the rest of nature, when we are able to contrast ourselves with what is not ourselves. When we attempt to define what is distinctly human, we seem invariably to run into great difficulty because we confine ourselves within the walls of our own thinking. In the mirror of time thought can see only its own wan image; hence the "essence" of the individual is always a dim reflection of what thought has learned in its encounter with external nature (and so ontology invariably repeats phylogeny). It is as if in its quest for the secrets of human nature thought has wrapped itself in a cocoon of time where it endures a sterile pupation, vainly awaiting its metamorphosis into an imago of psychological understanding. But thus encased in the chrysalis of the individual thought is isolated

from everything that could bring it to the realization that there is no secret to human nature: it has already been shouted out by all of creation.

Conclusion

We have completed our theory of the individual. The twin investigations of biological individuality and cultural individualism converge strikingly on a single point: the concept of the individual arises in the differentiation of a thinking entity which purchases stability and autonomy only at the cost of an increasing estrangement from nature. As this gap between the observer and the observed has widened, man has found himself more and more a dweller in his own symbolic universe. Cassirer (1944) has emphasized how man finds himself increasingly and helplessly enclosed within this artificial world:

No longer in a merely physical universe, man lives in a symbolic universe. Language, myth, art, and religion are parts of this universe. They are the varied threads which weave the symbolic net, the tangled web of human experience. All human progress in thought and experience refines upon and strengthens this net. No longer can man confront reality immediately, he cannot see it, as it were, face to face. Physical reality seems to recede in proportion as man's symbolic activity advances. Instead of dealing with the things themselves man is in a sense constantly conversing with himself. He has so enveloped himself in linguistic forms, in artistic images, in mythical symbols, in religious rites, that he cannot see or know anything except by the interposition of this artificial medium.
(p. 25)

It is in this artificial world that the individual

takes refuge. From the biological point of view evolutionary theory has done much to show that the individual cannot take precedence over the natural continuum in which it is embedded, but various confusions about cultural evolution have allowed man to presume that here at least the individual assumes dominance. Because change in cultural patterns can happen within the lifetime of individuals, a causal relationship has been inferred in which the individual is perceived to be the agent of that change. But it has been argued here that the stochastic nature of all evolutionary change means that this apparent dominion over cultural evolution is no more than a Lamarckian conceit.

Thus the individual can be seen as a puppet king imprisoned in the castle of his own imagination. He persists in his impotent reign only because he has been convinced by his distinguished pedigree that he continues a lineage of great importance to mankind. As the descendant of the original cultivators of the Neolithic revolution, the individual is heir to a tradition that is directly responsible for man's dominant position in the natural world. Through cultivation human thought transformed the relationship between man and nature. As long as those aspects of nature selected for cultivation remained within the embrace of nature as a whole, thought was able to maintain a relative harmony with its surroundings; its excesses were always tempered by the

natural corrective mechanisms inherent in any large ecosystem. As a biological neophyte, thought must rely on the environment to provide this delicate corrective balance, achieved only at the "evolutionary price of billions of deaths" (Ehrenfeld, 1978, p. 123). Thus the development of universal time was an important event in the intellectual history of mankind, as it meant that thought began to withdraw from its vital dialogue with nature in favor of an endless and dangerous monologue with itself.

Psychology constitutes an important part of this ubiquitous soliloquy. It has often been remarked that psychology cannot seem to establish the solid grounding enjoyed by the natural sciences. Our investigation suggests that this is because psychology is grounded in time, whereas the natural sciences continue the dialogue with nature. When thought turned in on itself, attempting to separate an internal observer from the rest of experience, it committed an act of intellectual incest. We have seen that the exploration of the psyche has produced a mirror image of history; thought can find nothing in the individual that it has not put there itself. As it attempts to couple with human nature as it has with external nature, thought ends up exhausting itself in a long process of intellectual inbreeding; there is not the contact with the living world which

constantly revitalizes the understanding of the natural sciences. The only reason psychology can claim any scientific credibility is that certain aspects of it overlap with disciplines such as neurology, physiology, biochemistry, and so on, in which a genuine dialogue with nature continues. But these concerns have never been central to psychology, which arose alongside the other sciences in an attempt to encompass what they all seemed to be missing--a comprehensive explanation of the observer, the living center around which all the forms of mental life, including the sciences, are arrayed.

Thus the scientific project of psychology must be viewed as a mistake. The individual is not a phenomenon of nature--we have seen that biologically it is a concept of nominal status--but rather an artifact of the symbolic activity of human beings, a bit of coagulated history existing in the artificial dimension of time. As such it can never be the subject of proper scientific investigation, and the continued attempt to force it into this mold only makes psychology seem like a pseudo-science, an intellectually lame duckling seeking to imprint itself on the nearest parental figure. Fortunately these scientific ambitions have completely consumed psychology; especially in the field of psychotherapy there is far too much at stake to worry about the scientific basis of one's thought and action. Thus psychology has developed into a formidable tangle of conjectures,

insights, theories and observations which range from science to mythology. It is this very wildness and confusion that allows one to remain optimistic that despite its empty scientific pretensions psychology might yet have some relevant things to say about human nature; we would not expect a discipline laid out as neatly as Newtonian mechanics to have much to say about the human condition.

The second part of this thesis will explore how some of psychology's major thinkers and schools of thought have sought to understand the field of the psyche. Our guide in this endeavor will be the theory of the individual developed in Part One. It might be expected that this guide will take us far, since we have defined the individual as an epiphenomenon of the ancient tradition of cultivation and suggested that psychology itself is but a recent offspring of this larger tradition. However, it will be important not to rely too heavily on our guide; from everything we have learned about the relationship between thought and nature it will be important to remain attentive to those things which defy our expectations and so hint at the possibility of a new understanding. It is only when we are open to the news of nature that an original and viable understanding may evolve.

PART TWO
THE FIELD OF THE PSYCHE

Chapter Three

WILLIAM JAMES: LOOKING INWARD

The work of William James is valuable to this investigation in two respects. First, he deals specifically with those aspects of mental life with which we have been primarily concerned in developing our theory of the individual--thought, memory, the self, and time. Thus we enter the field of the psyche in the company of one who speaks a common language and reconnoiters by familiar landmarks. Secondly, James' work is intriguing in that it belongs to what could be called the pre-cultivation stage of psychology.

James and the other introspectionists developed their psychology before it had been widely conceived that a "science of the mind" might be able to bend human nature to the designs of man in the same way that agriculture had begun the process of domesticating external nature. The contention that will be advanced in this chapter is that this difference between the introspection of James and the more scientifically-minded psychologies of the twentieth centuries stems from the fact that James's psychology does not rely on theory, whereas every subsequent psychology has relied on theory and thus constrained the ability of its adherents to comprehend the whole which constitutes the field of the psyche. Thus, the purpose of this chapter is not only to examine those aspects of James' work

which correspond with the theory of the individual developed in Part One, but to begin the process of trying to understand the critical difference between a theoretical and non-theoretical approach to psychology.

James on Thought and the Self

James' examination of the self in the Principles of Psychology (1890/1950) provides several areas of corroboration with what our own investigation has discovered about the role of the self as the nucleus of the individual. An example of this is his study of how thought manufactures constancy from the flux of mental life. James (ibid.) points out first the infinite variability of sensations, images, feelings, etc., which make up the stream of consciousness, emphasizing that "there is no proof that the same bodily sensation is ever got by us twice" (p: 231). Yet from this flux we construct a remarkably stable world. James (ibid.) feels that this constancy stems from

our habit of not attending to sensations as subjective facts, but of simply using them as stepping stones . . . to the realities whose presence they reveal. . . . We take no heed, as a rule, of the different way in which the same things look and sound and smell at different distances and under different circumstances. The sameness of things is what we are concerned to ascertain; and any sensation that assures us of that will probably be considered in a rough way to be the same with each other. (p. 231)

According to James, thought operates on the stream of consciousness in such a way as to perpetuate

constancy. With his flair for simile, James (*ibid.*) compares the career of thought to a bird's life: "it seems to be made of an alternation of flights and perchings" (p. 243). The latter he labels the "substantive parts" and the former the "transitive parts" of the stream of thought. The substantive parts are characterized by images, "whose peculiarity is that they can be held before the mind for an indefinite time, and contemplated without changing [*italics added*]" (*ibid.*). Thus, for James, "the main end of our thinking is at all times the attainment of some other substantive part than the one from which we have just been dislodged" (*ibid.*). He thus concurs with the position established in Part One that the manufacture of constancy from change is a primary function of thought.

James also agrees that the means by which thought seeks continuity must be through memory and the recognition of experience. Noting that "our mental reaction on every given thing is really a resultant of our experience of the whole world up to that date" (*ibid.*, p. 234), he goes on to a detailed exposition of the relationship between memory and thought. For James (*ibid.*) it is "the present 'judging Thought' with its memory and tendency to appropriate [the new in terms of the old]" (p. 355) which melds the stream of consciousness into a sensible continuity. "The natural name" for this continuity, he points out, "is myself, I,

or me" (ibid., p. 238). James offers the following passage from John Mill in support of his position:

The fact of recognizing a sensation, . . . remembering that it has been felt before, is the simplest and most elementary fact of memory: and the inexplicable tie . . . which connects the present consciousness with the past one of which it reminds me. (Quoted in ibid., p. 357)

Thus the sense of identity¹ which we call "me, myself, or I" consists in the recognition of that which is old in the new. So "I" will always be old! This realization underscores a central paradox of psychotherapy: namely, how to help individuals change when the desire to change is itself usually part of the patterns of equilibrium making up the "I." The desire of the individual in psychotherapy is usually not so much for fundamental change, which would involve the dissolution of the "I," but for peripheral change which will allow the "I" to continue in enhanced circumstances. As Freud (1917/1974) put it: "One hardly comes across a single patient who does not make an attempt at reserving some region or other for himself so as to prevent the treatment from having access to it" (p. 329). In other words, the individual wishes to change their experience while the "experiencer" remains unchanged. The conundrum facing the therapist is how to relieve the individual of his present patterns of equilibrium, including those constituting the desire to change, so that change is invited to happen on its own

terms.

To summarize the discussion thus far, James sees "the remembering and appropriating Thought incessantly renewed" (ibid., pp. 362-363) as the nucleus of continuity in the stream of consciousness. As James points out, this means that the formation of the self involves two levels of fragmentation: first, the "great splitting of the whole universe into two halves . . . whose names are 'me' and 'not-me'" (ibid., p. 289) and, secondly, within the subjective world of each me, "a certain portion of the stream is abstracted from the rest" and becomes the inner self (ibid., p. 297). To follow James' account in greater detail, this inner self

is felt by all men as a sort of innermost circle, of sanctuary within the citadel, constituted by the subjective life as a whole. Compared with this element of the stream, the other parts, even of the subjective life, seem transient external possessions, each of which in turn can be disowned whilst that which disowns them remains being more incessantly there than any other single element of the mental life, the other elements end by seeming to accrete round it and to belong to it. It become [sic] opposed to them as the permanent is opposed to the changing and inconstant [italics added]. (pp. 297-298)

Thus, as was established in the previous chapter, it is through a process of fragmentation that the self emerges as the stable center which opposes itself to the natural flux around it.

Having thus paralleled our description of how thought divides the flow of nature to form the self,

James goes on to point out that what one calls the self will tend to be the most constant elements of mental life. As thought outwardly seeks "the sameness of things," so inwardly it will group together similar manifestations of the self through time, so that "the distant selves appear to our thoughts as having for hours of time been continuous with each other, and the most recent ones of them continuous with the self of the present moment" (ibid., p. 334). Thus, concludes James (ibid.):

The sense of our personal identity . . . is exactly like any one of our other perceptions of sameness among phenomena. It is a conclusion grounded either on the resemblance in a fundamental respect, or on the continuity before the mind, of the phenomena compared.

Both inwardly and outwardly thought seeks continuity; for this reason one of the primary constituents of the self will be "a uniform feeling of 'warmth', of bodily existence" (ibid., p. 335). The homeostatic processes of the body are a dependable source of input from which the rudiments of the self can be abstracted, hence Freud's (1923/1960) remark that the ego "is first and foremost a bodily ego" (p. 16). However, as James realized, it is not the bodily sensations per se which are critical to the process of ego formation but the abstraction of these sensations as images in memory. It is these images, which can be "held before the mind . . . without changing" (James, 1890/1950, p. 243), upon

which identity is based. James cites Wilhelm Wundt in establishing this point:

In this development [of an identity] . . . one particular group of percepts claims a prominent significance, namely those of which the spring lies in ourselves. The images of feelings we get from our own body, and the representations of our own movements distinguish themselves from all others by forming a permanent group. (Wundt, quoted in *ibid.*, p. 303).

Thus, identity depends on memory: "The phenomena of Self and that of Memory are merely two sides of the same fact" (J.S. Mill, quoted in *ibid.*, p. 356). James supports this conclusion by observing that when we hear stories about ourselves as young children, before the process of building the self had begun, we feel a peculiar detachment. "The child in such stories "is a foreign creature because no representation of how the child felt comes up with the stories" (*ibid.*, p. 355). The child cannot be linked with ourselves because it had not yet begun the process of binding portions of experience in memory to provide the rudiments of the self. In other words, the child has not yet adopted time as a theory for psychological purposes (D. Bohm, in Krishnamurti & Bohm, 1985, p. 73).²

Thus James (1890/1950) agrees that it is from the past that we build "that self for which we feel such hot regard" (p. 319). And he also concurs that what we have constructed with such fervor we are anxious to see continue. For this reason, says James (*ibid.*), we have

adopted the "theory of the soul" (p. 342), whereby a permanent essence is supposed to lie behind the ephemeral thought. In James' (ibid.) words, the thought is a "perishing" thing while "the Soul-substance is supposed be a fixed and unchanging thing" (p. 345). James details two major psychological functions of this theory, as outlined below.

One obvious benefit of the theory of the soul is its promise of immortality. "A 'stream' of thought . . . may come to a full stop at any moment; but [the soul] is incorruptible and will persist in Being so long as the Creator does not by a direct miracle snuff it out" (ibid., p. 348). James (ibid.) points out, however, that the mere continuation of the soul-substance per se "guarantees no immortality of the sort we care for." For the concept of the soul to hold any appeal it is imperative that the surviving soul-substance "give rise to a stream of consciousness continuous with the present stream" (ibid.). In other words, our identity must survive; we are not interested in a non-personal state of "atom-like simplicity" (ibid.), no matter how long it might endure. The soul, then, appears as the purest distillate of thought, that which we perceive as the best in us and deem "fit for immortality" (ibid.). It is, in short, the ideal³ outcome of the whole process of cultivation through which thought has sought to carve from nature an unchanging center. Here the strategy of

cultivation is brought to bear even against death, for once the influence of raw nature in the form of the body is discarded the soul can proceed unfettered. The theory of the soul thus has the great psychological benefit of allowing mankind to see death as an opportunity for improved personal continuity rather than as a final ending of identity.⁴

This brings us to another "great use of the Soul: . . . to account for, and at the same time to guarantee, the closed individuality of each personal consciousness" (ibid., p. 349). Since each soul is accounted worthy of salvation according to its merits, it must exist as "an individual being" (ibid., p. 344) whose virtues and vices are "eternally insulated from those of every other soul" (ibid.). Salvation is a personal issue--each individual must prepare their own soul for deliverance. Thus the soul represents an ultimate personal harvest which rewards the process of inward cultivation and so helps perpetuate the whole ethos of individualism.

Thus James further parallels our own theory of the individual by pointing out that thought projects a personal continuity (the soul) even beyond death. The critical difference between James' approach and our own, however, is that James is not developing a theory of the individual (or of anything else); he is simply

recording observations that seem relevant to him in the course of his investigation. We will want to examine this important difference between James' approach and our own later, but will first bring out a further correspondence between his ideas and our own.

James on Time and Memory

James' treatment of time begins with the observation that "the perception of time" as events that have gone by "goes by the name of memory. To remember a thing as past, it is necessary that the notion of 'past' should be one of our 'ideas'" (ibid., p. 605). James felt that "the direct intuition of time" was limited to intervals of considerably less than a minute,"⁵ beyond which "extends the immense region of conceived time, past and future, into which . . . we mentally project all the events we think of as real" (ibid., p. 643). Thus "we paint the remote past [and future], as it were, upon a canvas in our memory, and yet often imagine that we have a direct vision of its depths" (ibid.). This recalls our suggestion that time is a fabrication of thought which we mistake for an objective reality.

James also corroborates our position that time is involved in the very beginnings of thought and consciousness, offering as his support for this point a long passage by S.H. Hodgson of which the crux is: "the rudiments of memory are involved in the minimum of consciousness ~~that~~ that is what is meant by saying

that all consciousness is in the form of time" (quoted in *ibid.*, p. 607). James also enters into some interesting speculations on the origins of our sense of time.

In a classic example of the introspectionist method, James (*ibid.*) observes that in "the twilight of our general consciousness" there are various recurring, rhythmical processes:

Our heartbeats, our breathing, the pulses of our attention, fragments of words or sentences that pass through our imagination, are what people this dim habitat. Now, all these processes are rhythmical, and are apprehended by us, as they occur, in their totality; the breathing and pulses of attention, as coherent successions, each with its rise and fall; the heart-beats similarly, only relatively far more brief; the words not separately but in connected groups. In short, empty our minds as we may, some sort of changing process remains for us to feel and cannot be expelled. And along with the sense of the process and its rhythm goes the sense of the length of time it lasts. Awareness of change is thus the condition on which our perception of time's flow depends. (p. 620)

James attributes the origins of our sense of time to an awareness of changing somatic rhythms. Thus he again implicates thought and memory in the inception of time, for in order that bodily process may become the basis of our sense of time it is necessary that a record of them be preserved in memory: "awareness of change" depends on retaining a record of a previous state of affairs which may be compared with the present. Thus two similar internal percepts, say the occurrence of two breaths, will be separated by an interval of not

breathing. It is this interval we call time. Thus we see in James the same understanding of time as an appurtenance of thought which we have arrived at ourselves. By both accounts time fills the gaps in the continuity of thought, providing the thread that connects the points of recognition in the great web of symbols thought has woven.⁶

From the lingering of the past in memory is born the whole process of transforming the present which goes by the name of thinking. Since thought is based on memory, it can recognize in the total moment of the present only that portion with which it is familiar. By thus leapfrogging from one similar moment to the next thought establishes a continuity amid the flux of nature, a continuity which becomes the basis of the self. James (ibid.) notes how the building of the self depends on memory and thus on time:

Any state of mind which is shut up to its own moment and fails to become an object for succeeding states of mind, is as if it belonged to another stream of thought . . . not being appropriated inwardly by later segments or appearing as part of the empirical self . . . All the intellectual value for us of a state of mind depends on our after-memory of it. Only then is it combined in a system and knowingly made to contribute to a result. Only then does it count for us. (p. 644)

Time is the dimension through which the foraging thought moves in its search for that which resembles itself.

Between the similar moments lies an interval of time; thus time spans that which is not similar, that which is

changing. -In terms of our theory of the individual, this interval can be seen as wilderness--dangerous, changeable nature in which thought can find no purchase. Time, then, is a label which covers these expanses of intractable nature as a lid covers a boiling cauldron. As such it is an integral part of the inward domestication of change. Just as agriculture is achieved only through skewing the environmental equilibrium in favor of those aspects of nature which seem most beneficial to the cultivator, so the construction of the self is a process which selects from the totality of human nature only those facets, which can be "combined in a system and knowingly made to contribute to a result."

Conclusion

James' investigation of the self finds that "personality implies the incessant presence of two elements, an objective person, known by a passing subjective thought and recognized as continuing in time" (ibid., p. 371). Each successive thought is "remembering" and "appropriative" of previous portions of the stream of consciousness, so that a "sense of sameness" is preserved. "This sense of sameness is the very keel and backbone of our thinking . . . the consciousness of personal identity repose[s] on it, the present thought finding in its memories a warmth and

intimacy which it recognizes as the same warmth and intimacy it now feels" (ibid., p. 459). Thus James converges with our investigation in finding separation to be a prerequisite of personality. When an inner observer has detached itself from the rest of human nature, the construction of the individual can begin. And this division already assumes the earlier separation of human nature from nature as a whole. Thus psychology begins with the double divorce of the observer from the observed: a separate human nature becomes apparent only when the observer has begun to lose its connections with the rest of nature.

Despite these similarities of James' investigation with our own, however, there is an important difference to which we have earlier referred. Whereas we have been concerned with generating a theory (of the individual), James, though he often deals with other theories, is not concerned with developing a theory of his own. As he noted in the preface to The Principles of Psychology, "[t]he reader will seek in vain for any closed system in the book. It is mainly a mass of descriptive details . . ." (ibid., p. vii). James does not seek fixed grounds upon which to organize his observations; because of this he is able to pass from one observation to the next with an ease and fluidity rarely found among more theoretically-minded psychologists. Since he is not constrained by the tenets of any one theory, James is

free to survey the whole field of the psyche; hence his work has a timelessness and general relevance which stands in marked contrast with theoretical psychologies such as psychoanalysis and behaviorism which are rendered dated and eventually irrelevant, as their basic premises lapse into obsolescence.

James once remarked that if a man has a theory, the facts will cluster to that theory like grapes. Each theory tends to accrete round it a collection of facts which confirm its basic premises. As this collection of facts grows it becomes increasingly difficult for counter-observations to make any impact on the growing bulk of evidence which protects and eventually may even obscure the original theory. The theory becomes more and more a self-perpetuating and self-contained system less and less susceptible to refutation. As Kuhn (1970) has shown, it is generally only possible to progress beyond such a dominant theoretical system when there is a shift in the whole intellectual substratum on which the theory stands (a so-called "paradigm shift"). Like an earthquake, this shift breaks down the accumulated structure of facts and exposes the theoretical foundations to the light of a new understanding. This is, as it were, the natural life cycle of a theoretical system, and may be expected to occur in any discipline which maintains direct contact with nature. Thus in physics, biology and chemistry we see a natural selection

among the various theories that arise, so that there is a progression of understanding and a general consensus as to what constitutes the theoretical essence of the discipline. In psychology, however, we have seen that the direct contact with nature has been lost; instead there has been substituted for it a partial and desiccated version called human nature which, it has been argued, is a symbolic introjection of what has been learned from nature as a whole. Thus psychology is unable to establish any consensus as to a general theoretical paradigm because the natural processes which guide the formation, confirmation, and eventual dissolution of theoretical systems have been excluded. Thus, when all the evidence has been weighed, one's choice of a psychological theory comes down to the decidedly unscientific question of which theory one likes or believes.

Introspection offers an intriguing alternative to this hollow mimicry of the natural sciences. In introspection, as James noted, there is no attempt to build a closed theoretical system, but only to describe what transpires "within."⁷ Instead of establishing oneself on fixed grounds, one is able to survey the entire field of psyche, moving from one observation to the next with thought as to how each observation fits with the others. Thus each observation will be a more or less spontaneous formation of language. This means that a corrective influence has been

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reintroduced to psychology in the form of the natural behavior of language (a concept to be elaborated in the discussion of the philosophy of Wittgenstein in Chapter Five). The language of human beings constitutes a huge natural system, which, though far from co-extensive with nature itself, represents the broadest possible symbolic representation of nature at our disposal. It is from this natural state of language that all the theories, conjectures, and speculations concerning human nature have been constructed. Thus it is as if the natural condition of language represents the wilderness in which human nature exists. Theory is destructive of this nature in the same way that cultivation is destructive of external nature: what we obtain through cultivation and theory is always bought at the cost of disturbing the natural relationships which have produced what we are after in the first place and without which it cannot be expected to sustain itself. Introspection offers an alternative to this essentially destructive process, as it allows us to leave human nature alone, to make our observations and move on, rather than settling in one place and expecting nature to accommodate us.

Thus we begin to understand why "[r]ereading James brings a sense of perspective and even a little humility to our regard for more modern achievements" (Schaffer,

1950, p. 416). The natural appeal of his work stems from his willingness to leave human nature as he finds it, rather than subjugate it to the demands of theory. His observations seem fresh and vital because he has no need to process them through the mills of theory. James confronts the full diversity of human nature, seeking it out in its natural setting, while the theorist is confined to a local understanding, able to appreciate only that cluster of facts which grows on the vine of his own theory. As we will see in the following chapter, this local understanding will always stand in contradiction with the whole field of the psyche because it is always partial. Whatever grounds a theoretical school may select, it always excludes far more than it includes and so must inevitably set up a contradiction, for if it were possible to reduce all of language to a part of language nature would have long ago accomplished this task. As we examine this essential limitation of the theoretical psychologies we will keep in mind James' example of a psychology which is bounded only by the limits of language.

Chapter Four

PSYCHOANALYSIS: KNOWLEDGE AND THE UNKNOWNABLE

To effect the transition from James to Freud it is worth reciting Freud's (1925/1963) account of a meeting between the two men during his 1909 trip to America:

Another event of this time which made a lasting impression upon me was a meeting with William James the philosopher. I shall never forget one little scene that occurred as we were on a walk together. He stopped suddenly, handed me a bag he was carrying and asked me to walk on, saying that he would catch me up as soon as he got through an attack of angina pectoris which was just coming on. He died of that disease a year later; and I have always wished that I might be as fearless as he was in the face of approaching death. (p. 99)

Freud's biography (Jones, 1953/1961) shows his wish fulfilled; he endured sixteen years of cancer with only an occasional aspirin for relief (p. 529). The anecdote indicates a common quality in the two men. James might call this "pragmatism" while Freud would be more inclined to "stoicism," but both men demonstrated an unusual willingness to face and accept life, to look at it without the buffers and blinkers most of us seem to prefer.

This quality was especially useful to Freud. As someone whose fate it was "to disturb the peace of this world" (Freud, 1917/1974. p. 326), Freud faced immense opposition to his psychoanalytic insights. Freud perceived this reaction as the outward manifestation of the inward forces of repression and renunciation he had so painstakingly uncovered in the individual. To Freud,

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all of civilization was built from the energy gained through this renunciation, and so he found such opposition "easily intelligible" (Freud, 1925/1963, p. 94) and to continued protests generally offered little more than "a shrug" (ibid., p. 58; cf. Freud, 1917/1974, p. 318). Freud considered every detail of psychoanalysis a treasure hard won from the elaborate defence mechanisms of the individual and society and was loathe to modify even the most peripheral aspects of the theory. In even seemingly innocuous revisions Freud recognized man's "powerful and exquisite capacities for defending himself against violation of his cherished self-image" (Bruner, 1957, p. 278). On those aspects of psychoanalysis he considered central--"the theories of resistance and of repression, of the unconscious, of the aetiological significance of sexual life and of the importance of infantile experiences" (Freud, 1925/1963, p. 74)--Freud was dogmatic: no reinterpretation was permissible in the face of the clinical experience he considered incontrovertible evidence for the validity of his assumptions.

Thus society faced a formidable opponent in Freud. Psychoanalysis called into question the deepest shared assumptions of society, the collective psychological agreements of men which serve to "adjust their mutual relations" (Freud, 1930/1985, p. 278). Perhaps the most

telling aspect of the psychoanalytic critique was its interrogation of the individual. As we have seen, the concept of the autonomous individual lies near the heart of Western culture. Psychoanalysis was the first psychology to go beneath the surface of this individual, to question his claim to "autonomy, dignity, and privacy."

Freud and the Individual

The extent and significance of the Freudian dissection of the individual has been discussed by various authors (e.g., Adorno, 1967; Goodman, 1945; Jacoby, 1975; Marcuse, 1955/1974). In disclosing the domination of primitive constitutional factors in the formation and operation of personality, psychoanalysis revealed the "carnal and visceral origins" of the individual (Jacoby, 1975, p. 33). Herbert Marcuse (1955/1974) describes the repercussions of this development in the following passage:

As [Freudian] psychology tears the ideological veil and traces the construction of the personality, it is led to dissolve the individual; his autonomous personality appears as a frozen manifestation of the general repression of mankind. Self-consciousness and reason, which have conquered and shaped the historical world, have done so in the image of repression, internal and external this disclosure undermines one of the strongest ideological fortifications of modern culture--namely, the notion of the autonomous individual. (p. 57)

Psychoanalysis was the first psychology to expose the fragmentation and conflict which make up the individual.

As both Jacoby and Marcuse point out, this glimpse beneath the psychic surface proved so unpleasant that much of subsequent psychology can be seen as a reaction against it, a anxious scramble to restore the individual to his previous status. Succeeding generations of psychologists evinced a "shift from a psychology of the unconscious to one of the conscious, from id to ego, sexuality to morality, repression to personality development, and most generally from libido and depth psychology to surface and cultural psychology" (Jacoby, 1975, p. 46). Finally, there was the "rediscovery and rehabilitation of the old-fashioned idea of self" (W. Matson, quoted in *ibid.*, p. 42) which allowed the resurrection of the individual as the inner man. But the very fact that all this revamping of the individual was considered necessary underlines the almost universal acceptance of Freud's demonstration of the inescapable fact of psychic fragmentation. This was the one undeniable truth that virtually every psychologist accepted: that the human psyche was a house divided between conscious and unconscious forces. Psychologists could not afford to turn their backs on this primary datum; its heuristic power to resolve a vast array of psychological phenomena was too great to ignore. Thus, in the terms we have developed in this thesis, there was in post-Freudian psychology an attempt to organize around this fundamental fragmentation, to

cultivate in the realm of consciousness, a stable center amid the chaotic uncertainties of the unconscious. Or in Jacoby's (1975) more acerbic formulation: "The shift in social attention toward psychology [since the time of Freud] is no accident; . . . the individual psyche commands attention exactly because it is undergoing fragmentation this is the specter that conformist psychology seeks to put to rest" (p. xvii). Psychoanalysis afforded man an unpleasant but irrepressible glimpse into his psychic fragmentation. It was the first coherent account of an inner discord which could no longer be ignored.

Freud and Psychological Disorder

If we go straight to the foundation of psychoanalysis, we find it is built upon the psychic split already mentioned:

The division of the psychical into what is conscious and what is unconscious is the fundamental premiss [sic] of psychoanalysis; and it alone makes it possible for psychoanalysis to understand the pathological processes in mental life, which are as common as they are important, and to find a place for them in the framework of science. (Freud, 1923/1960, p. 3)

Thus, "the first shibboleth of psychoanalysis" (ibid.) already assumes fragmentation. Indeed, the fact of this division Freud considered "the one and only piece of direct and certain knowledge that we have about the mind" (ibid., p. 6). For Freud, it was only the discovery of this one fixed certainty in the otherwise

uncertain terrain of the mind that allowed psychology to develop into a science from its previous state as a field in which "every philosopher, every imaginative writer, every historian, and every biographer . . . can 'run wild' as he chooses" (Freud, 1927/1969, pp. 13-14). In this division of the unconscious from the conscious Freud found his equivalent to Descartes' "fixed and immovable" point, a "certain and indisputable" base on which to erect the vast and formidable theory of psychoanalysis. Much of the rest of his theory (e.g., the "topographical model" of the ego, id, and super-ego) Freud was willing to describe as simply "a fiction" whose value "depends on how much one can achieve with its help" (1927/1969, p. 17). But the division of the conscious from the unconscious was the anchor in fact to which all these fictions were tied.

Psychoanalysis thus assumes fragmentation as its starting point. It interprets human personality in terms of the opposition of conscious and unconscious forces. It cannot help, then, but erect a theory of human nature fraught with conflict and discord. The greatness of psychoanalysis, and of Freud as a thinker, was that they did not try to escape from this fact. For Freud, man's condition is essentially tragic: he is not an autonomous and dignified individual presiding over the natural order, but rather an unfinished creature

"struggling against unreason, impelled by driving inner vicissitudes and urges" and "never fully free from an infancy anything but innocent" (Bruner, 1957, p. 279). An uneasy truce between one's aggressive and erotic self-interests and the necessity of living together was to Freud a realistic appraisal of the possibilities of human existence (see, e.g., Freud, 1930/1985, esp. Pt. III). Fragmentation and the conflict it entails are accepted as the lot of humanity; there is no attempt to spin round it illusions of wholeness and harmony. Freud was thus willing to face what so many would only turn away from: the essence of the individual is separation and conflict.

Freud, of course, had much to say on the nature of the primal conflict between conscious and unconscious forces which he saw as the basis of personality. As is well known, Freud (1933) posited the existence of the id, which he described as follows:

It is the obscure inaccessible part of our personality; the little we know about it . . . is of a negative character, and can only be described as being all that the ego is not [italics added]. We come nearer to the id with images, and call it a chaos, a cauldron of seething excitement [which] is somewhere in direct contact with somatic processes, and takes over from them instinctual needs and gives them mental expression These instincts fill it with energy, but it has no organization and no unified will, only an impulsion to obtain satisfaction for the instinctual needs, in accordance with the pleasure principle. The laws of logic--above all, the law of contradiction--do not hold for the processes in the id There is nothing in the id which can be compared to negation, and we are astonished to find in it an

exception to the philosopher's assertion that space and time are necessary forms of our mental acts. In the id there is nothing corresponding to the idea of time, no recognition of the passage of time, and (a thing which is very remarkable and awaits adequate attention by philosophic thought) no alteration of mental processes by the passage of time [italics added]. (pp. 103-104)

The id constitutes the entire mental life of the infant. Out of this undifferentiated state gradually arises what is to become consciousness. At this point some confusion enters the theory. The conscious entity is often assumed to be the ego, but as Freud emphasized whenever the question arose, it is not accurate simply to oppose the ego to the id and call it the seat of consciousness. Rather consciousness was felt by Freud to be a product of what he called the "perceptual-conscious system" (Pcpt.-Cs.), which forms "the most superficial portion of the mental apparatus. This system is directed on to the external world, it mediates perceptions of it, and in it is generated, while it is functioning, the phenomenon of consciousness" (ibid., p. 105-106).

The Pcpt.-Cs. system is not synonymous with the ego or the super-ego, both of which have strong unconscious aspects (ibid., p. 111). Indeed, the ego is essentially an agent of the id, engaged in fulfilling its needs according to the reality principle imposed by the environment, while the super-ego is as irrational in its moral imperatives as is the id in its quest for

instinctual release. Yet Freud seldom talks of the Pcpt.-Cs. system as an independent entity, referring instead to its manifestations as the conscious part of the ego and super-ego. It is difficult to escape here a sense of hesitation in the normally sure-footed Freud (which we will want to examine more closely later) but for the present it is useful to remember that the distinction between the conscious and the unconscious much preceded the later development of the topographical model and is to Freud much the more important differentiation--even while discussing the topographical model he takes care to note: "The only trustworthy antithesis is that between conscious and unconscious" (Freud, 1927/1969, p. 22). Given these difficulties of the topographical model, a more useful means of understanding the Freudian division of the psychical may lie in recalling the contrast between the primary process of the id, ruled by the pleasure principle, and the secondary process of the ego, governed by the reality principle. According to this scheme, the unconscious seeks only to gain pleasure and avoid unpleasure, while the conscious mind employs a "rational, pleasure delaying, problem-solving, and self-preservative mode of thought" (Ewen, 1980, p. 23). With the help of this differentiation we can temporarily sidestep some of the confusion entailed in the topographical model and proceed with our examination of

the Freudian understanding of psychological conflict.

Against this background, the essence of psychological conflict for Freud can be stated very concisely. Psychological conflict is an absolute necessity because it is imperative that the automatic, unintelligent striving of the id for gratification be brought under control. Unless it is restrained, the id will blindly seek gratification even when the cost is death. The ego thus develops out of the necessity of adjusting the id to the demands of the environment. In Freud's (1933) words:

- The ego has taken over the task of representing the external world for the id, and so of saving it; for the id, blindly striving to gratify its instincts in complete disregard of the superior strength of outside forces, could not otherwise escape annihilation. (p. 106)

This potentially fatal flaw of the id is brought about by a characteristic which Freud has already detailed for us: it undergoes no alternation with the passage of time; that is, it cannot learn. The id thus represents a timeless aspect of the psyche, a peculiarity which Freud (ibid.) recognized as being of fundamental importance:

It is constantly being borne in upon me that we have made far too little use of our theory of the indubitable fact that the repressed remains unaltered by the passage of time. This seems to offer us the possibility of an approach to some really profound truths. But I myself have made no further progress here. (p. 103)

But Freud did go on to note that the sense of time must be a

product of the Pcpt.-Cs. system: "The relation to time, . . . which is so hard to describe, is communicated to the ego by the perceptual system; indeed it can hardly be doubted that the mode in which this system works is the source of the idea of time" (ibid., p. 106-107). Thus Freud clearly attributed time to consciousness and timelessness to the unconscious and indicated the importance of this distinction, though he investigated it no further. Freud's lack of progress here is unfortunate, as we have established the importance of time in the domestication of change, and might suspect that it is a primary tool of the ego in its attempts to harness the id. Fortunately, writers such as Bonaparte (1940), Hartcollis (1974), and Melges (1982) have helped develop the psychoanalytic interpretation of the origins of the sense of time and its role in the development of personality.

Time and the Unconscious

Peter Hartcollis (1974) provides a useful summary of how the Pcpt.,-Cs. system/ego complex uses time in its relations with the id. Hartcollis relates that during infancy a rudimentary concept of time is perhaps the most important defense of the ego against the urgent promptings of the id:

According to psychoanalytic object relations theory, the capacity to anticipate need fulfilment [gives] rise to a putative hallucinatory experience that involves the memory of the 'good' breast or

'good' mother--an experience that, according to Freud (1925), marks the beginning of the thinking process. (p. 249)

Since the id does not distinguish between fantasy and reality, the image of previous gratification retrieved from memory is sufficient to temporarily placate the id; thus the past is used as a buffer against the present. However, if the arrival of gratification is delayed too long, "unpleasure increases, and the uncertain 'good' object image begins to turn into a bad one" (ibid., p. 250). The hallucinatory defense mechanism proves too unstable and so, with increasing experience, a more reliable modification of it is developed:

Eventually, and as object constancy develops, the early hallucinatory process is replaced by the ability to anticipate need fulfilment, i.e., by the awareness of the possibility that the 'good' object will arrive, even though its internal representation is uncertain, having become fused with the 'bad' object image. As the fused 'good' and 'bad' object image becomes internalized into a stable, realistic object apart from the self, the trustful, rather passive ability to anticipate a 'good' outcome is employed in the cathexis of the environment, which is projectively experienced as continuous--i.e., as possessing the attribute of time as duration. (Ibid., p. 250)

Thus the concept of duration is developed as a defense against the id's demand for immediate gratification.

The interval between previous gratification and its projected recurrence in the future is seen by the ego as finite and thus the urgings of the id can be tolerated as anxiety rather than fear, rage, and finally "an undifferentiated . . . experience of catastrophic

dimensions" (ibid.). Even in the infant, then, time has begun its work as a shield against the encroachment of undifferentiated nature.

As the child matures time becomes increasingly important in the operation of the ego. As Hartcollis (ibid.) notes in the following passage, the emerging sense of time is instrumental in the ongoing process whereby the self establishes itself as an autonomous entity able to predict and control change:

An important determinant of time is to be found in the integration of self and object representations, whereby completely independent perceptions become identified with the same object; in other words, when an object can be experienced in different ways at different times and still remain the same [James' "sameness of things"]. Such an accomplishment becomes a measure of the ego's strength and reflects its ability to move comfortably along the dimension of time, making it thus possible to explore the consequences of one's acts, real or imaginary, and thereby to arrive at a prediction of change on the basis of one's own effort [italics added]. Carried out first by the ego, this ability later becomes a superego function--inasmuch as future rewards or punishment are superego functions--and powerfully reinforces the sense of time. Indeed, the emergence of the superego as an autonomous system of the mental apparatus contributes significantly to the organism's adaptive, or maladaptive, conceptualization of time, influencing the ability to endure stressful experiences, to schedule decisions, and to wait, to be punctual, and to synchronize one's activities with those of associates, to procrastinate or to ignore completely the patterning of time, future or past.

Eventually, as the child's mind unfolds in its maturational schedule, the emergence of the ability for abstract operations will make it possible to deal with time as a measurable entity, as a standard of reference in terms of clocks and calendars--as a universal rather than as a personal, self-centered reality. (pp. 265-267)

Thus the whole development of the sense of time, from its origins as a rudimentary defense against the demands of the id to its abstract formalization as "an objective, conventional frame of reference" (ibid., p. 258), can be seen as part of the conscious mind's efforts to regulate its relations with a changeable and potentially dangerous internal and external nature. Time in this sense is the interval between pleasurable or at least quiescent psychic states, during which even great unpleasure can be tolerated because it is seen as finite; that is, the return of pleasure may be confidently predicted after the passage of limited time. If for some reason the return of pleasure cannot be reasonably expected, this defense loses its power and various psychotic states, depression, despair and even death may result. With time, then, the "psychic apparatus" manages the demands of the timeless id, which experiences each passing state as eternal and seeks only to move from unpleasure to pleasure, regardless of consequences.

Object relations theory thus provides a coherent account of the function of time in the establishment of the self which corresponds with our own description of its key role in the domestication of change. Both accounts see time as a vital component of thought--that part of it which spans the gaps in the continuity it

seeks between past and future. It thus helps accomplish the domestication of all that thought is not. (Outwardly we have characterized this other as "raw nature," too subtle for thought's grasp; inwardly this description corresponds to Freud's characterization of the id. Between them, time and thought cover the full range of internal and external nature and extend the promise that eventually all of it may come under the dominion of human consciousness.

The Externality of Consciousness

There is a more subtle point of agreement between object relations theory and our own theory of man's domestication of change. This has to do with Freud's observation that consciousness is a surface phenomenon. Most theories of the origins of time (e.g., that of James, which we have recently examined) attribute it to an early consciousness of internal rhythmical processes such as breathing and pulse. But as Freud took great pains to establish in The Ego and the Id (1923/1960) consciousness is only conceivable as originating in relationship to the outside world:

all our knowledge is invariably bound up with consciousness. We can come to know the Ucs. only by making it conscious. . . . We have said that consciousness is the surface of the mental apparatus; that is, we have ascribed it as a function to a system which is spatially the first one reached from the external world the real difference between a Ucs. and a Pcs. [preconscious] idea (thought) consists in this: that the former is carried out on some material which remains unknown, whereas the latter (the Pcs.) is in

addition brought into connection with word-presentations. . . . These word presentations are residues of memories [italics added]; they were at one time perceptions, and like all mnemonic residues can become conscious again. Before we concern ourselves further with their nature, it dawns upon us like a new discovery that only something which has once been a Cs. perception can become conscious, and that anything arising from within (apart from feelings) that seeks to become conscious must try to transform itself into external perceptions; this becomes possible by means of memory traces [italics added]. (pp. 9-10)

Freud recognizes the primacy of language in the development of consciousness (cf. Jaynes, 1976, Chpt. 2; Popper & Eccles, 1977, p. 439f.; Russell, 1948, p. 3f.), and language is only conceivable as a derivative of experience (i.e., as the product of a community of speakers interacting within a shared environment; never as the result of private inner processes--see Wittgenstein, 1953/1963). Thus for Freud the consciousness of time must evolve from interaction with significant objects in the environment of the infant, rather than from a rudimentary introspection. Other writers, even of psychoanalytic persuasion, did not realize the importance of Freud's insistence on the externality of consciousness and tended to adopt a Jamesian perception of the beginnings of time as awareness of internal change. Hartcollis (1974), for instance, quotes approvingly from Bonaparte's (1940) essay on the origins of time: "The sense we have of the passing of time . . . originates in our inner perceptions of the passing; of our own life. When

consciousness wakens within us we perceive this internal flow and then project it into the outside world" (pp. 244-245). This directly contradicts Freud's careful characterization of consciousness, which demands that time be seen as a derivative of early object relations.³ We cannot even become aware of a separate "inner life" until after the accumulation of sufficient external experience. As we have proposed in Chapter Two, it is this accumulated experience which forms the center, or observer, which surveys the remainder of psychic life. Thus object relations theory, as understood by Freud, correctly locates the origins of time in the rudiments of external experience; only much later, with the full development of linguistic and cognitive abilities, is time used in the management of internal affairs. This ontogenetic theory corresponds to our phylogenetic description which has seen time as a derivative of many centuries of knowledge and experience, only recently assumed to have relevance to the exploration of the mind.

Freud's emphasis on the externality of consciousness helps us see why thought experiences limited success in dealing with the psyche. The external world offers patterns of change sufficiently coarse to ensure the success of thought; indeed this would seem to be a primary function of thought: discriminating

certain useful patterns of environmental change and adjusting behaviour to them. Thus the coming and going of the mother and the accompanying gratification of feeding are an early pattern whose record as memory provides a prototype of all subsequent thinking. As outlined in object relations theory, the memory of previous maternal gratification is first retrieved as an hallucinatory substitute in the face of renewed need, and later the facility to anticipate fulfillment after a finite duration of time is used as a defense against feelings of helplessness and impotence arising with frustration of somatic needs. From this beginning the ego develops an extensive system of pleasure delaying cognitive strategies, all of which can be seen as "a roundabout path to wish-fulfilment which has been made necessary by experience" (Freud, 1900/1975, p. 721). In this way the ego borrows from consciousness the knowledge necessary to adjust the id to the demands of the environment. Since knowledge is of the external world, it will in general be appropriate for the purpose of outward adaptation. But, as Freud made clear, for internal perceptions to reach consciousness, they must be translated in terms of the "mnemic residues" upon which consciousness depends. That is why, as J.H. Van den Berg pointed out in Chapter Two, the accumulation of psychological knowledge in Western culture has generally taken the form of an ontogenetic recapitulation

of our phylogenetic history--we can only render whatever is taking place inwardly in terms of our accumulated outward experience. In attempting to gain positive knowledge of his psychic life, man has only been able to draw a caricature conforming to the patterning of thought imposed by the exigencies of external adaptation. Thus, as Freud pointed out in characterizing the id, the psyche is best approached in a negative fashion--it is what thought is not.

The Unknowable Id

We reach a significant frontier of psychological knowledge when we realize that thought is not in contact with the rest of the mind. This is essentially the same division that so deeply impressed Freud. Freud's new discovery was not of the unconscious, which long antedated psychoanalysis, but of the sharp division between it and consciousness; the insistence that the "general basis of psychical life" was "inadmissible to consciousness" (Freud, 1900/1975, pp. 773, 775). At first this separation was seen in terms of repression and resistance, the active effort of the conscious mind to ward off the threatening contents of the unconscious. But, as we have seen, Freud's later, more careful distinction between consciousness and the ego allowed the latter, which is itself largely unconscious, to assume the dynamic aspect of psychic defense, while

consciousness developed more passively in relation to external experience. Thus the greatest part of psychic life happens unconsciously (i.e. without knowledge) and can only become the subject of knowledge, as in analysis, when it is interpreted in terms of outside, or historical, experience.

This brings us to the therapeutic aspect of psychoanalysis. The essence of psychoanalytic treatment consists in uncovering the historical roots of psychological disorder, chiefly in childhood fixations of the libido. It is claimed that when these unconscious fixations are "lifted" into consciousness, they lose their dominion over psychic energy, and thus their power to influence thought and behavior. Here we encounter an apparent contradiction: how can unconscious conflict be related to historical events when we have just seen how Freud clearly emphasized that the unconscious is not conditioned by time? The resolution of this contradiction for Freud depended on his distinction between the repressed unconscious and the unconscious proper. Freud had long divided the unconscious into two parts--the preconscious, which had the potential to become conscious; and the unconscious proper, which would never be known by consciousness--but he did not seem to really perceive the difficulties entailed in positing historical conditioning as an etiological factor in psychic conflict until The Ego and

the Id (1923). This is where "it dawns upon [him] like a new discovery that only something which has once been a Cs. perception can become conscious" (Freud, 1923/1960, p. 10). This means the material retrieved during analysis must have been at one time conscious! That is, it must have been external experience, subsequently repressed by the ego. As Freud (*ibid.*) expressed it:

We have come upon something in the ego itself which is also unconscious, which behaves exactly like the repressed--that is, which produces powerful effects without being conscious and which requires special work before it can be made conscious. From the point of view of analytic practice, the consequence of this discovery is that we land in endless obscurities and difficulties if we keep to our habitual forms of expression and try, for instance, to derive neuroses from a conflict between the conscious and the unconscious [italics added]. We shall have to substitute for this antithesis another . . . --the antithesis between the coherent ego and the repressed which is split off from it. (p. 7)

As Freud (*ibid.*) goes on to acknowledge, this revision leads to some serious theoretical difficulties, as the quality of being unconscious no longer applies only to "that which the ego is not" but now also describes one part of the ego to which undesirable experience is somehow relegated:

For our conception of the unconscious, . . . the consequences of our discovery are even more important We recognize that the Ucs. does not coincide with the repressed; it is still true that all that is repressed is Ucs., but not all that is Ucs. is repressed. A part of the ego, too--and Heaven knows how important a part--may be Ucs., undoubtedly is Ucs. And this Ucs. belonging to the ego is not latent like the Pcs.; for if it were, it could not be activated without becoming

Cs., and the processes of making it conscious would not encounter such great difficulties. When we find ourselves thus confronted by the necessity of postulating a third Ucs., which is not repressed, we must admit that the characteristic of being unconscious begins to lose significance for us [italics added]. It becomes a quality which can have many meanings, a quality which we are unable to make, as we should have hoped to do the basis of far reaching and inevitable conclusions [italics added]. Nevertheless we must beware of ignoring this characteristic, for the property of being conscious or not is in the last resort our one beacon-light in the darkness of depth psychology. (pp. 7-8)

In this forthright passage we see Freud giving full expression to a growing hesitation about the "one certain and direct piece of knowledge we have about the mind." He is obliged to split the great primordial unconscious into two parts: one which contains historically conditioned material and one which retains the original quality of timelessness. We now have quite a different understanding of psychological conflict: it is no longer the timeless pleasure principle of the id conflicting with the time-bound reality principle of the ego which characterizes psychological conflict, but rather it is two parts of the ego, both historically conditioned, which are fighting each other! Indeed, since the contents of the historically conditioned unconscious originate in external experience, the repressed unconscious should more properly be called the repressed conscious! We are thus left with a theory which accounts for all psychological conflict in the self-imposed fragmentation of the ego.

Such an ingrown conceptualization of psychological conflict is clearly less compelling than that of a primal conflict between conscious and unconscious forces. Perhaps for this reason, Freud never seemed to bring the difficulties he had so conscientiously raised in The Ego and the Id into clear relief. In the New Introductory Lectures (1933) of ten years later, Freud admitted that the term "unconscious" had lost much of its potency due to

the discovery, inconvenient at first, that parts of the ego and super-ego, too, are unconscious in the dynamic sense. . . . We evidently have no right to call that region of the mind which is neither ego nor super-ego the Ucs. system, since the character of unconscious is not exclusive to it. (p. 102)

Instead, suggested Freud (*ibid.*), "we will call it henceforward the 'id'." Thus what had started out as "a fiction" is now used to prop up the fragmenting foundation of psychoanalysis. That Freud himself was confused on this complex matter is perhaps best seen by considering his famous formulation, taken from the same essay, of the aim of analysis: "Where id was, there shall ego be" (*ibid.*, p. 112). This means that that which is timeless--the id--will be changed by time! The whole paradox of positing historical conditioning as an etiological factor in psychological conflict is contained in this formulation. To resolve the paradox, either the definition of the id has to be changed, or the aim of analysis altered. As we have seen, Freud was

groping his way toward such a redefinition of the unconscious and therefore the id, but the incompleteness of his understanding of the difficulties he was encountering is revealed by the fact that he still saw the aim of analysis as the conversion of id into ego. To be consistent with the new understanding of the unconscious which Freud himself was advancing, the credo should read: Where unconscious ego was, there shall conscious ego be. The id, as Freud had only just finished explaining (ibid., p. 102), is exactly that part of the unconscious into which the ego will never penetrate. A remarkable inconsistency for so sure and steady a thinker as Freud, but perhaps understandable in light of the increasing vagueness of the once so clear distinction upon which he had based everything.

Change and Psychoanalysis

Changing the theory. Clearly, in this matter of the blurring distinction between the conscious and the unconscious aspects of the psyche, Freud faced a critical issue. It seems, further, that he really didn't know what to do about it. One gets the feeling that finally here was an issue Freud was not prepared to face squarely. Because he had so long been convinced that psychological conflict must originate in the collision of unconscious instinctual impulses with an overlaying accretion of conscious defenses, it may have seemed

absurd to Freud to follow through fully on the doubts he began to express in The Ego and the Id. As we have seen, these doubts lead to the conclusion that psychological conflict is in its beginning and end a conscious affair, with all skirmishes contained within the boundaries of the ego. Man's discontent, then, is not the inevitable price of the conscious ego's efforts to adjust the unruly id to reality, but a penalty he pays for the ego's self-induced psychic civil war.

Freud was not prepared to embrace this radical conclusion; however, it is quite possible to shift the framework of psychoanalysis in such a way that it maintains its overall integrity and yet is able to incorporate this seemingly incompatible conclusion. The way in which this can be done sheds some light on the nature of theories in general.

To effect the desired transformation of psychoanalysis it is necessary only to replace the central position occupied by the concept of the unconscious in the understanding of psychological conflict with the concept of repression. Since all historically conditioned psychic material (including knowledge) originates in external experience, the childhood complexes must have their origin in the perceptual-conscious system, from which they are then taken over by the ego. Some of this material is evidently perceived as threatening and thus relegated to

a portion of the ego which has the quality of being unconscious only in the sense of hidden or repressed from consciousness. The fact that this material is historically conditioned and can later be recovered in analysis proves doubly that it was never anywhere else but the ego, since the id is both "unaltered by the passage of time" and "foreign to the ego" (Freud, 1933, p. 102). Therefore we have suggested that this repressed unconscious is more aptly described as a repressed conscious; by which we mean that the essence of psychological conflict is better understood as occurring between "the repressor" and "the repressed," both of which originate in consciousness, than between the unconscious and the conscious.

Adopting this point of view shifts the central focus of psychoanalysis away from "the division of the psychical into what is conscious and what is unconscious" and puts it instead squarely on the concept of repression. That this is not an unfeasible transition is shown by Freud's (1927/1963) own remark that it "is possible to take repression as a centre and to bring all the elements of psychoanalytic theory into relation with it" (p. 58). This would result in a version of psychoanalysis more consistent with our own findings, as it would locate psychic conflict within the sphere of consciousness--specifically, in the carrying over of

certain forms of experience in a manner which interferes with subsequent functioning. Thus the historical conditioning (fixation) imposed on childhood sexuality would be relegated to a portion of the ego where it could still influence mentation, but would not be known by consciousness. This would result in an accumulated body of repressed experience, which, like all experience (in Freud's view), must have been at one time external perception. A plausible reason for this repression Freud (1930/1985) himself provides: "A tendency arises to separate from the ego everything that can become a source of . . . unpleasure, to throw it outside and to create a pure pleasure-ego which is confronted by a strange and threatening 'outside'" (p. 254). Thus the ego's tendency toward repression is not surprising; its whole purpose, according to Freud, is to divert unpleasant forms of experience away from a central core of pleasurable or reassuring experience. Naturally, "there is no possibility at all of [this project of creating a pure pleasure-ego] being carried through; all the regulations of the universe are against it" (ibid., p. 263). Thus the ego must balance the demand of the pleasure principle with those of the reality principle, and hence the essential tension of Freud's view of psychological conflict is retained while reorienting the theory around the concept of repression.

Positivism and the limits of knowledge. Whether or

not it is possible to reorient psychoanalysis around the concept of repression, a significant point emerges from the preceding discussion: some kind of center must be retained to support the structure of the theory.

This is not a peculiarity of psychoanalysis; most theories are positivistic in the sense that they depend on a core of knowledge derived from certain crucial experiments or postulates which determines the subsequent structure of the theory. However, this is not the case for all theories. It will be the purpose of this section to show that the peculiar subject of psychoanalysis--the mind--limits its essentially positivistic approach and that psychoanalysis has not clearly seen these limits. Using the example of quantum theory, we will suggest that psychoanalysis must restrict itself to an investigation of consciousness. That part of the mind that Freud originally called the unconscious and later the id is not accessible to the positivistic approach employed by psychoanalysis.

Discerning the limitations of psychoanalysis requires a consideration of the problem of observation and measurement. These activities are essential to the accumulation of knowledge, especially scientific knowledge, and may be seen as two aspects of one process since measurement is essentially a means of organizing

observation in terms of what is already known. In general terms, observation and measurement may be said to organize experience in such a way that it becomes a modification of existing knowledge. As a result, the natural sciences exhibit an "impressive, cumulative character" (Meehl, 1978, p. 807); there is a steady expansion of knowledge around the established theoretical center.

This progression of scientific knowledge is only an organized and codified version of the universal pattern through which thought and knowledge expand their domain. At one time it was thought that this progression might continue indefinitely, but now it is generally recognized that there are limits to the progression of human knowledge. Perhaps the clearest demonstration of these limits has come from quantum theory. As pointed out in the following passage by E.J. Zimmerman (1966), the investigation of the subatomic realm has revealed a threshold beyond which measurement and observation cannot proceed:

There exists no measuring stick with subdivisions small enough to indicate relative positions of parts of atoms, for the spaces between atoms of the stick are of atomic size. We are therefore forced to investigate microphysical systems not with instruments small compared to them, but in fact with instruments which are relatively very large. The instruments are necessarily external, not internal, to the system measured, and this seriously restricts the kind of information we get by measurement [italics added]. So fundamental is this distinction between microscopic and macroscopic measurement that it can be questioned whether it is

...id to conceive of an atom as composed of parts in spatial and temporal relation to each other We are thus prevented in principle and in fact from making a detailed study of the interior of the atom. (p. 482)

The failure of observation and measurement within the subatomic realm means that it remains inaccessible to consciousness. It is not possible to gain any positive knowledge of the interior of the atom; that is, one cannot say what it is like in terms of what is already known.

Much the same situation pertains in investigating the subconscious realm (i.e. all the mind outside consciousness). In investigating the mind with consciousness we are forced to use an instrument developed in relation to a very different domain; one, again, which is external to the system being investigated. We have emphasized that the externality of consciousness (i.e. its development as an organ of environmental adaptation) means that attempts to characterize the mind will always recapitulate history. In looking at the mind, as at the atom, we come up against the limitations of observation. The measuring stick is useless when it attempts to cross the atomic threshold because on the other side its coherence as a measuring stick is lost--the atoms it is attempting to measure are indistinguishable from those that make it up. Likewise, when we try to look upon the unconscious we engender confusion because our distinction between an

internal observer and what it observes imposes a separation which cannot be maintained. As we have seen, even Freud had to acknowledge that, however one attempts to shore it up, the distinction between the conscious and the unconscious proves increasingly difficult to maintain. When we attempt to characterize the mind we "thrust into emptiness" (Thomas Mann) because there is no separate observed against which our observations can take their ground; nothing for our descriptions to "rub up against." We cannot describe human nature because our descriptions are human nature. Whatever characterizations we bring to the unconscious are imported from the extraneous gleanings of consciousness; we cannot help, in William Blake's phrase, but make the unknown over as "the ratio of the known."

The externality of our characterization of mind is perhaps most clearly seen in considering the origins of words we use to describe mental life. An intriguing hour can be spent deriving the origins of such terms as: "emotion," from the French mouvoir, "to move"; "feeling," from the Old English fel, "skin"; and "pleasure," from the Latin placatus, "placid." Always there is an "introjection" of outward experience. "Acumen," for example, can be traced to the same term in Latin which originally described the sharpness of an insect's sting; "ambition" to the Latin ambitio, "the

soliciting of votes"; and "will" must be traced far back through related words such as "wish" and "win" to its origins in a Hittite term signifying copulation (Webster's Third New International Dictionary). More central to our discussion is the origin of the term "consciousness" which comes from the Latin con, "joined," and scientia, "science" or "knowledge." Thus our consciousness is all our knowledge together. When consciousness interacts with matter in the act of observation, then, it measures the new experience in terms of the old knowledge. It is worth recalling Wigner's (1967) formulation of this point: "In order to obtain any formulation of the outside world, in order to make any measurement or observation, it is necessary that one already possess a crude knowledge of his surroundings" (p. 197). Thus consciousness is always based in the past--it is the past as accumulated in the mnemonic residues to which Freud refers. Consciousness is the precipitate of man's relationship through millions of years with a certain range of experience vital to his survival. All of its components, of which the most notable is language, are thoroughly conditioned by the exigencies of this relationship. That which pertains to other realms, such as the subatomic, can be recognized only in terms of this range of experience. As Zimmerman noted in discussing quantum theory, the distortion introduced by this process is so extensive that we are

"prevented in principle and in fact from making a detailed study of the interior of the atom." The suggestion to be made here is that the same prohibition applies to the study of mind: consciousness cannot form positive characterizations (i.e. knowledge) of that which is unconscious.⁴

Theory without a center. The insusceptibility of mind to the workings of consciousness must leave Freud disappointed in his hope that he had "opened up a pathway for an important advance in our knowledge" (1927/1963, p. 134). Freud wanted to establish a science, a body of knowledge, relating to the unconscious. But the unconscious is precisely that part of the mind into which consciousness, the organ of knowledge, can make no headway. Consciousness must limit itself to a study of its own intricacies; in thus coming to an understanding of itself, "the other" may become apparent through a process of negation: that is, once we know what consciousness is, we know what the unconscious is not. Again, the example par excellence of such a theoretical approach is the quantum theory.

Unlike almost every other major theoretical system (the theory of evolution is the most notable exception), the quantum theory is not oriented around a center of empirical knowledge. Zimmerman (1966) emphasizes this

in the following passage:

the empirical basis for the [quantum] theory is neither so directly established nor so unambiguous as is that for many theories. For example, once the experimental evidence for the speed of light is accepted, the Special Theory of Relativity seems to be almost completely determined by a strictly logical argument. There does not seem to be, for the quantum theory, any similar crucial experiment, or even small group of experiments, the results of which logically determine the formalism of the theory. Quantum theory has developed rather slowly and painfully, with a number of false starts which even today still somewhat becloud the issue one sees a progression in learning an entirely different mode of thinking there is no evidence that this evolutionary process has ended. (p. 488)

Quantum theory exhibits a stochastic, evolutionary quality because its structure is not determined by a central body of knowledge: it is open to change. By contrast, psychoanalysis is tied to a center. It has sought to increase our knowledge of the mind, beginning with the core of central discoveries outlined by Freud earlier in this chapter and amassing round it a vast body of knowledge whose structure is determined by this center. Thus, psychoanalysis is resistant to change. As Freud so clearly recognized, most of the so-called revisions of psychoanalysis amounted to little more than an attempt to erode the disturbing assertion that "the ego is not even master in its own house" (Freud, 1917/1974, p. 326). Revisions which thus seek to deny the fundamental premises of psychoanalysis cannot hope, as they nonetheless often do, to graft themselves onto it. Such an approach is comparable to seeking to

contribute to the Special Theory of Relativity while denying the universal constancy of the speed of light. Any modification of a positivistic theory must be peripheral to an unchanging center--if the basal assumptions of the theory are eroded the entire structure must collapse. When the center of psychoanalysis is called into question the whole theory hangs in the balance. We have seen that Freud himself began to question the validity of this center, finding that it was much more indistinct than he had hoped.

We have suggested that the concept of repression might provide a more tenable center for psychoanalysis. But this only substitutes one center for another (actually only another aspect of the same center, since repression is already among the concepts admitted by Freud as central to psychoanalysis--that is why we suggest that such a shift would not seriously impair the integrity of the theory); eventually repression too would begin to yield to its own inconsistencies. In itself, of course, this is not an undesirable eventuality; Thomas Kuhn (1970) has shown that all scientific progress depends on this crumbling of old positions. But the quantum theory has shown that this progression of understanding through knowledge has limits; thus a theory such as psychoanalysis, which starts at the limits of the known mind (consciousness),

cannot expect to advance far in the classical positivistic fashion. It can expect to make progress in understanding the subtleties of consciousness: a reorganization around the concept of repression, incorporating the realization that the repressed unconscious is really the repressed conscious, would help accomplish this. But psychoanalysis cannot expect to advance in its avowed intention: the exploration of the unknowable id. As quantum theory has shown that the interior of the atom lies beyond the reach of observation, so the best work of Freud emphasizes that the id is just that portion of the mind inaccessible to consciousness. The nearest approach to what is truly unconscious lies in a thorough explication of what is conscious. This allows a negative characterization of the unconscious to emerge, as we learn what it is not.

We see this process of negation exemplified in the quantum theory. Despite the inability to say what the atom is like, it has been possible to talk sensibly about atomic phenomena, and make profound and accurate predictions based on theory, by exploring the limits of observation and measurement. Thus, it has become apparent that the atom is not like a particle, nor a wave, nor even a "fuzzy particle" or "wave packet"--all these images which form in the consciousness of the scientist fail to adequately encompass the experimental results, so that now, as Bertrand Russell (1948) noted,

"there is no longer any attempt to make an imaginative picture of the atom" (p. 23). The formulations of quantum mechanics "represent" the microsystem . . . only in the sense of defining a statistical ensemble to which the microsystem belongs. Probabilities of events can be calculated; but probabilities are not events and cannot be directly observed" (Zimmerman, 1966, p. 484). Thus certain qualities of atomic ensembles can be described by mathematical variables and the relationships between these variables studied. This translates the behavior of the ensemble into a system to which macroscopic rules of measurement apply. The knowledge accumulated, then, is of the macroscopic mathematical system; the actual state of the atomic ensemble remains inscrutable. Variables referring to space and time used in quantum theory are "dummy variables which must disappear from all predictions made by the theory" (ibid., p. 488). The failure to realize this, and to keep theory and fact separate, is one reason "the quantum theory has proved vulnerable to a great many different philosophical interpretations" (ibid.). Properly regarded, quantum theory has little to say about philosophical matters; it "remains primarily a postulated formalism, justified by the fact that it works" (ibid.). This is "in considerable contrast with, for example, the Special Theory of

Relativity, which is involved with a fundamental consideration of the nature of time and space, and therefore, if successful, can claim to have modified these concepts" (ibid.). Thus, in contrast to the positive goal (increasing knowledge) of most theoretical systems, quantum theory has advanced mainly through negation--realizing the limitations of observation and measurement. Confusion arises only when this demonstration of what cannot be said of the atom is taken as the basis of what can be said of it, as the new description remains within the realm of observation and measurement which has been ruled invalid in the subatomic realm. Likewise, confusion arises in psychoanalysis when consciousness attempts to explain the unconscious.

Confusion, literally, means putting together that which is properly separate. Thus, the confusion in Freud's work arises from putting together the conscious and the unconscious; attempting to explain one in terms of the other. Moving to end this confusion means realizing that what is truly separate--that portion of the unconscious labelled the id, and the rest of the mind--cannot be used to interpret each other. However, a clear distinction between two realms of consciousness, separated by the mechanism of repression, could provide a coherent account of that part of the mind which is accessible to coherent accounts. Then the instrument of

investigation would be appropriate to the domain being investigated, and the id would remain where it outside the realm of knowledge.

Therapy without a center. Just as psychoanalytic theory proposes to understand the mind through the accumulation of knowledge around a conceptual center, so psychoanalytic therapy proposes to deal with psychological conflict through the same process of expanding consciousness. Through a certain type of experience, the analytic interview, it is held that the center of consciousness (roughly speaking, the ego) can be expanded to incorporate aspects of the unconscious. One thus gains knowledge of the unconscious and thereby brings it under the dominion of consciousness. Thus psychoanalysis joins the ancient human covenant to subdue nature with knowledge.

The aspect of psychoanalytic therapy which most clearly reveals its alliance with this inveterate tradition is its reliance on time. Psychoanalysis has always required a vast commitment of time from the prospective client. In a classical analysis, the "patient attends therapy from four to six times per week, for approximately fifty minutes . . . per session, and usually for several years" (Ewen, 1980, p. 53). During this time, the patient is asked to present his inner experience for interpretation by the analyst.

This interpretation is always determined by the conceptual center of psychoanalytic theory; thus a conscious structure is given to what had previously been "unconscious" material. In this way the domain of the ego is expanded--the new, or unknown, is measured in terms of the old, or known.

As seen in examining man's relationship with external nature (Chapter Two), this process of transforming the wild into the domestic has always taken a great deal of time. As it took many centuries to accumulate the knowledge which began to operate as agriculture, so the analytic patient cannot expect results without investing many hours. Time is required for the analyst to put together the pieces of experience offered by the patient into a coherent whole oriented around the conceptual center of psychoanalytic theory. Connections must be made which are consistent (ie., continuous) with the established body of knowledge. A continuity with the past is necessary, both in terms of the patient's experience, and in terms of the analysts experience. For both, the material presented must be organized in such a way that the continuity demanded by thought becomes apparent. Then this continuity may be forecast into the future and prediction and control become possible.

It is this arrangement of pieces of experience that typifies analysis, whether it is of inner or outer

nature. This is the literal meaning of analysis: ana, "above," and lysis, "loosening"--one looks over experience and takes it apart. This dissection of nature proceeds according to the conditioning of the observer, or center of accumulated experience. Language⁴ is the primary means through which the analysis of experience is accomplished. Each word has already apportioned experience more or less automatically, according to the conditioning of millenia of human experience. Words can then be arranged into concepts. Thus lived experience is translated into measured pieces which are organized according to the conditioning of the observer. This means that the immediacy of living is sacrificed so that a continuity with the past can be established. The observer becomes a stable center of knowledge apart from the observed natural flux. This center operates on nature in such a way as to perpetuate continuity; it functions by ignoring the natural flux and reifying the constancy of thought.

In psychoanalysis, this separation is manifested as that between the analyser (therapist) and the analysed (patient). The analyst embodies the stable center of psychoanalytic knowledge around which the experience of the patient can be organized. The job of the analyst is to impart this knowledge to the patient in such a way that he is provided with a stable center

which can serve to organize his own experience. Thus pieces of experience which were formerly perceived as disjointed, autonomous, conflicting (in short, unconscious) are joined together with consciousness to provide a coherent story.

Thus we see that analysis is a process in time. Change is held to come about slowly, in gradual increments, as conscious connections are drawn up between the pieces of experience revealed in analysis. The ego must be strengthened with this knowledge so that it may cultivate the unconscious, which is primal nature, the source of all psychic life. Psychoanalysis can thus be understood as a recent manifestation of the ancient tradition of cultivation which man has found so useful in his relationship with nature. According to H.F. Ellenberger, "Freud views the analyst's role as similar to the gardener, who removes weeds that impede growth but does not provide a direct cure" (cited in Ewen, 1980, p. 52). Freud (1933) himself compared the work of analysis to the efforts of Dutch agriculturalists to gain new land for cultivation: "It is a reclamation project, like the draining of the Zuyder Zee" (p. 112). Psychoanalysis seeks what cultivation has always sought: to organize experience in such a way that those aspects of nature which bring recurring, predictable gratification ("crops") are maximized, while those which interfere or are neutral ("weeds") are minimized.

Through this strategy a maximum yield of pleasure is sought within the circumstances of natural contingency.

From this it becomes apparent that analysis is not concerned with change, but rather with constancy.

Analysis divides nature into separate parts. Those parts which are viewed as favourable, according to the analyser, are then cultivated--thought seeks their propagation. One is for these parts, and against that which interferes with them; thus conflict ("resistance") is a necessary condition of analysis. During psychoanalysis, the client's experience is organized according to the stored knowledge of the analyst.

Regression and transference are "good" because they are held to provide access to the childhood fixations which in turn are held to contain the origins of neurosis.

Thus, every client is expected to undergo regression and transference. The details of these phenomena may vary with individual cases, but the essential experience must be repeated. Only through sharing in this experience can the patient expect to gain the common bond of knowledge in which all those who have been analysed share. It is this covenant which provides the analysed individual with his bulwark against "the unconscious." Thus psychoanalysis takes its place in the ongoing cultural evolution of man. It is a cultural institution which ensures the propagation of a certain body of

knowledge designed to subdue natural change.

We have shown in detail (Chapter One) how this cultural evolution must obey the general laws of all evolution; that is, it cannot be determined by thought, which is a limited part of nature, but must take place in stochastic dialogue with the whole of nature. Thought, "the response of memory," is the factor of constancy in cultural evolution (just as the individual is the factor of constancy in biological evolution). Change can come to cultural evolution only through the random element vital to any stochastic process. This element is perceived as random just because it is foreign to thought; it is the incursion of the vast bulk of nature which thought has excluded in the pursuit of its practical ends. Thus change comes to cultural evolution in the form of interruptions in the continuity of thought. Likewise, in biological evolution, change occurs instantaneously between individuals, as the random processes of gene mutation and recombination are effected. Change comes to natural systems instantly--it is not a process in time. What confuses this issue is the fact of development, which is a process in time. Thus if mutation brings about a change in the genetic material of a species, it may take several generations for that change to become phenotypically explicated. But the fact of change, the incursion of the new, has occurred in the original instant, and it is this fact

that determines the subsequent development. Change, derived from the Latin cambire, "to barter," means to exchange the old for the new.⁶ Development is the modification of this change through time.

Thus psychoanalysis is not a theory of psychological change, but of psychological modification. This is made clear by imagining the results if everyone in North America were to be put through analysis. The result would not be a greater psychological diversity--change, the appearance of new forms--but a greater similarity between individuals--modification, movement toward the mode. Each individual becomes a field in which the theory is propagated; the success of psychoanalysis in this regard can be gauged by the almost universal acceptance of the division between the conscious and the unconscious. Almost everyone going into analysis is prepared to accept this "first shibboleth," and so the groundwork for the ensuing analysis is already laid. All that remains is for the analyst to cultivate this seed of psychological knowledge into a full grown instantiation of the theory (it is easy to imagine the increased difficulty of analysing someone who had never heard of the unconscious). In order to avoid this endless propagation of the past, a therapy must be without a center; that is, free from dependence on a conceptual or experiential nucleus which is to be

absorbed by the client. Psychoanalysis depends heavily on both: the client must have his experience interpreted in terms of the psychoanalytic theory, and must experience the phenomena of transference and working through of resistances. Like all forms of cultivation, psychoanalysis is concerned only with propagating what already exists.

Conclusion

We have expended considerable effort in our examination of psychoanalysis, but have been rewarded with some general conclusions about psychological theory and therapy which may assist our investigation of subsequent psychologies. In examining the confusion surrounding Freud's distinction between the conscious and the unconscious we have come to appreciate the limits of consciousness as an instrument for investigating the mind. In particular, the externality of consciousness (its origin and conditioning in relation to a limited range of behavioral experience) was seen to circumscribe its usefulness as a tool of psychological investigation. This was most clearly seen in the case of language, where words used to describe inner experience can all be traced to behavioral origins.

Thus we arrived at the insusceptibility of mind to the accumulation of knowledge. We have seen that all our knowledge of "the unconscious" is simply more consciousness, and so have suggested that Freud's

repressed unconscious is actually the repressed conscious. However, we remain as deeply impressed as was Freud that "the general basis of psychic life" is beyond the reach of consciousness. We have compared this vast field of the mind, of which consciousness is but a "shrivelled, desiccated fragment" (Laing, 1967, p. 22), to the immense bulk of nature which remains intractable to thought. Like Freud, we have attributed all vitality to this primordial source of mind, but unlike Freud have made no attempt to differentiate it further. Description proceeds according to the conditioning of consciousness and so to further describe "the id" is simply to accumulate more "non-id." D.H. Lawrence (1922/1983) made this point vividly, even before Freud had arrived at his final formulations: "The Freudian unconscious is the cellar in which the mind keeps its own bastard spawn. The true unconscious . . . is not a shadow cast by the mind" (pp. 207, 212). Inasmuch as psychoanalysis seeks to make the unconscious into another aspect of consciousness, it confines itself to this cellar. It was the dawning realization of this inability of psychoanalysis to progress into the "true unconscious" that brought about the confusion we have seen in Freud's later work.

Finally, we have come to an important distinction between change and modification. Change is the

substitution of the new for the old, while modification concerns the movement, or development, of that which already exists. From our previous investigation of thought we realize that everything which appears in consciousness is a modification of the old; nothing new can appear there unless it is touched by "the other"--everything that lies outside thought--just as all the centuries of human cultivation have not produced one new species of plant or animal (White, 1959). Change comes to biological systems when what we call the "random element" of nature makes its presence felt; it is the incursion of that which lies outside consciousness. Development is the assimilation of this change, organizing the new in terms of the old.

It would seem that Freud experienced this incursion of the new in his initial insight that consciousness was but a superficial entity within the great currents of unconscious mental life: "Insight such as this falls to one's lot but once in a lifetime" (Freud, 1900/1975, p. 56). But this intimation of the other was subsequently organized in terms of the old. Freud brought conscious form to the unconscious--he described what it was like in the terms of consciousness. Psychoanalysis sought to make the unknowable known, and thereby revealed its allegiance with the ancient tradition of cultivation, the attempt to domesticate nature through the workings of consciousness. But in

the end, this psychological knowledge, like all knowledge, only "refines upon and strengthens" the net of symbols in which we are already caught (Cassirer, 1944, p. 25) and so further divorces us from the contact we are seeking with the "true unconscious." The great merit of psychoanalysis was its appreciation of this river of life within, and the demonstration that the vaunted contents of consciousness were but a fragile purchase at its edge. What was not well understood by psychoanalysis was that for the conscious observer this was a river of no return; like the fish in its river we cannot observe our origins because we cannot get away from them.

For Freud, ultimately a believer in scientific progress and the accumulation of knowledge, the way forward lay in expanding the domain of consciousness: he remained a cultivator of human nature and thus a child of his Cartesian heritage. In the next chapter we will encounter a different philosophy, one that does not accept the Cartesian faith in the knowing observer and thus offers the possibility of an entirely different relationship with human nature.

Chapter Five

BEHAVIORISM AND HUMANISTIC/EXISTENTIAL PSYCHOLOGY:

THE PRIVATE PSYCHE

We want in philosophy to see the absurdities both of what the behaviorists say and of what their opponents say.

--L. Wittgenstein (quoted
in Gier, 1981, p. 139)

In the opening pages of The Concept of Mind, Gilbert Ryle (1949/1968) describes the pervasive influence of the Cartesian conception of discrete private minds "harnessed together" with public material bodies:

There is a doctrine about the nature and place of minds which is so prevalent among theorists and even among laymen that it deserves to be described as the official theory. Most philosophers, psychologists and religious teachers subscribe, with minor reservations, to its main articles [italics added]. . . .

The official doctrine, which hails chiefly from Descartes, is something like this. With the doubtful exception of idiots and infants in arms every human being has both a body and a mind. . . .

Human bodies are in space and are subject to the mechanical laws which govern all other bodies in space. Bodily processes and states can be inspected by external observers. So a man's bodily life is as much a public affair as are the lives of animals and reptiles and even as the career of trees, crystals and planets.

But minds are not in space, nor are their operations subject to mechanical laws. The workings of one mind are not witnessable by other observers; its career is private [italics added]. Only I can take direct cognisance of the states and processes of my own mind. A person therefore lives through two collateral histories, one consisting of what happens in and to his body, the other consisting of what happens in and to his mind. The

first is public, the second private [italics added]. (p. 13).

Ryle's description draws our attention to the third of the three concepts we have identified (in Chapter Two) as most central to individualism--privacy. As Ryle (ibid.) goes on to note, a fundamental premise of the "official theory" is that "mental happenings occur in insulated fields, known as 'minds'," and therefore "one person has no direct access of any sort to the events of the inner life of another. He cannot do better than make problematic inferences [italics added] from the observed behavior of the other person's body to the states of mind which, by analogy from his own conduct, he supposes to be signaled by that behavior" (pp. 15-16). This conception of the privacy of mental life is deeply rooted in our culture and central to the idea that we all represent autonomous individuals each pursuing particular private lives. This chapter will examine how two apparently disparate schools of psychology--behaviorism and humanistic/existential psychology--share this fundamental premise and operate from it. The premise itself will also be examined, in an attempt to disclose its fundamental role in our conception of ourselves as individuals.

To see the congruence of behavioral and humanistic/existential psychologies on the issue of mental privacy, consider the following passages. The

first is from B.F. Skinner's Science and Human Behavior (1953), the second from Carl Rogers' Client-centered Therapy (1953), and the third from R.D. Laing's The Politics of Experience (1967):

When we say that behavior is a function of the environment, the term "environment" presumably means any event in the universe capable of affecting the organism. But part of the universe is enclosed within the organism's own skin. Some independent variables may, therefore, be related to behavior in a unique way. The individual's response to an inflamed tooth, for example, is unlike the response which anyone else can make to that particular tooth, since no one else can establish the same kind of contact with it. Events which take place during emotional excitement or in states of deprivation are often uniquely accessible for the same reason; in this sense our joys, sorrows, loves, and hates are peculiarly our own. With respect to each individual, in other words, a small part of the universe is private. (Skinner, 1953, p. 257)

Every individual exists in a continually changing world of experience of which he is the center

An important truth in regard to this private world of the individual is that it can only be known, in any genuine or complete sense, to the individual himself. . . . The world of experience is for each individual, in a very significant sense, a private world. (Rogers, 1951, pp. 483-84)

We can see other people's behavior, but not their experience I see you, and you see me. I experience you, and you experience me. I see your behavior. You see my behavior. But I do not and never have and never will see your experience of me. . . . Your experience of me is not inside you and my experience of you is not inside me, but your experience of me is invisible to me and my experience of you is invisible to you.

I cannot experience your experience. You cannot experience my experience. We are both invisible men. All men are invisible to one another [italics added]. . . .

The study of the experience of others, is based on inferences I make [italics added], from my experience of you experiencing me, about how you are

experiencing me experiencing you experiencing me.
. . . (Laing, 1967, pp. 15-16)

All three writers see the individual as a center of private experience. Because the individual is perceived as having privileged access to his own experience, no other individual can fully know or understand him. The best that can be hoped for is, as Ryle noted, a partial understanding based on inference. For both behavioral and humanistic/existential psychologies there is an irreducible element of inference in the process of understanding another human being (see, e.g., Rogers, 1951, pp. 495-96; Skinner, 1953, p. 282). Each individual, then, remains a separate private portion of an otherwise public universe.

The position taken by Skinner, Laing and Rogers is a strong one. It corresponds at first glance to common sense; that is, it seems obvious that there are various aspects of the individuals around us--thoughts, feelings, and so on--about which I can only make informed guesses based on my own experience. Along with this, the official theory gains a sense of solidarity from its appeal to scientific certainty. In separating private subjective experience from public objective behavior, the official theory endorses the scientific tradition whereby knowledge is most certain where it involves reasoning from reproducible, observable events. Skinner, Laing and Rogers express the common conviction

that we have no direct access to the inner life of another human being, and though they proceed in different directions from this primary assumption, it forms their common bond as it does for the whole field of behavioral and humanistic/existential psychology. To question the conception of the privacy of individual experience, then, is to challenge a fundamental premise of a wide area of psychology.¹

Wittgenstein and the Challenge to Privacy

The notion of individual privacy is not so much a theory or philosophical doctrine as it is an almost unconscious assumption which forms the background to subsequent theorizing and philosophizing. It pervades our thinking to the extent that it is often difficult even to detect, and more formal statements of it, such as Logical Behaviorism (see Malcolm, 1971, p. 80f.), fail to contain the range and subtlety of its influence. This makes the "explanation of what is wrong with it one of the most challenging problems of philosophy" (ibid, p. 82). By far the most significant challenge to the notion of individual privacy is contained in the work of Ludwig Wittgenstein. It will be the primary task of this chapter to elucidate the profound but difficult challenge mounted by Wittgenstein against the privacy of the individual.

Approaching Wittgenstein. The first thing to note in Wittgenstein's approach to the problem of privacy is

that he "never formally lays out the position he is attacking" (Morrick, 1969, p. xiv). This is because, as noted above, formality is not a quality of this position; rather, it is an informal entity, vague and loosely defined, which appears, as Wittgenstein might put it, throughout the landscape of our language and thinking. Thus he approaches the concept of privacy on its own terms, picking it out of the mental landscape as it appears in the course of daily life.

This approach is typical of Wittgenstein's later work,² and provides an important clue as to why he has succeeded in elucidating various complex phenomena of human mentality where so many others have failed. This success has made Wittgenstein "by all odds the most influential of contemporary philosophers" (Barrett & Aiken, 1962, p. 485), but also one of the most difficult to comprehend. Because he has abandoned traditional modes of explanation, Wittgenstein presents a highly original and elusive approach to philosophy. The normal reference points associated with logic and analytic reasoning are unavailable to the reader, who must encounter the subject matter in the full complexity of its natural condition. Kenneth Fann (1969) remarked of the Philosophical Investigations, the major work of Wittgenstein's later philosophy, that it

is completely unsystematic in both its form and content. Unlike most earlier or later

philosophical writings in the Western tradition, it consists of loosely connected remarks, unanswered questions, unamplified hints, imaginary dialogues, vague parables, metaphors, and epigrams. (p. 105)

In short, Wittgenstein "has no system" (ibid., p. 101).

The unsystematic nature of Wittgenstein's approach stems from his determination to leave no linguistic stone unturned in his search for the hidden assumptions and presuppositions he sees as the root of all philosophical confusion. For Wittgenstein such confusion always begins with the misapplication of language; therefore the task of his philosophy is to restore misappropriated words to their proper linguistic context. This requires an intensive investigation of grammar, conceived not in the narrow sense of formal conventions governing the use of a word, but in the broad sense of the entire behavior of a language system. And since grammar in this sense constitutes the entire behavior of a language, it cannot be reduced to a system of principles or postulates which are only part of that language; it is essential for the philosopher to succeed that he be able to roam freely throughout the linguistic landscape in the course of his investigations. For this reason "theory is not at all characteristic of [Wittgenstein's] thinking, because it is atomistic, whereas his tendency is always to see the connection between things and to keep his sense of the totality" (Pears, 1985, p. 178). Thus, says

Wittgenstein, "we may not advance any kind of theory.

. . . We must do away with all explanation, and description alone must take its place" (PI, #109³).

Wittgenstein does not abstract the subject from its matrix; rather than explanations he offers descriptions of certain aspects of human linguistic interest, those critical to our philosophical picture of the world, as they occur in their natural settings: "What we are supplying are really remarks on the natural history of human beings" (PI, #415). The result is a rich and intricate compendium of remarks which most observers agree constitutes a radically new direction for philosophy and even for the course of Western thought.

The observation of language-games. Wittgenstein's observations are mainly accounts of what he calls "language-games". A language-game can be thought of as the actual pattern of use which surrounds the natural (non-philosophical, non-technical) occurrence of various words and phrases, or, in Wittgenstein's words, "the whole, consisting of language and the actions into which it is woven" (PI, #7). This insistence on incorporating the natural setting of language is one marker of the fundamental change represented by the philosophy of Wittgenstein. As William Bartley (1973) noted in comparing Wittgenstein to Kant, "the categories, logics, grammars, frameworks, of different language-games are seen as a record of the natural

history of man's interaction with his environment, rather than as reflections of the structure of the world" (p. 161). There is no longer a necessary but only a contingent connection between language and the world.

To Wittgenstein, seeing the actual use of language is a task of the utmost difficulty because of the overwhelming tendency to attend to only the surface of various grammatical constructions. This "surface grammar" may disguise significant differences in the deeper, more subtle workings, or "depth grammar," of a word or phrase. With the terms "depth" and "surface" grammar Wittgenstein wishes to distinguish between the obvious and hidden content or impact of words. His own explanation is as follows:

In the use of words one might distinguish 'surface grammar' from 'depth grammar'. What immediately impresses itself upon us about the use of a word is the way it is used in the construction of the sentence, the part of its use--one might say--that can be taken in by the ear.--And now compare the depth grammar, say of the word "to mean", with what its surface grammar would lead us to suspect. No wonder we find it difficult to know our way about. (PI, #664)

A passage by Fann (1969) helps us see the significance of Wittgenstein's distinction between surface and depth grammar:

When we are doing philosophy we are confused by the uniform appearance of words when we hear them spoken or meet them in script and print. But their application is not presented to us clearly. It is like looking into the cabin of a locomotive. We

see handles all looking more or less alike. Traditional philosophy, we may say, is concerned with handles. It treats of terms, words as handles; it ignores to a large extent the different ways the handles work. 'We remain unconscious of the prodigious diversity of all the everyday language-games because the clothing of our language makes everything alike' (PI, #224). This is a very important point which Wittgenstein wants to remind us of over and over again in the Investigations. He distinguishes the 'surface grammar' from the 'depth grammar' in the use of words. The 'surface grammar' is 'what immediately impresses itself upon us about the use of a word'. The 'depth grammar', then, is the application of words. . . . [For example] Compare the propositions: 'I have a beautiful hat' and 'I have a terrible toothache'. The similarity in their surface-grammar is obvious but their uses are quite different. . . . The difference in their depth-grammar may be brought out by comparing, e.g. 'Is this my hat?' and 'Is this my toothache?'--(nonsense). (p. 89)

It is such differences beneath the surface of apparently similar language-games that Wittgenstein wishes to expose. Through this process he seeks to "pass from a piece of disguised nonsense to something that is patent nonsense" (PI, #464); to reveal that apparently similar statements conceal language-games of very different import related only in their surface grammar. Thus for Wittgenstein, "Philosophy is a battle against the bewitchment of our intelligence by means of language" (PI, #109).

It is important to realize that Wittgenstein had no interest in any kind of language-reform. As he emphasizes in the following remarks, language as it occurs naturally is always the final authority:

When philosophers use a word--"knowledge", "being", "object", "I", "proposition", "name"--and

try to grasp the essence of the thing, one must always ask oneself: is the word ever actually used in this way in the language-game which is its original home [italics added]?

Philosophy may in no way interfere with the actual use of language; it can in the end only describe it.

It leaves everything as it is. (PI, #116, 124)

Things as they are have a higher authority for Wittgenstein than any product of human analysis. To attempt a reform of language would be to Wittgenstein like a biologist suggesting that particular organisms should be other than they are.

An exacting scrutiny of the natural context of various language-games, then, is the crux of Wittgenstein's philosophy. Before turning to his examination of the particular language-games involved in the conception of individual privacy, it is worth making a final point about Wittgenstein's general approach. This concerns the word "observation" as it is used by Wittgenstein in describing his activity of looking at the actual circumstances of language. It is clear that observation here is not used in the same sense as we might say, for example, that a scientist observes. No one assumes that Wittgenstein actually goes out looking for people using a certain word and then observes how they do so. Rather, what is going on is a kind of introspection, whereby Wittgenstein examines his accumulated experience of the language-games in question and points out aspects "which have escaped remark only

because they are always before our eyes" (PI, #415). Now, the very fact that this occurs and that few would care to argue that it represents an invalid approach already confirms much of what Wittgenstein wants to say about privacy! That is, since the examination of one's experience with language would be almost universally regarded as a valid procedure for conducting an investigation of language (what psychologist would hesitate to draw on examples from his own experience rather than try to set up an actual instance of the behavior in question?⁴) there is already a tacit understanding that experience is public. Seeing this widespread, albeit unwitting, acknowledgement of the universal applicability of one's own linguistic experience (which according to the official theory should be unique, individual, idiosyncratic) provides a first inkling of how Wittgenstein uses his linguistic investigations to attack the notion of individual privacy. By showing that participation in a language assumes a common understanding which subtends the proclivities of individual speakers, Wittgenstein initiates a powerful and wide-ranging assault on the whole ideology of private mental life. Thus orientated, we are ready to follow Wittgenstein in his philosophical investigations.

The ownership of experience. As has been noted, Wittgenstein's whole approach precludes any formal

analysis of the problem of privacy. Rather, a web of subtly connected observations is woven which gradually catches up the various language-games involved in the conception of individual privacy and fixes them for close scrutiny. As the depth grammar of these forms of life is revealed, the "problem" is dissolved rather than solved (Fann, 1969, p. xii). As Malcolm Norman (1969) notes, this makes Wittgenstein's investigations very hard to summarize, because each part is interwoven with the rest and cannot be abstracted without loss of impact.

An attempt to summarize the Investigations would be neither successful nor useful. Wittgenstein compressed his thoughts to the point where further compression is impossible. What is needed is that they be unfolded and the connections between them be traced out. . . . each of the investigations in the book criss-cross again and again with every other one. (p. 96)

Thus there is little prospect of conveying the full impact of Wittgenstein's assault on privacy; instead the attempt will be to convey a sense of the investigation by "unfolding" one of its most pertinent themes--"the ownership of experiences" (Morrisk, 1969, p. xv).

In examining the ownership of experience Wittgenstein approaches most directly the widely held premise that each individual is the center of a unique, private domain of experience accessible to others only through a process of inference. To see the fallacy of this way of thinking, Wittgenstein asks us to consider

the experience of pain. Pain is often used, as by Skinner in the passage quoted earlier, as an example of a private sensation to which only the "owner" has full access. Like private property, one can, as it were, see the outside of another's pain but not experience it fully. This very common assumption is often called "the skeptical position" (Morrick, 1969, p. xiv) because it implies that "I can never know what another person is really thinking or feeling" (ibid.) and leads ultimately to solipsism, the purest form of skepticism. Most proponents of this view, however, retreat from the solipsistic extreme to more moderate views such as that expressed by William Taveson (1982) in a recent survey of humanistic psychology:

Though a realist myself, I find no personal difficulty in adopting an empirically phenomenological stance toward the understanding of human personality and behavior, while disagreeing with the basic relativism and idealism that seem implicit in the philosophical tradition of phenomenalism. However objective the real world may be apart from my perception of it, it is my perception of it that motivates and determines my reactions to the people and objects within it. That seems to be a psychological fact not a philosophical conviction, though philosophers may want to make more of it. (p. 33)

Wittgenstein would certainly want to make more of it. It is precisely this kind of uneasy conceptual compromise that indicates to Wittgenstein that philosophy has lost contact with the language "which is its original home." Wittgenstein seeks to dismantle the skeptical position

by examining the various language-games on which it is based. The language-games surrounding the expression of pain are one of his favorite examples of how we can be misled by surface grammar into a superficial understanding of mental phenomena.

A fundamental tactic used by Wittgenstein in dissolving the skeptical position is to examine the various statements which arise from it and then compare these with the naturally occurring language-games from which they have been abstracted. Through this process Wittgenstein attempts to show that most of these statements constitute disguised nonsense which draw their apparent meaning only from spurious relationships in surface grammar with the surrounding linguistic environment. For instance, the skeptical position assumes that since no one can fully experience my pains, they are in some sense unique and peculiar to me. Therefore the skeptic might assert: "Another person cannot feel my pains, they are uniquely my own." Wittgenstein replies to this: "What in my experience justifies the 'my' in 'I feel my pains'? Where is the multiplicity of feeling that this word justifies" (quoted in Morricks, 1969, p. xviii). As Morricks (ibid.) notes, Wittgenstein here wishes to expose the specious sense of ownership which the statement "I feel my toothache" draws from its relationship in surface grammar to analogous statements about physical objects,

such as "I have my hat." To see this, it is first necessary to realize that "feel" serves the same function in first person psychological statements as does "have" (i.e. they are interchangeable terms), while outside the psychological context the two words have quite different grammars. As Morricks (ibid.) points out: "It doesn't matter whether I say I have a pain or that I feel it, whereas it does make a difference if I say I have a hat in the closet or that I feel it there" (p. xxi; cf. Cook, 1965, p. 289). In talking about the hat, feel is "an observation word" which has to do with confirming one's knowledge about a possession; that is, it establishes that one has evidence to confirm one's statement. However, in the psychological context, using feel can add nothing to the statement "I have a toothache" that it does not already have. Nevertheless, because feel connotes an extra measure of certainty, it contributes to the impression that one can only know the pains one feels. This distinguishes the pains of one's own body from the pains of all other bodies and brings about the idea that one has direct knowledge only of one's own case and therefore a unique experience of pain. Thus is established the fallacious "multiplicity of feeling" to which Wittgenstein refers. The attribution of uniqueness to each individual's experience leads to "the mistaken picture of a pile of

experiences which have to be assigned to their respective owners--like the pile of hats which must be sorted out at the end of the party" (Morrick, 1969, p. xviii). It is such pictures, according to Wittgenstein, which captivate the mind (Bartley, 1973, p. 163) and prevent us seeing the actual nature of mental phenomena.

Related to the confusion between have and feel in first person psychological statements is the use of "I." Here again it is a spurious relationship with language-games concerning physical objects which leads us to falsely individuate sensations. Fann has already provided us with one example of this when he invited us to compare the propositions "I have a beautiful hat" and "I have a terrible toothache." The disparity in the depth grammars of these apparently similar propositions is brought out by asking "Is this my hat?" and "Is this my toothache?" Immediately one sees that a very different relationship exists between "I" and the two things with which "I" is concerned. The relationship between "I" and hat can be adequately described as one of possession, but "I" cannot be said, in everyday language, to own the toothache. Thus, in psychological statements, "I" "does not refer to an owner of experiences" (Morrick, 1969, p. xix). Wittgenstein feels that "I" functions in such statements simply as a "grammatical filler," much as does "It" in "It is raining" (ibid., p. xx). But whereas we are content to

leave the referent of "It" as vague and unspecified, we tend to form an image or conception of "I" as some kind of bodiless entity (the self) possessing various aspects of experience. Here again the mind is held captive by a picture.

Under Wittgenstein's scrutiny the simple statement "I have a toothache" begins to disclose a complex depth grammar unrelated to the surface grammar it shares with similar experiential propositions. But we are still only scratching the surface here. Wittgenstein goes much deeper into the language-games of psychological statements, and it becomes harder and harder to follow him through this extremely difficult terrain. Wittgenstein himself found the whole subject "extraordinarily difficult" because "the whole field is full of misleading notations" (quoted in Moore, 1969, p. 119). G.E. Moore, himself one of the foremost of contemporary British philosophers and who attended Wittgenstein's 1930-33 lectures on these topics, found himself "very much puzzled" and had great difficulty seeing "the connexion between different points which he seemed anxious to make" (ibid.). It is to Moore's credit that despite his perplexity he was able to compile detailed notes which can help us further explore Wittgenstein's investigation of the ownership of experience.

One of the points Wittgenstein was anxious to make, notes Moore (ibid.), concerned "the differences between the proposition which is expressed by the words 'I have got tooth-ache', and those which are expressed by the words 'You have got tooth-ache'." Wittgenstein related this discussion to behaviorism by asking two related questions: namely, "When we say 'he has tooth-ache' is it correct to say that his tooth-ache is only his behavior, whereas when I talk about my tooth-ache I am not talking about my behavior?", and, "Is another person's tooth-ache 'tooth-ache' in the same sense as mine?" (ibid., pp. 120-21). Wittgenstein went on to point out that what leads one to these questions is a difference in "what verifies or is a criterion for" "I have a tooth-ache" as compared to "He has a tooth-ache" (ibid., p. 121). This difference is seen by asking the question, "How do you know x has a toothache?" If x is replaced by "you" the question is nonsensical but not when replaced by "he." This indicates that "the two expressions are on a different grammatical level . . . they are not both values of a single propositional function 'x has a tooth-ache'" (ibid., p. 121). Most people would agree with this observation, but take it in exactly the opposite sense that Wittgenstein intended. That is, they take it as evidence that one indeed cannot directly experience another's toothache and so must rely on the criterion of behavior for

establishing the presence of toothache in another. This seems to confirm the skeptical position that an individual's experience is his private domain (and may be one reason why this position seems so convincing), but Wittgenstein expressly stated that this is not what he meant to indicate (ibid.). To stop at this point is to return to the surface grammar and miss the opening Wittgenstein has created. This opening concerns the role of knowledge in our psychological experience and has to do with the verifiability of different statements which appear superficially similar. To pass through this opening means following Wittgenstein on his complicated wanderings through the related questions of knowledge, doubt and certainty.

At this point in Wittgenstein's investigation, Moore (ibid.) singles out as "the point on which he was most anxious to insist" that "what we call 'having tooth-ache' is . . . a 'primary experience' . . . and . . . that "what characterizes 'primary experience'" is that . . . "'I' does not denote a possessor" (p. 122). The word 'I', said Wittgenstein, is used in "two utterly different ways": one where it is "on the level with other people" (e.g. "I have a match-box," "I have a bad tooth") and one where it is not (e.g. "I have a toothache," "I see a red patch"). Thus there is a division in the depth grammar of "I", and this division

does not correspond to a simple distinction between self and other; rather it has something to do with the verifiability of the two types of propositions. This is perhaps best seen by imagining talking to one's self about the respective statements. Asking one's self "Do I have a match-box?" or "Do I have a bad tooth?" is sensible under easily imaginable conditions of normal life, but asking one's self "Do I have a toothache?" or "Do I see a red patch?" is not. As Morricks (1969) puts it, "it makes no sense to speak of my getting myself into a more favourable position to observe my toothache" (p. xxi). Thus it is sensible to speak of knowledge (information which can be verified) in the first case but not in the second. As we will see, Wittgenstein is quite adamant that a statement such as "I know I have a toothache" is a serious abuse of language which leads quickly and directly into "tormenting and seemingly irremediable doubts" (ibid., p. xiv-xv) as it encourages such questions as "How do I know I have a toothache?" This type of question, upon which the whole skeptical tradition originating with Descartes is based, can only occur, in Wittgenstein's gravid phrase, "when language goes on holiday" (PI, #38). As long as language is working we will never ask the question, "How do I (you) know I (you) have a toothache?" Much of Wittgenstein's later work is concerned with demonstrating that this kind of doubt is

the product of idle philosophical speculation adrift from its moorings in the working language. To cut through the confusion surrounding the conception of individual privacy, then, we must explore the working grammars of the key words out of which it has been constructed.

The grammar of knowledge. If there is one word whose grammar is most deeply involved with statements of the skeptical position, it is know. Morrick (1969) delineates the central position of knowing in the skeptical tradition and introduces us to Wittgenstein's critique of its overwrought importance:

The skeptical reasoning proposes that others can not know--or at least can not know with the certainty that I have--what I am thinking or feeling. But Wittgenstein's reply to this is that this sense of "know" is no sense of the word at all, for it makes sense to speak of knowledge only where it also makes sense to speak of doubt and uncertainty. (p. xx).

Wittgenstein explores the depth grammar of "know" in great detail and emerges with an understanding of knowing which is diametrically opposed to that of the skeptic. This divergence can be formulated most sharply as follows. Where the skeptic (qua behaviorist, humanist, or existentialist) says "I cannot know (with certainty) what another thinks and feels, only what I think and feel," Wittgenstein says "I cannot know what I think and feel, only what another thinks and feels"! To understand this startling statement, we need to

understand the grammar of the word "know."

To capture the flavor of Wittgenstein's complex and highly original treatment of the grammar of knowledge as it relates to the whole problem of privacy, it is worth quoting at length from the Philosophical Investigations.

The following remarks, though the connections between them may seem vague, are all contiguous in the text.

The paragraphs are numbered for ease of reference.

[1] That what someone else says to himself is hidden from me is part of the concept 'saying inwardly'. Only "hidden" is the wrong word here; for if it is hidden from me, it ought to be apparent to him, he would have to know it. But he does not 'know' it; only the doubt which exists for me does not exist for him.

[2] "What anyone says to himself is hidden from me" might of course also mean that I can for the most part not guess it, nor can I read it off from, for example, the movements of his throat (which would be a possibility.)

[3] "I know what I want, wish, believe, feel," (and so on through all the psychological verbs) is either philosopher's nonsense, or at any rate not a judgement a priori.

[4] "I know . . ." may mean "I do not doubt . . ." but does not mean that the words "I doubt . . ." are senseless, that doubt is logically excluded.

[5] One says "I know" where one can also say "I believe" or "I suspect"; where one can find out [italics added]. (If you bring up against me the case of people's saying "But I must know if I am in pain!", "Only you can know what you feel", and similar things, you should consider the occasion and purpose of these phrases. "War is war" is not an example of the law of identity, either.)

[6] It is possible to imagine a case in which I could find out that I had two hands. Normally, however, I cannot do so. "But all you need is to hold them up before your eyes!"--If I am now in

doubt about whether I have two hands, I need not believe my eyes either. (I might just as well ask a friend.)

[7] With this is connected the fact that, for instance, the proposition "The earth has existed for millions of years" makes clearer sense than "The earth has existed in the last five minutes." For I should ask anyone who asserted the latter: "What observations does this proposition refer to; and what observations would count against it?"-- whereas I know what ideas and observations the former proposition goes with.

[8] "A new-born child has no teeth."--"A goose has no teeth."--"A rose has no teeth."--This last at any rate--one would like to say--is obviously true! It is even surer than that a goose has none.--And yet it is none so clear. For where should a rose's teeth have been? The goose has none in its jaw. And neither, of course, has it any in its wings; but no one means that when he says it has no teeth.--Why, suppose one were to say: the cow chews its food and then dungs the rose with it, so the rose has teeth in the mouth of a beast. This would not be absurd, because one has no notion in advance where to look for teeth in a rose. ((Connection with 'pain in someone else's body'.))

[9] I can know what someone else is thinking, not what I am thinking.

It is correct to say "I know what you are thinking", and wrong to say "I know what I am thinking" [italics added].

(A whole cloud of philosophy condensed into a drop of grammar.) (PI, pp. 220-22)

It is difficult to know where to stop (or start). The train of thought continues indefinitely in both directions, but we have enough here to "unfold" (as Malcolm suggested) several of Wittgenstein's main arguments.

We may as well begin with what might seem most preposterous in Wittgenstein's discourse; namely his assertion that one doesn't know what one is thinking,

feeling or even saying. Wittgenstein voices the automatic objection for us in paragraph [5]--"But I must know if I am in pain!"--but then asks us to consider "the occasion and purpose" of such a phrase. We immediately see that this is not a phrase which would be uttered in the course of daily life; rather it belongs to the peculiar discourse that takes place when one is doing philosophy. For example, we might see someone fall down clutching their chest and upon being questioned exclaim, "I'm in pain!", and can easily imagine the reaction this would entail. But if the same person said, "I know I'm in pain!", we would simply be perplexed by the additional words and/or ignore them as irrelevant. This helps clarify the different purposes of the two statements. The expression "I'm in pain!" is part of a very important language-game human beings have developed to deal with one of their primary experiences. It is so deeply entwined in the forms of life around it that it is difficult to even talk of purpose here; it is not an expression we "use" but rather something that "escapes us" in certain situations (Malcolm, 1963, p. 109). In contrast, the statement "I know I'm in pain" has a purpose--namely, to provide an example of something that seems especially certain; "something," as Wittgenstein put it, "a philosopher might say to demonstrate to himself or to someone else that he knows something that is not a mathematical or

logical truth" (OC, #350). But here Wittgenstein wishes to emphasize a very important point: pain is not something about which one can be certain. Certainty can only arise out of uncertainty; it belongs to the whole process of verification, or "finding out," which leads to the accumulation of knowledge. Pain has nothing to do with this process; it is beyond (or beneath) any question of knowledge or certainty.

Wittgenstein's most thorough treatment of this theme is contained in On Certainty (1969), a collection of remarks taken from various writings he compiled during the last two years of his life (1949-51). Here Wittgenstein is much concerned with the place of doubting and knowing in the whole sphere of human life. A main contention he advances is that doubting and knowing are not primary activities of human beings but secondary processes of specific and limited application which can take place only in relation to something much more fundamental, "something [which] lies beyond being justified or unjustified; as it were, . . . something animal" (OC, #359). As an illustration of what he is getting at, Wittgenstein offers the following scenario:

A pupil and a teacher. The pupil will not let anything be explained to him, for he continually interrupts with doubts, for instance as to the existence of things, meanings of words, etc. The teacher says "Stop interrupting me and do as I tell you. So far your doubts don't make sense at all."

. . . .
And it would be just the same if the pupil

cast doubt on the uniformity of nature, that is to say on the justification of inductive arguments. --The teacher would feel that this was only holding them up, that this way the pupil would only get stuck and make no progress. --And he would be right. It would be as if someone were looking for some object in a room; he opens a drawer and doesn't see it there; then he closes it again; waits, and opens it once more to see if perhaps it isn't there now, and keeps on like that. He has not learned how to look for things. And in the same way this pupil has not learned how to ask questions. He has not learned the game that we are trying to teach him. (OC, #310. 315)

For the pupil's doubting to make sense, he must first accept a great deal. If he is to question everything, he questions nothing, since he will not even be able to accept the existence of his teacher or the meaning of his words. Wittgenstein summarizes the situation as follows:

the questions that we raise and our doubts depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn. . . . If I want the door to turn, the hinges must stay put.

My life consists in my being content to accept many things. (OC, #341, 343, 344)

Only when operating from a "substratum of non-doubt" can human beings proceed with their daily lives.

Language is one aspect of this substratum. Our doubts may be formulated in language, but language itself must be rooted in certainty: "The primitive form of the language-game is certainty, not uncertainty." For uncertainty could never lead to action" (Wittgenstein, quoted in Malcolm, 1981, p. 5). In this quotation, taken from an earlier work (1937), Wittgenstein uses the

term "certainty" to refer to what we have called the substratum of non-doubt, but as Malcolm (1981) points out in the following passage, he later came to reject even the notion of certainty as applied in such a manner:

This fundamental thing is so fundamental that it is difficult, or perhaps impossible to describe it in words. One would like to characterize it in mental terms--to call it knowledge, or belief, or conviction, or certainty, or acceptance, or confidence, or assumption. But none of these expressions fit. All of them have their appropriate application within various language-games. Whereas Wittgenstein is trying to call attention to something that underlies all language-games. (p. 20)

Malcolm goes on to point out that even negative characterizations of this substratum, such as "absence of doubt," use words which have employment in everyday language-games and thus introduce misleading connotations. Evidently we must leave this firmament of our lives on the other side of what can be described; in Wittgenstein's well-known phrase: "Whereof one cannot speak, thereof one must be silent" (quoted in Kenny, 1973, p. 4).

It is the immunity to doubting, questioning and knowing that characterizes what Wittgenstein called "primary experiences." That is why, in paragraph [1], he says that the person speaking to himself cannot be said to know what he is thinking; it is simply that "the doubt which exists for me does not exist for him." That is, I may be in doubt as to what another is thinking or

feeling, and can take steps to find out what it is, but it makes no sense to speak of the other person attempting to find this out. As Wittgenstein brings out in the following passage, the proper use of "I know" implies the presence of reasonable doubt:

The correct use of the expression "I know". Someone with bad sight asks me: "Do you believe that the thing we can see there is a tree?" I reply "I know it is; I can see it clearly and am familiar with it".--A: "Is N.N. at home?"--I: "I believe he is."--A: "Was he at home yesterday?"--I: "Yesterday he was--I know he was; I spoke to him."--A: "Do you know or only believe that this part of the house is built on later than the rest?"--I: "I know it is; I asked so and so about it." (OC, #483)

To complement one's assertion that one knows something it is generally necessary to provide (or be capable of providing) evidence as to how one overcame the doubt involved. "In a court of law the mere assurance 'I know . . . ' on the part of a witness would convince no one. It must be shown that he was in a position to know" (OC, #441). This implies that the one who knows differs from others in having had certain experience. For instance, "I should say 'I know what this colour is called' if e.g. what is in question is shades of colour whose name not everybody knows" (OC, #546). It would be absurd to ask someone in reference to a primary colour, "Do you know what colour this is?"--unless there were circumstances which made them atypical (e.g., you suspected they were colourblind, they were just learning

English, they had recently been unconscious, etc.). The question of knowledge arises only when the possibility of not knowing is also present. Wittgenstein summarizes this condition succinctly: "'I know' means that I who know it, and the person who doesn't are separated by a difference in understanding" (OC, #563). Knowledge is something that (at least some) others do not have--it is something individual, something that can be possessed.⁵

Thus Wittgenstein reveals an important and almost universally overlooked aspect of knowing buried in its depth grammar. Knowing is always characterized by partiality; that which everyone knows (which nobody doubts) does not fit the grammar of the word "know." Thus, when we apply the word know to the "primary experiences" of our lives we engender confusion because here we are dealing with "something universal . . . not just something personal" (OC, #440). To say one knows one's own pains in contradistinction to anyone else's is to misapply the word "know" and thereby obscure the unbroken continuum of pain behind the linguistic fences we set up on its surface. Pain belongs not to the individual but to all of humanity (and a great deal of the rest of nature as well). When pain is present a deep and immediate communion takes place; it is almost impossible not to react, either to one's own pains or to those of others. To conjure up doubt here would be extremely unnatural; it would

threaten the foundation of our relationship with each other. As Wittgenstein remarks: "Just try--in a real case--to doubt someone else's fear or pain" (PI, #303). Pain and fear belong to the universal substratum in which our lives are founded; doubt has no place here. Doubting and knowing come into play only when we move up from this common denominator toward the individual and the particular: "Doubt itself rests only on what is beyond doubt" (OC, #519).

Having seen what is contained in the depth grammar of "know," we may begin our return to the surface. The passages from the Philosophical Investigations quoted earlier can now be reread (hopefully) with greater profit. We are still far from explaining all that is contained in them and, indeed, to try to do so would be a mistake. If explanation were all that is needed the Philosophical Investigations would not exist.

Nonetheless, it should now be more apparent how the questions of knowledge, doubt and certainty lie intertwined at the heart of the skeptical position. This position is not built on the indubitable foundation of our lives, but on the sands of doubt. Language has gone on holiday and ended up at the beach.

The experience of man. Throughout Wittgenstein's work there is a push toward that which lies beyond the knowing, doubting individual; toward that in which all

men share. He accomplishes this by working toward the ground from which all language-games, including the complex forms of philosophy and psychology, arise. Here, as in the example of pain, he is able to show us how the often overlooked details of our language-games can reveal the whole pattern of the various forms of life with which they are entwined. For this reason Wittgenstein spoke of the physiognomic quality of language (PI, pp. 181, 210)--the face which language presents to us (grammar) is revelatory of the character of mankind, the common denominator in which we all take our being. Always it is contact with this ground that Wittgenstein seeks; whatever stands in the way, however highly regarded, must be destroyed:

Where does our investigation get its importance from, since it seems only to destroy everything interesting, that is all that is great and important? (As it were all the buildings, leaving behind only bits of stone and rubble.) What we are destroying is nothing but houses of cards and we are clearing up the ground of language on which they stand. (PI, #118)

Wittgenstein wants to reveal the living language which has been obscured by our theoretical constructions. These constructions always rely on a foundation, and so will attempt to take part of language and make it the keystone of a general understanding of the world. Thus Descartes erected a philosophy which interprets the world almost entirely in terms of knowledge, doubt and certainty. In our own century we have seen other

philosophers place a similar stress on words such as being, existence, anxiety and will. What Wittgenstein is concerned with is liberating these words from such undue philosophical emphasis and returning them to their place in the language-games which are their original home. Only in this context can the full meaning of the word emerge. When we take the word out its natural milieu and emphasize a certain application of it, we disrupt the linguistic environment in much the same way that agriculture distorts the natural equilibrium in order to abstract from selected plants and animals those aspects which best suit human ends.

As we have seen, the constructions of the skeptical position are among the "houses of cards" brought down by Wittgenstein in his attempt to clear the ground of language. With them falls the edifice of the private individual. For Wittgenstein the concept of a private sensation, like that of a private language, has no meaning. We have seen how the notion of individual experience arises from various confusions surrounding the language-games of knowledge and certainty. Wittgenstein summarizes the situation as follows:

In what sense are my sensations private?--
Well, only I can know whether I am really in pain; another person can only surmise it.--In one way this is wrong, and in another nonsense. If we are using the word "to know" as it is normally used (and how else are we to use it?), then other people very often know when I am in pain.--Yes, but all the same not with the certainty with which I know it myself!--It can't be said of me at all (except

perhaps as a joke) that I know I am in pain. What is it supposed to mean--except perhaps that I am in pain? (PI, #246).

The "certainty" with which the sufferer "knows" his own pain is not certainty at all. Certainty, as we have seen, arises from uncertainty through a process of verification involving time. Wittgenstein provides the following example: "I shall get burnt if I put my hand in the fire: that is certainty" (PI, #474). It takes time to acquire this certainty. While virtually every human being knows that fire will burn him, it is still something that the young child must learn. Likewise, there must have been a time when human beings did not know about fire; a time when experience taught the innocent (literally: "not hurt") the certainty of a burnt hand. By contrast, no one would want to suggest that there was ever a time when human beings did not "know" pain, or that it is something the young child must learn. Certainty belongs to the individual, the being in time. Pain is much deeper--along with sorrow, fear, beauty and love it belongs to the sine qua non of humanity. These are not qualities possessed by individuals (experiences owned by the "I") but the common ground of humanity from which the knowing, doubting individual arises.

Wittgenstein was greatly concerned with the confusions that arise when the notion of individual private experience takes hold. Using the example of

something shared by all mankind, he brings out the artificiality that accompanies this notion:

Look at the blue of the sky and say to yourself "How blue the sky is!"--When you do it spontaneously--without philosophical intentions--the idea never crosses your mind that this impression of colour belongs only to you. And you have no hesitation in exclaiming that to someone else. And if you point at anything as you say the words you point at the sky. I am saying: you have not the feeling of pointing-into-yourself, which often accompanies 'naming the sensation' when one is thinking about 'private language'. Nor do you think that really you ought not to point to the colour with your hand, but with your attention. (Consider what it means "to point to something with the attention".) (PI, #275)

In this example we see how absurd it would be for each individual to assume that he had a unique experience of the sky. The exclamation "How blue the sky is!" carries immediate impact because it connects with the primary experience of mankind; there is no need for any intermediate process whereby each observer scans his experience and infers what the other must mean: understanding spreads from one to the other in the instant of speaking and hearing. If we bring the processes of doubting and knowing here in the form of psychological investigations we only introduce fragmentation and confusion. As behaviorists we might investigate the atmospheric conditions: "Is there some measurable quality of the sky that elicits this exclamation?" If we are phenomenologists we might query the "inner experience" of the observers, as if we missed

something the first time round. In either case we fragment the original unity of the linguistic act which was woven into the lives of the two human beings and the fabric of their world: "It is as if we detached the colour-impression from the object, like a membrane" (PI, #276). Thought becomes the third party to whom we refer for certainty: "Is the sky really blue?" We may devise various methods of verifying the sensation, or seeking its essence, but these methods simply garner us a different set of sensations! As Wittgenstein aptly put it, we end up in the position of the man who buys twenty copies of the morning paper to check the accuracy of something he has read there (PI, #265). For Wittgenstein the blueness of the sky is not something that can be doubted or elaborated upon--it speaks for itself.

The observer and the observed. The furthest reaches of Wittgenstein's investigations converge on a question of great importance in twentieth century thought: that of the relationship between the observer and the observed. In this regard, Wittgenstein's work represents an outstanding example of a particular form of observation generally disparaged in psychology--introspection. Wittgenstein's entire opus consists of little more than introspected pieces of common experience--the everyday words and events that make up our lives. It is of interest to consider why

Wittgenstein advanced far in this form of inquiry which has been largely rejected by psychology.

What has sent introspection into disrepute is the perception that it brings forth only an unverifiable individual reality. We are here in the grip of a very convincing picture: that of introspection as looking into the head. The strong compulsion to think of introspection in this way is a legacy of our Cartesian conditioning. We assume that experience is a private display appearing before an inner spectator; thus we are convinced before we start that our findings are idiosyncratic, subjective, and therefore unreliable. We do not even question these assumptions because we do not know we have made them. Wittgenstein expresses this point as follows:

"I cannot know what is going on in him" is above all a picture. It is the convincing expression of a conviction. It does not give the reasons for the conviction. They are not readily accessible. (PI, p. 223)

When we begin an investigation in the grip of such a picture, we generally end by perpetuating it.

Wittgenstein illustrates this with the arresting example of an investigator who sets out to locate thought by opening his own skull and observing his brain while he thinks. Because he is already convinced that thinking must occur in his head, he correlates the felt process of thinking with his observations of brain activity and

concludes that "thought takes place in the head." But, notes Wittgenstein, he has simply "given this expression its meaning by [c]onnecting the experience which would justify the hypothesis that the thought takes place [sic] in our heads" (BB, pp. 7-8). He begins and ends his investigation in the grip of a picture. Psychology is full of such uroboric investigations. If we set out (intend) to do introspection, then in accordance with the picture we have of it we will assume the role of an inner observer peering into "the depths of consciousness." Our reporting will be like that of an explorer in an unknown land (a Jungian happy hunting ground) who tells of the many strange creature he has seen but never thinks to rank himself among them.

When we engage in introspection after such a fashion we never escape our conditioning; we just follow the prototype of "exploring an unknown place" which experience has taught us. We begin with a picture we have inherited and end by accumulating more evidence for its validity. It is extremely difficult to avoid such pitfalls; as difficult as it is to be free of one's own conditioning. For Wittgenstein the only way to escape such conditioning is to make no assumptions at all about what a word means, but to see how it is used in everyday life. Thus, we cannot merely think about language because, as we have seen, thinking is always conditioned by the past--it is the

conditioning we are trying to escape. Instead, as Wittgenstein emphasizes in the following passage concerning the "family resemblance" of games, we must look at what is actually in front of us, even if what is in front of us is before the mind rather than the eye:

Consider for example the proceedings that we call "games". I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all?--Don't say "There must be something common, or they would not be called 'games'"--but look and see whether there is anything common to all.--For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that. To repeat: don't think, but look! (PI, #66)

It is when we are thus willing to scrutinize what we have previously taken for granted that we begin to notice those aspects "which have escaped remark only because they are always before our eyes" (PI, #415). For Wittgenstein, this "dawning of an aspect" (PI, p. 212) is a phenomenon of great importance because it is in such moments that understanding and meaning come into being as our relationship with what we are observing changes. In the following passages, Wittgenstein describes how our observation of a face is not simply the static reception of light rays, but a complex involvement of the observer and the observed:

I contemplate a face, and then suddenly notice its likeness to another. I see that it has not changed; and yet I see it differently. I call this experience "noticing an aspect".

And I must distinguish between the 'continuous

seeing' of an aspect and the 'dawning of an aspect'.

The expression of a change of aspect is the expression of a new perception and at the same time of the perception's being unchanged.

"I observed the likeness between him and his father for a few minutes, and then no longer"--One might say this if his face were changing and only looked like his father's for a short time. But it can also mean that after a few minutes I stopped being struck by the likeness. (PI, pp. 196, 210)

The fact that the face being observed could equally well be a portrait and still produce the same effect shows how far we are from the behaviorist's stimulus-response universe. The relationship between the observer and the observed is not one of mechanical response to a signal, but a living process in which the most varied nuances of understanding may be aroused by a "stimulus" which remains unchanged. The best name for such a process is psychological.

To emphasize the importance of this psychological aspect of observation, Wittgenstein asks us to imagine a people who are "aspect-blind," who do not experience the dawning of aspects (PI, p. 213).⁶ Clearly their existence would be a drab and lifeless affair by our standards. Like the micronystagmus of the eye which keeps the visual image fresh, the fluctuations in the relationship between the observer and the observed are what keep alive the phenomena we refer to as meaning, understanding, and insight. As Wittgenstein notes, "what I perceive in the dawning of an aspect is not a

property of the object, but an internal relation between it and other objects" (PI, p. 212). Just so, when we survey the grammar of a word, we are not concerned with its visual properties (the print on the page), but with its meaning--the internal relations (relations in the mind) it has within the language-games and forms of life which constitute its grammar.

It is this unthinking observation of what is before the mind (as opposed to the eye) that constitutes introspection. Here, as in the observation of external nature, it is the refusal to accept old ways of looking that separates good introspection from bad. Some commentators (e.g. Gier, 1981) have argued that Wittgenstein rejected introspection as surely as he did behaviorism, but this assertion is hard to reconcile with the fact that The Principles of Psychology was a book Wittgenstein greatly admired, and "one of the very few books he used as a kind of text in his lectures" (Fann, 1969, p. 47). It was not introspection that Wittgenstein rejected, but bad introspection, introspection which accepts the Cartesian distinction of an inner observer which questions, doubts and accumulates knowledge of "human nature." For Wittgenstein, knowledge has no place in introspection because it is the whole human being in the hurly-burly of life that doubts and questions, not a disembodied

inner observer. Doubting and questioning are manifestations of the living human being in linguistic intercourse with his world. When abstracted from this context for philosophical purposes these language-games lose their vitality and end up, in Wittgenstein's phrase, "like an engine idling" (PI, #132), unable to do any useful work for us. The lonely meditations of Descartes are just such a misapplication of doubting and questioning. Descartes' quest for an inner certainty attempted to turn doubt back on itself by reasoning that "we cannot doubt our existence without existing while we doubt" (quoted in Malcolm, 1986, p. 203). Thus he attempts to make of his uncertainty the one certainty he is seeking: he bends and twists in his philosophical isolation until he catches his own tail. This contortion of the language-games of doubt and certainty indicates how confused philosophy can become when language is removed from its original home.

For Wittgenstein there can be no quest for an inner certainty, as the "inner experiences"--pain, sorrow, fear, pleasure, etc.--are already far more than certain: they are the ground on which the game of certainty is played. We cannot turn doubt against this ground because in the process we destroy the very framework of our doubting; as can be seen in the case of Descartes, our doubts begin to make no sense: it is as if we had asked our hand to dissect itself. Psychologically, the

observer is the observed, as Finch (1977) illustrates with the example of pain: "Pain is not something which "confronts us" inwardly, or which we "look upon". It is part of our manifesting in the circumstances of the world I cannot see my pain because I am my pain" (p. 139). Pain is part of the whole complex which animates the knowing observer; we are unable to separate ourselves from it, to make it stay put while we apply the questions and doubts which are the precursors of our knowledge. Thus, as a standard textbook of nursing (Henderson & Nite, 1978, p. 1908) notes, there is no scientifically acceptable definition of pain, though it could be considered the center around which all of medicine is organized.

To Wittgenstein, all the psychological terms of human beings--thought, knowledge, the self, consciousness, the ego, the will, etc.--can be understood only through their grammar. The attempt to study the "inner processes" to which these terms are commonly thought to refer is to Wittgenstein a grave philosophical error committed by those who have been "bewitched by language" into believing that a correspondence must exist between word and thing. For Wittgenstein, all the psychological terms are simply ways of talking (language-games) and thus their secrets are grammatical, not psychological or physiological.

Therefore we learn about knowledge not by grinding up brains and extracting various residues, but by seeing how the word "know" is used in our daily discourse. For this reason introspection is indispensable to psychology, for how else are we to study grammar? That is why the assault on the notion of a private language (and thus on private experience) is "the central argument of Wittgenstein's philosophy" (Finch, 1977, p. 127). As Finch elaborates, once the essential community of language is established, the illusory isolation of the Cartesian self begins to dissolve:

What should be clear at the outset is that the main point of the private language discussion is not to establish something about language (e.g. that language is necessarily "social"). Wittgenstein is after much bigger game than that. He is out to establish something about so-called "inner experience", to break down the Cartesian way of thinking of this, and thus to change in a fundamental way our conception of ourselves. There is an attack on the prevailing philosophical conception of the self implicit in the attack on the possibility of a private language, and it is this which gives the project its importance. (Ibid.)

When we survey the grammar of a word we range far beyond the individual. Wittgenstein exerted great effort to show that no human being can carry about within him a self-contained, private language. For Wittgenstein the meaning of a word is always its use, and use implies a world of human beings with their innumerable conventions and patterns of interaction.

How could human behavior be described? Surely only by sketching the actions of a variety of

humans as they are all mixed together. What determines our judgments, concepts and reactions, is not what one man is doing now, an individual action, but the whole hurly-burly of human actions, the background against which we see any action. (Z, L #567)

The only way that we can secure the meaning of the words with which we wish to characterize our mental life is through the use these words receive in the world at large. The way that the word "self" is used is all that we will ever know about the ultimate nature of the self. Thus William James was able to make a sensible depiction of the self not because he was an acute observer of some inner thing, but because he understood what we all mean when we use the word "self." If we are able to purge ourselves of the Cartesian picture of an inner observer which actually sees the things we talk about, introspection resumes its rightful place in psychology. It is not an embarrassing anachronism now safely superseded, but the only means at our disposal for fulfilling the original project of psychology--to understand the place of the observer in the field of the psyche.

Conclusion

Wittgenstein's philosophy has been called the first serious challenge to three centuries of Cartesianism. While many have recognized the importance of "getting below the cleavage between subject and object," Wittgenstein is one of the very few who are

actually able to do it. As Finch (1977) points out, Wittgenstein is convincing where so many are not.

Wittgenstein's philosophy requires us to "think in a new way", and hence its great difficulty. He is the first philosopher who is really outside of modern philosophy--that is, outside the philosophy of the last 300 years. In an exact way he is the first philosopher of our time who is not a Cartesian.

We have heard this before about other philosophers. It has indeed been fashionable for a long time, on various provocations, to sound the death-knell for Cartesianism. But when the noise abates, the patient is found to be still there, gasping but alive. (p. vii)

For Wittgenstein no theory, no "ology" or "ism", can get beneath the Cartesian fissure because any such theory is only a part of language, and thus stands in contradiction to the whole field of language. If we try to base our understanding on certain key words or concepts (as indeed this thesis has sought to do with "thought," "time," "cultivation," "individual," etc.), then at some point we have to arbitrarily sever the web of language and thereby must inevitably breed contradiction and confusion. Thus, as will be seen in the case of the systems theorists (Chapter Six), the very way in which we construct a theory to renounce the Cartesian distinctions can be shown to incorporate the same confusions against which we are trying to rebel. Our attempts to demolish Cartesianism with theory, it appears, must invariably end by perpetuating it.

Wittgenstein once told a friend that "he felt as though he were writing for people who would think in

quite a different way, breathe a different air of life, from that of present-day man" (cited in Fann, 1969, p. 110). "To many who encountered him this quality of newness, of great originality, constituted a tangible and even oppressive presence. Norman Malcolm (1984), in recounting his experience of Wittgenstein's lectures, has written evocatively of the powerful impression "that he was fighting his way through profoundly difficult problems and that his method of attacking them was absolutely original" (p. 23). It was this immediate apprehension of the seriousness of Wittgenstein's investigations that kept Malcolm (among many others) riveted to his seat, though he "understood almost nothing of the lectures" and estimated that "one had to attend quite a long time (at least three terms, I should say) before one could begin to get any grasp of what he was doing" (ibid., pp. 23, 27). Philosophy was to Wittgenstein intensely hard work: "He drove himself fiercely" and "was always exhausted by his lectures" (ibid., p. 26). This was an intensity born of necessity. Wittgenstein had removed from himself the buffer of time. He knew that everything of importance that could be discovered in philosophy is already there if one has the energy to uncover it. He saw the tendency to wait for understanding to come in time as enervating, sapping the urgency of the investigation.

Thus he wrote of his early work, the Tractatus Logico-Philosophicus, "Much more dangerous (than dogmatism) is another error which also pervades the whole book--the notion that there are questions the answers to which will be discovered at some later date" (quoted in Fann, 1969, p. 56). If anything of value is to be found, it is to be found now, wrested from the lethargic and complacent habits of thought and speech in which it is embedded.

It is precisely this kind of intensity which is lacking in psychology. Theories and therapies succeed one another without ever escaping the grasp of Cartesianism. Each succeeding theory is just that: a point of view for which one seeks verification. We can see now that this thesis has adopted the same pattern, plodding along cultivating its own theory of theory as cultivation. Wittgenstein is the scarecrow who startles us when we look up. Everything we have gathered is lost, but in the moment of startled attention everything we need is revealed. The encounter with Wittgenstein is always difficult, but he affords what the others cannot: a glimpse beyond the narrow confines of our private Cartesian cell.

Chapter Six

BATESON AND MATURANA: THE SYSTEMIC CARTESIANS

In the previous chapter we dealt with the apparently disparate schools of behaviorism and humanistic/existential psychology on the basis of a shared assumption which renders inconsequential their subsequent divergence in terms of theory and therapy. We are not the first to so treat these strange bedfellows. A number of years ago Gregory Bateson (cited in Keeney, 1983) was pointing out that both these approaches to psychology, along with psychoanalysis, "belong to the same world view . . . one postulating a material world of physical objects obeying the laws of force and energy" (p. 12). All the major schools of psychology, he felt, were united at the level of epistemology; they all operated from a set of shared assumptions about the world which governed their subsequent action and cognition. Bateson characterized this "old epistemology" as being grounded in linear thinking; that is, in reductionistic, analytic modes of thought which ignored context and relationship in favour of instrumentality and control. For Bateson (1979), the inevitable consequences of such a narrow view are "greed, monstrous over-growth, war, tyranny, and pollution" (p. 241). Any psychology that operates from such an epistemology can only contribute further to the general processes of objectification and

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exploitation which threaten to leave "every aspect of our civilization . . . split wide open" (ibid.). What is needed, said Bateson, is a new beginning, a new epistemology.

Bateson's pioneering efforts in epistemological reform have, as Paul Dell (1985) aptly put it, "bred excitement, boredom, irritation and confusion" (p. 1). This manifold reaction is at least indicative that Bateson has struck a chord to which many feel the need to respond. There is, as he noted, a widespread recognition that "something [is] deeply wrong" (1979, p. 243). But Bateson felt that this epistemological crisis does not constitute "a necessary tribulation about which nothing can be done" (ibid.). He thought that the burgeoning fields of "cybernetics, systems theory, information theory, and related sciences" had brought about "extraordinary advances . . . in our knowledge of what sort of a thing the environment is, what sort of a thing an organism is, and, especially, what sort of a thing mind is" (1972, p. 315). This could provide, he felt, the basis for a new epistemology, one which would emphasize "interrelation, complexity, and context" (Keeney, 1983, p. 14). Now, this immediately strikes one as a curious piece of reasoning, as it is hard to see how anything fundamentally new can grow out of a conglomeration of activities so intimately associated

with the old epistemology. What we want to examine in this final chapter, then, is this: Does the "new epistemology" of the systemic school provide a new beginning for psychology, or are we simply witnessing once again a reorganization of the old?

What is a New Epistemology?

In order to determine what a new epistemology is, and what it has to offer, it is first necessary to eliminate the pretenders. There are legion in contemporary psychotherapy, especially in family therapy. To have a new epistemology is a prestigious endowment, and so many make the claim on dubious grounds. Bateson himself observed that most family therapists quickly reveal a solid foundation in Newtonian thinking beneath their flimsy claims to a "radically different frame of reference, paradigm, and epistemology" (Keeney, 1982, p. 156). Keeney (ibid.) expands this criticism, but at the same time stakes his own claim to a "radically different" epistemology:

A "systems", "nonlinear", "ecological", "circular" epistemology may or may not signify a cybernetic epistemology. In family therapy, for example, a "systemic epistemology" is often used only to indicate a holistic view, e.g., working with families rather than individuals. General systems theory, which got its official baptism from von Bertalanffy's work, must be differentiated from cybernetics. . . . cybernetics is principally concerned with changing our conceptual lens from substance to form, rather than parts to wholes. In the world of cybernetics, both parts and wholes are examined in terms of their patterns of organization The cybernetician's criterion of distinction centers around whether one is in a

descriptive universe that utilizes metaphors of matter, force, and energy or is based on the metaphors of pattern, form, organization, and organization. (pp. 154-55)

Keeney wants to characterize the new epistemology as cybernetic; that is, as attempting to "see the world primarily as systems of pattern and information rather than as systems of mass and energy" (Tomm, 1983a, p. 9). He thus hopes to advance the cause of the "one true epistemology," but we cannot fail to notice here the same process of fragmentation that we have described as a general tendency whenever human beings think about something. It is not enough simply to have a new epistemology; it must be a certain type of new epistemology, and, as always, there are those qualified to say which is the right new epistemology and which is wrong (though "right" and "wrong" must be circumlocuted with terms such as: "most useful," "most practical," "inadequate," "less desirable," etc.). The qualifications necessary to become such an arbitrator of epistemologies are remarkably familiar: experience and knowledge. He who has convincingly demonstrated the most knowledge and expertise in the field is he who is best qualified to judge the validity of epistemologies. The new epistemology, then, has plenty of room in it for that denizen of the old epistemology--the expert. The individual thus assumes a status in the new epistemology similar to that he held in the old: there are those who

"have it," those who don't, and those who know who has it and who does not.

It is to Bateson's credit that he did not think he had it. In a revealing passage too often passed by, Bateson (1972) admitted that, whatever his intellectual leanings, he continued to live and work by the old epistemology.

Let me say that I don't know how to think [in the new way implied by the cybernetic epistemology]. Intellectually, . . . I can give you a reasoned exposition of this matter; but if I am cutting down a tree, I still think "Gregory Bateson" is cutting down the tree. I am cutting down the tree. "Myself" is to me still an excessively concrete object, different from the rest of what I have been calling "mind". (p. 462)

Bateson did not know how to achieve the necessary epistemological conversion, only that "that step is not an easy one" (ibid.). This passage has an important message for those who wish to "attain" a new epistemology in order to accomplish various ends, such as "better therapy." It is not a simple matter of effort or will which brings one a new epistemology; on the contrary, will and effort are the modus vivendi of the old epistemology. Nor can one simply decide to use a new epistemology as a tool; the very idea of using anything as a tool is hopelessly "old-epistemological." Yet one sees this kind of mind-set throughout the writings of even the most highly regarded systems theorists. Keeney (1983), for instance, feels we can "choose to operate within the framework of a nonlinear

epistemology" (p. 15), "achieve an epistemological conversion" (p. 193), and even "[l]earn to trigger the necessary higher order feedback processes before we destroy the planet" (p. 140--[italics added]). Likewise, Tomm (1983) talks about "employing" a circular epistemology (p. 10), of the "deliberate attempt . . . to synthesize behavioral connections into larger, holistic patterns" (p. 11), of being "able to achieve and hold a circular epistemology" (ibid.), and of "striving" and "struggling" to learn the requisite skills (p. 12). The Milan Associates, whose approach is undoubtedly the best therapeutic application of the systemic principles (Hoffman, 1985), maintain they have "adopted" the systemic epistemology (Selvini Palazzoli et al., 1980, p. 31) and that they "made the effort" to change their linear epistemology (Selvini Palazzoli et al., 1978, p. 51). In all these cases, the underlying epistemology remains one of effort and mechanism, old world values indeed. As Bateson was attempting to illustrate with the example of himself, one cannot "employ" or "adopt" an epistemology--it employs you! Thus we can begin to see what the "new epistemology" is. It is not a description of what is actually taking place among theorists and therapists, but rather a description of a desired state, an end toward which effort can be directed (something akin to sainthood in the Catholic

Church). As such it does not differ from any other product of thought: it is the projection of a modified past into an imaginary future.

To be sure, most treatises on the new epistemology contain a caveat similar to Keeney's (1983): "It is unlikely that anyone has fully realized a nonlinear epistemology" (p. 16). But such tokens of false modesty do not disguise the fact that the new epistemology has become a reified reward for adopting a certain point of view. Where most theories offer perhaps a framework for insight or greater understanding, the systemic orientation offers the opportunity for personal transformation: "A change in epistemology means transforming one's way of experiencing the world" (ibid., p. 7). No wonder the systemic fold is drawing many converts: the perceived rewards here are great.

Paul Dell (1985) pointed out that Bateson uses the term "epistemology" in at least five different ways. The "least important" of these, says Dell, is as a sort of grandiose synonym for paradigm. But it is this usage "that has become the most popular in the family therapy field today" (ibid., p. 2), perhaps because it is this interpretation of epistemology which lends itself most readily to transformation by thought into a future reward for the intellectually faithful. As Dell points out, "it seems likely that the term 'epistemology' has often been used by family therapists when the word

'theory' would be more modest and, perhaps, more accurate" (ibid.). Such moderation would at least temper the exclusivity fostered by those who imagine the new epistemology to be a special state of mind for the exceptional and dedicated few. It is unfortunate that this superficial understanding of Bateson's epistemology has prevailed. However, it is probably fair to say that this simply constitutes a perversion of what he was actually trying to get at, and it would not be wise to dismiss the whole of his effort on this account. Beneath the clamor and hubbub of those at the epistemological rummage sale one senses something deeper and worth pursuing further.

Bateson's Germinal Question

It is difficult to tease out what might be worthwhile in Bateson's epistemology, just because it is so ubiquitous. Bateson seems to resort to the term every time he wishes to explain anything beyond the commonplace. As Dell (1985) indicates in the following passage, every avenue of Bateson's investigation seems to end in a new aspect of epistemology:

For Bateson, almost everything is epistemology. To review briefly, first, he had a cosmology of the living world. Nevertheless, Bateson called it an epistemology. Second, Bateson insisted that the various life sciences are subsumed by a metascience--epistemology. Third, Bateson contended that a living organism's character structure is actually its own personal epistemology. Thus, there seems to be little room for anything but epistemology in Bateson's

worldview. Like a black hole, Bateson's epistemology seems to attract and devour everything in its vicinity (p. 4)

If Freud saw sex at the basis of all biological interaction, Bateson sees knowledge. "Bateson insisted that the fundamental characteristic of biological systems is that they possess the ability to know, think, and decide" (ibid., p., 3). This somewhat abstract principle is rendered more comprehensible in the specific. In the introduction to Mind and Nature (1979) Bateson relates that he had been concerned throughout his life with the question of "how we can know anything," where "we" includes "the starfish and the redwood forest, the segmenting egg, and the senate of the United States" (p. 4). How, asks Bateson, do these living systems know how to do the things they do: "grow into five-way symmetry, . . . survive a forest fire, . . . grow and stay the same shape", etc. (ibid.)? This is the basic question which forms the staging area for Bateson's far-reaching forays into anthropology, biology, and psychology.

Unfortunately, Bateson never really answers his lifelong question. He talks around it, sketching a subtle and perceptive picture of the "sacred unity" of the biosphere, and provides penetrating insights into how various illusions and misconceptions have set man apart from nature and himself, but he never seems to resolve his germinal question. Dell (1985) feels that this

failure is due to Bateson's lack of an ontology--there is no position taken on "what sort of a world this is" and so no ground against which questions can be definitively answered (p. 3). Thus, says Dell (ibid.): "All of his arguments remain tautological and a bit mystical because he justifies his epistemology solely in terms of his epistemology. He lacks an ontology in which to ground his arguments" (p. 5). It is hard to know what to make of this explanation, as it seems that Bateson spent most of his time talking about exactly that: what sort of a world this is. It is difficult to see how one could sort his ontological statements from his epistemological statements, especially since Bateson seems to equate being (living) with knowing. There is a simpler and perhaps bolder explanation for Bateson's failure: he never asked the right question.

What Bateson did not Know

To expose the fallacy of Bateson's primary question (essentially: "How do living systems know how to do the things they do?") we have only to review Wittgenstein's examination of the grammar of knowledge. We have given the full exposition in the previous chapter and will here recall only the most pertinent aspects.

Whereas Bateson sees knowing as the basis of all biological processes, Wittgenstein insists that it must

be limited to but a very small portion of human activity. As we have seen, Wittgenstein will not even allow an individual the privilege of knowing what he is thinking, saying, or doing (though it is possible to know what one has thought, said, or done). Life as it unfolds cannot be captured in the crude processes of verification or "finding out" which characterize knowing. An interval of time must be created in which knowing is established (e.g., knowing how to drive a car or speak a language, knowing one's self, knowing what time it is, etc.). Within this peculiar time-bound domain of human thought the processes involving knowledge, doubt and certainty have their rightful application. But Wittgenstein exerts great effort to show that even the first stirrings of doubt can take place only against a vast indubitable background which cannot itself be questioned. This "scaffolding" (OC, #211) or "river-bed" (OC, #97) of our lives must remain immune from doubt in order for our doubts to make sense. Finch (1977) calls this foundation the area of "ordinary certainties" (though we have discussed the difficulty of applying any such terms in this regard) and provides a useful summary of the two main limiting conditions of knowledge with which Wittgenstein was concerned:

1--Knowledge needs to be grounded (OC, ##16, 18, 91, 243, 270, 504). This means that when we claim to know something, it has to be possible to state

how we know it, or to show that we are in a position to know it (OC, ##550, 555). With regard to ordinary certainties, however, there is no ground (OC, #307), and we do not have to be able show how we know them (OC, ##34, 176).

2--Knowledge always carries with it the possibility of doubt (OC, #480). Knowledge and doubt have to make sense together. With regard to ordinary certainties, on the other hand, no doubt is possible, or at least no reasonable doubt, or no doubt that would not bring a large part of my world toppling down with it, if it be possible; and hence no knowledge is possible either. (p. 230)

Finch (ibid.) also provides an excellent summary of the import of these conditions for our understanding of knowledge:

These meaning-conditions for knowledge amount to the one main condition that knowledge has to be able to fail (OC, ##41, 58). What characterizes ordinary certainties, on the other hand, is that in normal circumstances it is inconceivable that they should fail because they are just what makes up the normal circumstances and so also determine what constitutes failure. If abnormal circumstances should sweep such certainties away, it would be tantamount to "normality" or "reality" itself giving way.

Knowledge, then, is attached to the realm of "ordinary certainties," as Wittgenstein put it, on "the hinges of doubt" (OC, ##341, 343). And these hinges can only open one way; doubt cannot be turned back on the doubter. In the failure to realize this arise the great confusions of modern philosophy with which Wittgenstein was so concerned.

Thus we do not know what forms the background to our knowing. Our thought and action must ultimately rest on "a matrix of surety, which is prior to

knowledge" (Finch, 1977, p. 229). This matrix cannot itself be questioned because it is from this that we "define what doubting is [and] what it makes sense to doubt" (ibid., p. 222). It is this matrix that Bateson wishes to characterize as our epistemology, but to Wittgenstein this cannot be an epistemology because it is prior to the whole intellectual endeavor which distinguishes and defines such entities. An epistemology is not the ground of our knowing, because this can never be known, but is rather a set of assumptions, ideas, premises, etc., which we, as observers, wish to designate as being particularly significant for some domain of human activity. And we in turn have our grounds for making these distinctions, about which ultimately we know nothing. Here, the systemic theorist might want to invoke "a metaepistemology" (Keeney, 1982, p. 157), but in so doing simply moves laterally within the sphere of knowing and doubting. We may give grounds for our grounds, but eventually reach a point where we "have exhausted the justifications, [where we] have reached bedrock, and [our] spade is turned" (PI, #217). "At bottom," says Finch (1977), "language is a doing; and this doing cannot be further justified or accounted for. It is what one commentator has called a full stop" (p. 199). Doubting must have an end (PI, p. 180), and at this end we enter the "ungrounded way of acting" (OC,

#110) which forms the foundation of our lives.

Epistemology, if we are interested in such a thing,

comes later.

As Finch (1977) brings out in the following passages, Wittgenstein challenges the entire philosophical tradition which seeks to ground our lives in knowing:

We do not . . . start with knowing. There is no given which is epistemologically primary. Rather we start with acting-with-certainty. Our action is, as it were, embedded in a matrix of surety, which is prior to knowledge, being the matrix of knowing-and-doubting and knowing-and-being-mistaken. Ordinary certainties are the roads on which we walk without question, not because they are the only possible roads or the right roads or even the pragmatically justified roads, but because they are the roads which we are on, and no occasion has arisen for leaving them.

Wittgenstein's dictum that there is a sureness which is not a knowing, but which is prior to knowing-and-not-knowing, challenges the primacy of epistemology across the board . . . In his view philosophers have been bewitched by the word know (OC, #435), a word which he says won't "tolerate a metaphysical emphasis" (OC, #482). The philosophical tradition has given this word a preeminence which, he says, it does not deserve. (p. 232)

Clearly Bateson follows in this tradition. He wants to bring epistemology out of the philosophy texts and install it at the basis of a new understanding of life. But if we now return to his germinal question (e.g.: "How does the starfish know how to grow into five-way symmetry?"), we can see how deeply Bateson is embroiled in the various confusions surrounding the use of "know." For the starfish there is no possibility of failure; it

cannot fail to grow into five-way symmetry and still be a starfish. In other words, there is no separation between the starfish and its growing into which we can insert knowledge. Though he felt himself the herald of a new age, in his formal philosophy Bateson ends up perpetuating the whole cloud of Cartesian confusions he purported to end. Bateson's epistemology is simply Descartes' res cogitans "to ayery thynnesse beate" (John Donne).

From Bateson to Maturana

If, to recall Dell's metaphor, Bateson's epistemology is like a black hole, there is one important difference. The black hole attracts and devours all, but from Bateson's epistemology comes a lamentable emanation--confusion. Though his general approach to the problems of psychology has helped foster insight and creative thinking, Bateson's attempts to establish a formal basis in epistemology have only perpetuated the Cartesian confusions in a particularly subtle and virulent form. This dubious legacy is perhaps best illustrated in the work of the Chilean biologist Humberto Maturana, a careful and rigorous thinker not susceptible to mild strains of confusion. It will be the task of the following section to trace out some of the Cartesian confusions ~~which~~ we saw in Bateson as they manifest themselves in the work of

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Maturana.

It was Maturana whom Bateson felt was best equipped to bring to fruition the work he had begun (Dell, 1985, p. 5). And indeed Maturana and his associates have developed in their work on "Autopoiesis" a theoretical system which many feel "may at long last be providing us with the sound foundation which the social and behavioral sciences so sorely need" (ibid., p. 17).

Though strictly speaking a theory of biological systems, various scholars have been engaged in working out the implications of Autopoiesis for the practice of psychotherapy (e.g., Dell, 1982, 1985; Hoffman, 1985; Keeney, 1982, 1983), and Maturana himself has recently addressed questions related to this area (Maturana, 1983; Mendez, Coddou, & Maturana, 1985). These efforts have helped render more intelligible a difficult and abstract theory. Our concern here, however, will not be with summarizing or further developing these interpretive efforts, but rather with following the thread of confusion which was picked up in Bateson's work. Thus our examination of Maturana's work will be organized not around what is clear and intelligible, but rather around what is confused and contradictory. In this way it may be possible to complement the efforts which have been made to date and thus speed the exegesis of this undoubtedly significant theory.

With Maturana, the clearest indication that we

have not left behind Bateson's Cartesian legacy is that we are once again surrounded by knowing, or as Maturana prefers to call it, cognition.¹ Like Bateson, Maturana promotes knowing as a fundamental property of living systems, to the extent that he maintains "the two phenomena--cognition and the process of living--are actually one and the same" (cited in Dell, 1985, p. 5). "Living, as a process, is a process of cognition," says Maturana; therefore "to know has become to live" (quoted in *ibid.*; cf. Maturana & Varela, 1987, p. 174). There could hardly be a balder reformulation of the Cogito: "I think, therefore I am." This is the kind of statement of which Wittgenstein remarked: "Why does it strike me as if I did not understand the sentence?" (OG, #347). Maturana² here is pushing at language, trying to get it to express something which does not come easily. This, of course, is the task of every writer engaged in the expression of "new ideas," but here we run into what could be called "the grain of language." If we want a word to function for us, we must respect its place in the "language-game which is its original home" (PI, #116). It is this context, or environment, from which the word draws meaning. If we dislocate the word from this background, its meaning cannot be naturally sustained. Language cannot be coerced; the more we push and pull at a word, the more artificial it becomes and the further

we are removed from the living thing in which we were originally interested. Wittgenstein expresses this point with rare elegance:

In the actual use of expressions we make detours, we go by side-roads. We see the straight highway before us, but of course we cannot use it, because it is permanently closed. (PI, #426)

Maturana attempts to take the open highway, to reach in a hurry where he wants to go. Like Bateson, he wants to drive "knowing" into a new domain of understanding. But in the process he runs roughshod over language and destroys the very meaning he wishes to convey. Maturana's equating of "knowing" and "living" is too far from our actual use of these words to convey any general meaning.² His attempt to so use these words is like the attempt to establish a private language: we want to jump aboard, but are left behind because there is no vehicle.

The further Maturana attempts to drive the concept of knowing, the more he becomes bogged down in the Cartesian confusions he has inherited from Bateson. Like Bateson, Maturana feels we can talk about knowing in assessing the conduct of any living system. In a public seminar in Calgary, Maturana (1983) equated the ability to play the piano with the ability of a fish to live in salt water:

I shall define cognition as adequate conduct performed in the domain specified by a question, or more generally, in a particular domain specified by an observer. . . . If somebody claims that he

knows how to play the piano, how do you assess whether he or she knows how to play the piano? You ask him or her to play and then you decide . . . whether or not there is adequate conduct in that system If you want to know whether a fish is a salt water fish, you immerse this fish in salt water and see whether or not it [displays] adequate conduct in salt water, which means [going] on swimming without dying. And if it goes on swimming without dying, then he knows. He has knowledge of being a fish in salt water. It's not different knowing whether a fish knows [how] to be a fish in salt water from knowing whether a person knows [how] to play the piano. It's exactly the same thing. You provide a domain in which you want to assess adequate conduct. (pt. 3; p. 6)

The main confusion here is caused by equating the knowing of the observer with the knowing of the piano player and the so-called knowing of the fish. It may be true that the knowledge of the observer about the fish is similar to his knowledge about the piano player (i.e., he knows something about the conduct of both), but if the observer says, "The fish knows how to live in salt water," then he has misapplied the word know. As was the case with Bateson's starfish, the fish does not know how to live in salt water because there is in this regard no possibility of failure; it cannot not know this and still be a salt-water fish. Living in salt water is one of the constitutive conditions of the fish; part of the fixed grounds upon which doubts, if it were to have any, would be based. In contrast, it is correct to say that a person does or does not know how to play the piano because it is quite possible to answer this question in either direction; there is a possibility in

this case of not knowing. This difference can be expressed somewhat glibly by noting that we never see a living fish without water (only a dying fish), whereas we often see a person (even a pianist) without a piano. Thus Maturana commits the classical Cartesian error of invoking knowing where it does not belong. This mistake is (unknowingly!) concealed by simultaneously talking about both instances of knowing in terms of an observer, who can be said to know about both cases. But the equivalence of his knowing should not obscure the important distinction between the knowing of the piano player and the "knowing" of the fish.

The crux of Maturana's difficulty with knowing is that he creates his own definition of it: namely, "cognition as adequate conduct performed in the domain specified . . . by an observer" (ibid.). This is not an adequate definition of knowing. It covers part of the grammar entailed by knowing, but as Wittgenstein has shown us, there is a great deal more to consider. By so truncating knowing, Maturana distorts its meaning and leads us into the Cartesian temptation to spread the res cogitans over hill and dale. Within his definition, the knowing fish is joined in its cogitations by all creatures great and small. But we need not stop there; we have carte blanche to go as far as we want. Do we want to say a plant knows how to grow? A stomach to digest food? A star to shine? A cloud to rain? A stop sign

to control traffic? Dell (1985) reaches rock bottom: "the most fundamental knowledge is to 'know how' to exist. A rock knows how to exist" (p. 12): What do we gain by so diffusing knowledge throughout the cosmos? Does it make us feel less lonely? Is it like a glue that we want to stick into every cleavage we have made between noun and verb? But what concern does the rest of creation have with these preoccupations of linguistic observers? Wittgenstein asks simply: "Does a child believe that milk exists? Or does it know that milk exists? Does a cat know that a mouse exists?" (OC, #478). By now we can answer Wittgenstein's question for him: no doubt is possible here, and so there is no question of knowledge either. The separation we create between the child and its milk is an artifact of our operation as linguistic observers. As Wittgenstein brings out in the following passages, doubt can only enter the child's life after it learns to speak, and then only in a restricted domain:

When a child learns language it learns at the same time what is to be investigated and what not. When it learns that there is a cupboard in the room, it isn't taught to doubt whether what it sees later on is still a cupboard or only a kind of stage set. (OC, #472)

Children do not learn that books exist, that armchairs exist, etc., etc.,--they learn to fetch books, sit in armchairs, etc., etc.

Later, questions about the existence of things do of course arise. "Is there such a thing as a unicorn?" and so on. But such a question is possible because as a rule no corresponding

question presents (itself. For how does one know how to set about satisfying oneself of the existence of unicorns? How did one learn the method for determining whether something exists or not? (OC, #476)

Without language there is no question of doubting and thus of knowledge (of, for example, the existence of things).

Therefore Maturana's definition of cognition as depending on the specifications of an observer will not do; rather it is the observer who must obey the specifications entailed in the grammar of know.

Maturana is thus caught in a peculiar dilemma of his own making: since his definition of cognition as adequate conduct is not adequate, he cannot say he knows what knowing is! To establish an adequate definition of knowing, Maturana must return to the language-games from which he has dislocated his truncated version of knowing.

In and Out of Language

We touch here on a very important question: What gives us the right to say Maturana's definition of cognition is adequate or inadequate? How can we say Maturana is right or wrong in this regard when it is a fundamental tenet of the systemic position that since there is no access to "an independent reality, then what each one knows or distinguishes is equally legitimate" (Mendez, Coddou, & Maturana, 1985, p. 5)? Finch (1977) puts the question in more general terms:

What establishes correctness in the way we speak

about the world? How do we know we speak about it rightly? How do we see things rightly, use the right concepts and understand things rightly?
(p. 194)

The systemic theorist hesitates to answer these questions because he has seen that traditional attempts to answer them in ontological terms--"the appeal to the way the world is independent of us" (ibid.)--will not suffice and he does not want to make the same error. But the very fact that the systemic theorists wish to advance a new epistemology shows that they have already decided the old one is wrong (though, as has been noted, they feel bound by their theoretical stance to find imaginative synonyms for the forbidden terms right and wrong). But Wittgenstein does not hesitate to answer these questions; on the contrary, they "occupy an important place in the Philosophical Investigations" (ibid.). How, then, does Wittgenstein answer such questions without resorting to ontological grounds?

Wittgenstein avoids the traditional ontological error because he never attempts to go outside language. On the contrary, he takes the very "things" with which various philosophers have tried to transcend language (e.g.: "experience," "reason," "inspiration," "common sense," "intuition," etc.) and treats these as phenomena of language. Since all these words and concepts are part of language, they must find their niche in the appropriate grammars and forms of life which surround

them. In other words, they must partake of the rule-governed nature of all language, otherwise they serve no better than a string of random letters. Thus, though we cannot go beyond language to find a justification for a word or concept, we can find a justification within language (and in fact must be able to do so if pressed on the matter). In Finch's (1977) phrase, grammar is "the last court of appeal for the correctness of language" (p. 199). If we have fully satisfied the requirements of grammar (i.e., used each word as well as possible), we have said a thing as well as it can be said. If we do not fully satisfy the requirements of grammar (as Bateson and Maturana do not when they talk about knowing), we advance a point of view which can legitimately be called incorrect.

There remains one further question in this regard: What makes our statements, however grammatically correct, descriptions of the world? The key point here is articulated by Finch (ibid.): "grammar is not something which hangs in the void; it is the practice of language, what we do, as this embodies the patterns and rules of correctness" (p. 198). In other words, language is an activity of the human animal and must take its place within the whole pattern of praxis which constitutes our lives. Whatever "the world" is, our language is part of it and so must somehow fit with it, though we cannot say how or why. Where we run into

trouble is in trying to explain one, in terms of the other. This occurs when we have "forgotten that such concepts as world and mind also arose out of language" (ibid., p. 151) and so cannot be used to "get outside it" and provide the comprehensive view we seek. When we "give up the idea that we have access through language to meaning and sense independent of language," then "it is no longer possible to speak of a universal framework within which language functions and which has a reality independent of language" (ibid., p. 150). Thus, like Maturana, we have closed the door between language and the world, but, unlike Maturana, do not conclude from this that all statements are equally valid. As Finch (ibid.) points out:

To drop the picture of "the way things really are" . . . does not dispose of the question of what justifies the way we speak about them but simply shifts its locus. If there is no sense in talking about how the world is, entirely apart from the ways we make sense of it, then we still have the problem of what constitutes sense, even if this will no longer be decided in the old way. (p. 195)

What we are left with is the way language is, and this, though we cannot explain it (because it is already the basis of the whole activity of explaining), is our only frame of reference. And this is all we need. There is no "essence" that eludes language, because language is already of this essence; already a part of the natural manifesting of the world, as much as the forests, lakes and streams. The patterns of language (grammar) are as

real as anything, though not more real (i.e., not a "tool" for abstracting the essence of things).

Language, as it is, makes sense, just as the forest, as it is, "makes sense" (i.e., fits with its world); this despite the fact that no appeal to the way things really are can be used as a justification or corroboration of this sense. Language cannot reach outside itself, but does not need to because it already has its place in the natural order. Even if we have closed the door our room remains in the world. Thus, we may, as Maturana suggests, bring forth a world in language, but do not create it ex nihilo.

What we have when we speak correctly, then, while it is not a description of an "independent reality," is still a description of the world because that is what we mean by "the world." The world does not arise until we speak: "we cannot confront the world outside language-games" (Finch, 1977, p. 172). Without language there is no observer separate from what is observed and so no world to be distinguished as a background to one's doing. Within language we bring forth a world, but not, as Wittgenstein once put it, "by some extraordinary act of mind." Rather, every move in each language-game fits together with all the rest in a concatenation whose overall configuration is flexible but whose links are forged through centuries of use. Each speaker is bound

by these conventions to "an enormous system the entire system of our language-games" (OC, ##410, 411) which is our world³(there is no other). And whatever the inclination of individual speakers, it is the entire system which holds the final authority. It is quite possible for them to be mistaken, but it cannot be wrong since it is "the inherited background against which [we] distinguish between true and false" (OC, #94). In the words of Hugo von Hofmannsthal: "The word is mightier than he who speaks it" (quoted in Finch, 1977, p. 94). Those who would say, then, that "what each one knows or distinguishes is equally legitimate" are in a peculiar way perpetuating the myth they wish to debunk since they base this statement on the notion of something beyond language which renders grammar inconsequential (some kind of non-objective, non-independent reality which somehow swallows up or negates the sense of language). If we stay within language we automatically begin sorting sense from nonsense (sometimes "patent" nonsense, sometimes "disguised" nonsense (PI, #464)). As Wittgenstein notes, the great difficulty here is to resist the temptation to go beyond language (even by saying what the world is not like): "it is difficult to begin at the beginning. And not try to go further back" (OC, #471).

Maturana's Negative Ontology

In many ways, Maturana's understanding of language

is very close to Wittgenstein's. For Maturana (1983) everything that exists, exists in language: "without language there is no reality" (pt. 3; p. 11).

Likewise, he is adamant that language is "a closed domain" and that "we cannot get out of language through language" (ibid., p. 10). He is careful to avoid the search for ontological absolutes which he describes as an important but misguided part of our philosophical tradition:

In our historical tradition, there has been a continual search for the absolute, for the thing in itself. To speak about the thing in itself we must make distinctions which show or specify the attributes of the thing itself, and part of the history of philosophy has to do with that. But how could we do that? If we were to distinguish and talk about something which was the thing itself, then it is language . . . so it is not the thing itself. In language we cannot make statements about the thing itself . . . Language is . . . a closed domain. (ibid.)

So Maturana is fully aware of the traditional ontological error, but at the same time sets out to establish the biological foundations of language. Thus he is seeking something more fundamental than language but all the while operating in language. He describes his peculiar task as follows:

I shall . . . speak about language as a biologist. In so doing, I shall use language, notwithstanding that this use of language to speak about language is within the core of the problem I wish to consider. (Maturana, 1978, pp. 27-28)

The reason he can do this, says Maturana, is because he is operating as part of the "closed cognitive domain" of

science. That is, he accepts from the beginning that his "statements are, of necessity, subject dependent, valid only in the domain of interactions in which the standard [scientific] observer exists and operates" (ibid., p. 29). Thus he is not talking about "a reality that is ontologically objective and independent of us" but simply making statements that must find their niche within the "closed cognitive domain" of science (ibid.). Only with these limits clearly established does Maturana advance the thesis that language can be explained as the "trivial necessary result" of "fundamental" biological processes such as "ontogenic structural coupling" (ibid., p. 50).

Thus Maturana makes no claim for the ontological validity of his statements; in fact, he is very careful to avoid this. Surprisingly, this has not always been recognized, even by some of Maturana's strongest advocates. Dell (1985), for instance, feels that Maturana's work provides an "ontological biology" on which we can base the social and behavioral sciences (p. 17). This is a very tempting version of the traditional ontological error, because it seems that since the language-using human being is first of all a living creature, his biology must be more fundamental than his language. But it is not his biology, it is ours. "Biology" (with all its concepts, including

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structural determinism) is not something we discover, but something we have constructed in our operation as linguistic observers. It stands alongside all other forms of description as cohabitators in language and cannot claim any special status as an explanatory mode simply because it is supposed to be about "fundamental processes" of the living. That claim is simply another linguistic construction which can be investigated along with all the other ontological claims which, though they are part of language, have sought to go beyond it. Maturana's position is more subtle than this; he slips by the traditional ontological error while Dell slips into it.

But for all his care in avoiding the traditional ontological error, it is possible to detect in Maturana's work something which could be termed a "negative ontology." We can begin to see what this means by asking the question: If there is no such thing as an independent, objective reality, why is Maturana always talking about it? In the article he co-authored with Mendez and Coddou (1985), for instance, the notion of an/independent or objective reality is mentioned more than one hundred times! Ostensibly this is done in order to show the fallacy of it, to "put it in parentheses," or otherwise negate it. But here we run into another phenomenon of language in which Wittgenstein was very much interested; namely, when we

negate something, the negation depends for its sense on the thing negated. For instance, says Wittgenstein, "when I want to explain the word 'red' to someone, in the sentence 'That is not red', I do it by pointing to something red" (PI, #429). Thus, it "is as if the negation of a proposition had to make it true in a certain sense in order to negate it" (PI, #447). This occurs because no one part of language works in isolation from the rest. It was the realization of this which in large part prompted Wittgenstein to leave behind the atomistic, reductionistic philosophy of his early phase and move toward his later understanding of the organic or, as he preferred, physiognomic nature of language. In some remarks to a friend in 1929 Wittgenstein illustrated this point by comparing language with the act of measurement (see Kenny, 1973, p. 106f.). When we measure something, Wittgenstein pointed out, we must lay the whole scale up against it, not just an individual graduating line. Thus we know simultaneously not only what length the object reaches, say the 10 cm mark, but also that it does not reach 11, 12, 13 cm, etc. In other words, the whole scale is needed to take a measurement, not just a single mark. Just so, when we use language, it is "whole proposition-systems . . . that are compared with reality,³ not single propositions" (Wittgenstein, quoted in *ibid.*, p. 107).

When an observation is made, the description which arises depends not only on what has been said, but also on various things which have not been said. It is as if all the potential statements which might be used to characterize a given observation are needed to support the description which is actually used. So, when Maturana says there is no such thing as an objective, independent reality he does not thereby dismiss it. On the contrary, he brings it into the picture, because the whole system of propositions which relate to this concept must be invoked to support the subsequent negation. As long as we keep trying to negate something, ~~then~~, we must also sustain it! The way to escape such "paradoxes" is to simply relinquish our efforts to "get rid of them." Thus we may come across the concept of an objective, independent reality but simply leave it behind, as we have left behind the notions of a flat earth and a man in the moon. If not, we are in the position of the monk in the well known story who refuses to help his companion carry a beautiful girl across a muddy street. As the two walk on, the deed preys on the monk's mind and he begins to admonish his companion for associating with such an attractive young woman. But his companion simply points out that he has left the woman back on the street corner, while the monk is still carrying her. Thus it is somewhat ironic when Maturana et al. (1985) tell us that they have arrived at "the

complete abandonment of the notion of objective reality itself" (p. 6). On the contrary, like the alcoholic who has hidden his bottle but can't keep his mind off it, they are obsessed with it.

In his constant negating of the proposition of an independent, objective reality, Maturana sets up a kind of negative ontology. He takes no position on what kind of a world it is; but takes a definite stand on what sort of a world it is not. The ontological character of this negative ontology is revealed in its supposed dominion over language. An ontological claim is always a linguistic construction (idea, concept, proposition, theory, etc.) which is nonetheless held to be beyond language (because it concerns the "true nature" or "essence" of the world and is thus prior to language) and therefore determines what can and cannot be said. For Maturana what cannot be said is anything based on the notion of an "objective, independent reality," but the obviously ontological character of this condition is disguised by its supposed consequence: namely, "what each one knows or distinguishes is equally legitimate." Here we have an ontological condition which claims that there are no such conditions! Maturana's ontology, like a spurious dweller in language aware of its own illegitimacy, attempts to cloak itself in its own negation.

Thus we return to the same confusion via ontology which we earlier approached through epistemology: The dictum that "what each one knows or distinguishes is equally legitimate" depends for its sense on the notion of something beyond language which renders grammar inconsequential. This convergence confirms Finch's (1977) observation that "[t]he ontological picture is at one with the epistemological; to say the world is definite is to say that it must consist of elements" (p. 16). When we stay within language the question of the epistemological or ontological moorings of language is resolved into a question of grammar. As Wittgenstein put it: "Language is not tied down; but one part is tied to another" (quoted in Lee, 1980, p. 105). If, as Maturana insists, "our starting point is language" (1983, pt. 1; p. 7), then there can be no question of all points of view being equally legitimate: all our statements must be honed against grammar.

Conclusion

"The philosopher", Wittgenstein once said, "is not a citizen of any community of ideas. That is what makes him a philosopher" (quoted in Kenny, 1973, p. 1). We have visited one of the latest of such communities, that of the systems theorists. It is claimed by many that here people live in a different way. Along the main street lie all the familiar landmarks: the "theory of types"⁴; the "cybernetics of self"; the "double bind";

"Autopoiesis"; "structure determinism"; etc. Here, all is arranged to impress the visitor. But we have passed by the official portal and entered by a side street, because here we can see how the people actually live. We are not overly surprised to have found that the daily life of this community is organized around familiar principles: there is the ancient veneration of knowledge and the narrow human capacity to know; there is talk of "second orders," "superobservers," "hierarchies," and all the familiar litany of logic and analysis; and on every street corner there are the inevitable experts strutting and fretting their hour. Sometimes it seems as if there might be something more substantial going on. One quadrant of the city has taken the trouble to officially ban ontology; but now those who live there must spend all their time guarding their gates against the encroachment of "reality." To be sure, there is much that is serious here, and genuine in its intent; and as far as theory goes, it's some of the best we've seen. But we have already realized that in dealing with the psyche, theory does not go far enough until it comes upon its own futility. There seems to be some realization of the futility of theory in the systems camp, but this generally takes the shape of formal arrangements to "save" theory by restricting its range; to, as it were,

put it in a zoo. Like Wittgenstein, we are not interested in saying theory: it obscures what we seek. What we seek cannot be confined or kept alive in zoos. To find it we must leave all the communities of ideas and go back out onto the open ground of language.

CONCLUSION

Where was it one first heard of the truth?
The the.

--Wallace Stevens,
The Man on the Dump

This thesis, if it has learned its own lesson, cannot reach any conclusions, but only an end. Rather than to distill some final wisdom that can be held on to, the purpose of these last pages can only be to complete the process of deconstruction which has arisen of its own accord and led us to abandon all the theories of psychology, including our own. Whatever value this thesis has lies not in what it has accumulated, but in what it has gotten rid of.

If we have abandoned all the theories of psychology, what have we left? As Wittgenstein has shown us, we are left with the ground of language, and, as psychologists, that is exactly where we want to be. If there is any "point" toward which this thesis drives, it is this: The field of the psyche is the field of language. As Maturana (Maturana & Varela, 1987) has stated:

language is a condition sine qua non for the experience of what we call mind. . . . it is in language that the self, the I, arises as the social singularity defined by the operational intersection in the human body of the recursive linguistic distinctions in which it is distinguished. . . . Self-consciousness, awareness, mind--these are phenomena that take place in language.
(pp. 230-31)

The corollary of this observation is clear: the problems we approach as psychologists are also phenomena of language. Animals do not have psychological problems; they are the exclusive property of linguistic observers. And, as we have learned from Wittgenstein, problems in language always arise with the misuse of language. Language itself cannot be a problem; it is simply a given, what Wittgenstein called "a form of life." It cannot constitute a problem any more than can floods, volcanoes, droughts, diseases, or any other aspect of nature. These things can become a problem only when we do not accept them as part of the weave of life, and instead try to prolong the more pleasing aspects of existence at their expense. As we have seen, it is this cultivation of what we find desirable that has defined our attitude toward nature and shaped our relationship with it. This process extends even into our relationship with language: we ignore its natural condition and instead seek to secure it around fixed philosophical positions. It is this distortion of the given condition of language which engenders the philosophical confusions examined in this thesis. If we are able to restore language to its natural state, we are able to resolve even the greatest philosophical confusions. In this way, Wittgenstein was able to resolve even the mighty philosophy of Descartes, which overpowers even those who profess to reject it most

vehemently.

Why do we find it so hard to let language speak? There is no easy answer. We seem to be eternally preoccupied with constructing stories, myths, theories, ideas, religions, philosophies, ideologies--anything that will enhance our sense of psychological security by making the various linguistic self-descriptions we have devised seem more permanent. In this way, as Wallace Stevens (1978) observed, we have made language into a dump, a slag-heap of ideas and images which are but moribund excrescences of the living language they obscure. Only if we reject such trash, says Stevens, can we feel "the purifying change" (p. 202). Psychology is in dire need of such a housecleaning, but this cannot take the form of systematic reviews, revisions, or any kind of organized effort. It is simply up to each one of us to reject the trash, to leave the fallow fields of theory and return to hunt and gather in the dark continent of language.

Footnotes

Chapter One

¹Our modern connotation of revolution as upheaval dates from the Copernican vision of the earth revolving around the sun (Bronowski, 1973, p. 197).

²Bateson (1979) provides a definition of stochastic processes: "If a sequence of events combines a random component with a selective process so that only certain outcomes of the random are allowed to endure, that sequence is said to be stochastic" (p. 253). As Bateson points out, it is only through stochastic processes that change can produce anything new: "Without the random, there can be no new thing" (ibid., p. 163). In a deterministic system, i.e. one in which future events can be determined from present circumstances, change can only produce extrapolations (modified versions) of the present.

³This differential between the two rates of evolution is evinced by the recent transplants of baboon hearts to human bodies. Though we diverged from the baboons some 30 million years ago (Pilbeam, 1984, p. 87), there has been sufficiently little biological change since then that the hearts are mechanically interchangeable. Yet the vast difference in cultural evolution ensures that it is the baboon, not the human, which is sacrificed.

⁴As Popper (1972, p. 167) has noted, "There are no

Darwinian laws of evolution" in the sense of Newton's laws of motion. But the term fits in describing "the observed regularities of nature" (Merriam-Webster Dictionary) which characterize the evolutionary process.

⁵Otherwise there would be no need for symbols. That is, if a symbol did not condense experience, it would fulfill no purpose since it could not be distinguished from all that surrounds it. For a system of symbols (i.e. a language) to exist, it must retain a relative, though not absolute, stasis with respect to the natural flow of experience, otherwise it disappears into the background it is meant to represent.

⁶Note how this ability apparently enhances man's independence from time, one of Huxley's criteria for the perfect individual. The thinking man can plan for future events and thus releases himself from an eternal present. However, since human thought is the means through which time came into being (some have maintained that time is thought (Krishnamurti & Bohm, 1985)), this juncture actually marks the beginning of man's bondage to time, his own creation.

⁷Richard Dawkins (1976), in an imaginative but less than careful analysis, proposed the term meme for the "unit of cultural transmission" (p. 206): However, his discussion fails to penetrate the culture-wide perception that man is a special creature, some part of

whose psyche remains independent of evolutionary influences, and so ends up endorsing the Lamarckian conceit: "we are built as gene machines and cultured as meme machines, but we have the power to turn against our creators. We, alone, on earth, can rebel against the tyranny of the selfish replicators" (p. 215).

⁸In terms, that is, of an explanation that fits with the scientific understanding which dominates our present world-view. Religious explanations, for example, may be important, but must be considered to stand apart from our general understanding of the world and can only be appropriately used in a much narrower context. It would have been entirely inappropriate, for instance, to have given an unexplained religious justification as the basis for this chapter. By contrast, the sort of "natural philosophy" developed in this chapter would be accepted in most areas of discourse (even in a religious context this kind of discussion is tolerated as long as it does not trespass against fundamental articles of belief).

Chapter Two

¹As Krishnamurti & Bohm (1985, p. 56) point out, our word theory comes from the greek root meaning theatre.

²The natural gravitation of thought toward inorganic material processes was a fundamental point of Bergson's Creative Evolution (1911), wherein he declared that the human intellect feels at home among inanimate

objects, more especially among solids, where our action finds its fulcrum and our industry its tools; that our logic is pre-eminently, the logic of solids; that consequently, our intellect triumphs in geometry, wherein is revealed the kinship of logical thought with unorganized matter, and where the intellect has only to follow its natural movement, after the lightest possible contact with experience, in order to go from discovery to discovery, sure that experience is following behind it and will justify it invariably.

But from this it must also follow that our thought, in its purely logical form, is incapable of presenting the true nature of life, the full meaning of the evolutionary movement. (p. ix)

³Freud, for instance, felt this gap keenly, and realized that it would have to be closed if psychoanalysis were to be successful in its claim to scientific status. He also had to admit, however, that his attempts to do so with the theory of instincts were problematic at best:

Of all the slowly developed parts of analytic theory, the theory of instincts is the one that has felt its way most painfully forward. And yet that theory was so indispensable to the whole structure that something had to be put in its place. (Freud, 1930/1985, p. 308)

Chapter Three

¹Identity, "sameness of essential character" (Merriam-Webster Dictionary), comes from the Latin idem, meaning "same", which is probably derived from the (Plato) greek idea: "eternally existing pattern of which individual things in any class are imperfect copies" (Concise Oxford Dictionary). There is also a relationship with the English word image. Thus identity is the continuing image which transcends the finite

biological individual.

²The question of the "timelessness" of childhood has interesting implications for our critique of psychoanalysis, to be developed in the next chapter.

³Again note the relationship to idea, the static form which provides an unshifting anchor for the finite individual.

⁴In the East the theory of reincarnation fulfills the same function.

⁵James' perception that the present has duration foreshadows much later work on the nature of time (see, e.g., Schaltenbrand, 1967).

⁶After examining psychoanalytic object relations theory in the next chapter we will have reason to quarrel with James' attribution of the origins of time to awareness of internal change.

⁷As we will see in Chapter Five, the connotation of introspection as looking inside (as opposed to outside) need not be taken literally. It is very likely, however, that James did take it literally, as he reveals in several places that for him the secrets of psychology were to be obtained by actually looking within oneself. At one point, for example, James (1890/1950) attempts to find the innermost kernel of the self by introspecting his consciousness and ends up reducing it to "peculiar motions in . . . the head and throat" (p. 297). Clearly, this is not what we mean when

we talk about the self. James is most convincing when he talks about the self and other mental phenomena in terms of what the "human race as a whole largely agrees" upon (p. 289), what is "felt by all men" to be the case (p. 297), and what "[e]very one knows" is so (p. 403). It is his ability to articulate the common ground in our understanding of the various mental terms that distinguishes James among psychologists, not an imagined ability to "see" inner realities that had somehow been overlooked until the introspectionists came along. Thus, James displays both good and bad introspection: good when he is content to act as a spokesman for the psychological experience of mankind and bad when he takes literally the implied project of introspection as looking into one's own mind.

Chapter Four

¹Perhaps Freud should have recognized a "resistance" here. As we will see, making further progress into the question of timelessness means confronting some serious inconsistencies in the psychoanalytic model.

²Feelings, that is, of pleasure or unpleasure, "which prove to be almost the only psychical quality attaching to transpositions of energy in the inside of the apparatus" (Freud, 1900/1975, p. 729).

³What is most puzzling about this contradiction is

that even Freud appears to have overlooked it, as he personally reviewed Bonaparte's article (Bonaparte, 1940, p. 467).

⁴Another way to see that we cannot know what is going on inside us is to consider medicine. Clearly it is not possible to base medicine on introspection. The accumulation of medical knowledge requires experience in external nature. Thus the progress of medicine was for long impeded by various taboos against the dissection of corpses. The physician can only learn about his body by dissecting those of others. Introspection is not sufficient, nor of course can he dissect his own body! It would be difficult to find a more graphic demonstration of how the accumulation of knowledge requires the separation of the observer from the observed.

⁵Here we see the connection of psychoanalysis with myth. The story devised by the analyst must always be grafted onto the universal beginnings in childhood sexuality. Psychoanalysis, like any other system of myths, provides a story of origins; in this case, the origins of personality. Like any other origin myth, it refers to a special time, before the advent of normal, everyday frames of reference. In such a realm fantastic and supernatural things can take place because the normal rules of logic and rationality do not apply; hence the outlandish quality of this portion of

psychoanalysis. Generally, it is such concepts as the Oedipal complex, penis-envy, the psycho-sexual stages-- in short, those aspects of psychoanalysis originating from the interpretation of childhood sexuality--which seem most incredible to the newcomer. Myth is the attempt by consciousness to account for its own origins. Since by definition it cannot find these within itself, it pushes this account into another realm, generally in the distant past, where it is possible to relive the conditioning imposed by centuries of experience with "reality". But even here consciousness is consciousness; the result is only a disguised version of everyday thinking--that is why myths are susceptible to interpretation. The same can be said of dreams. It seems quite sensible to talk of the dream as being a disguised version of primary process thinking, but it does not seem right to attribute this primary process to the unconscious. What is truly unconscious must remain so. Greater theoretical clarity is maintained when the primary process is seen as the mode of operation of the deeper layers of consciousness, perhaps that part repressed by the ego. Cf. Eliade (1963): "For psychoanalysis . . . the truly primordial is the 'human primordial', earliest childhood. The child lives in a mythical, paradisaical time This is why the unconscious displays the structure of a private

mythology" (p. 7).

⁶It is interesting to contrast cultivation with change. Since change derives from the act of bartering, it can be seen as the means through which one obtains that which one cannot cultivate. Change brings the new, while cultivation develops what already exists. Thus the entire history of human cultivation has resulted in not one new species of plant or animal. Only natural change can bring this about.

Chapter Five

¹G.S. Brett has discussed the general impact of this premise on psychology, and traced it to the philosophy of Kant:

Many would regard the legacy of Kant as a disaster for psychology. It perpetuates the rigid distinction between the outer and the inner with its accompanying assumptions both that there is a radical difference between what we know of our minds and what others know of them, and that overt behavior alone can be scientifically described. (Quoted in Wolman, 1981, p. 413)

²Wittgenstein's work shows two unusually distinct phases, described by Walter Kaufman as follows:

It has been said that every great philosopher has given philosophy a new direction, but that only Wittgenstein has done this twice--first with his Tractatus, published right after World War I, and then again with the ideas that found their final form in his Philosophical Investigations, published posthumously after World War II. (Quoted in Bartley, 1973, p. 11)

As K.T. Fann (1969) suggests, the first phase may be said to endorse analysis, the second to repudiate it.

³Since most of Wittgenstein's writings consist of

short, numbered remarks, it is customary to refer to them by the initials of the work and the number of the remark. Thus (PI, #109) refers to remark number 109 of Part I of the Philosophical Investigations. Those parts of Wittgesntein's work which are not numbered (such as Part II of the Investigations) are simply referred to by the initials of the work and the page number, e.g. (PI, p. 220). The intitials used and works referred to in this thesis are:

- BB The Blue and Brown Books (1958/1975)
- OC On Certainty (1969)
- PI Philosophical Investigations (1953/1963)
- Z Zettel (1967)

⁴For instance, B.F. Skinner uses many such examples in Science and Human Behavior. In fact, the whole book contains no references to actual observations; it is entirely written by Skinner from his experience. Likewise, R.D. Laing, after telling us in the opening pages of The Politics of Experience of the "invisibility" of one's experience to another, proceeds to fill the rest of the book with observations on the nature of that experience. For such pundits of privacy, both men show curious confidence as psychic eavesdroppers.

⁵The physicist Richard Feynman (1985) captured this divisive quality of knowledge in his reply to a woman

who had reacted to the information that he was a physicist by saying: "Oh. Well, nobody knows anything about that, so I guess we can't talk about it."

"On the contrary," Feynman answered, "it's because someone does know something about it that we can't talk about physics. It's the things that nobody knows anything about that we can discuss. We can talk about the weather; we can talk about social problems; we can talk about psychology; we can talk about international finance--gold transfers we can't talk about, because those are understood--so it's the subject that nobody knows anything about that we can all talk about!"

(p. 283).

Thus theories actually impede the progress of psychology, because they set up artificial linguistic hedges where we need an open view.

⁶The aspect-blind would be very like Malcolm's (1971, p. 93f.) Natural behaviorist, the imaginary man who actually lives according to the dictates of behaviorism. Among the many problems facing this unfortunate fellow would be that of recognizing expressions. To see that this is not simply a matter of noting the "geometrical descriptions" (ibid., p. 97) of faces, consider the following remark of Wittgenstein's:

Think of the recognition of facial expressions. Or of the description of facial expressions--which does not consist in giving the measurements of the face! Think, too, how one can imitate a man's face without seeing one's own in a

mirror. (PI, #285)

The natural behaviorist will not find employment as an actor. Wittgenstein (quoted in Gier, 1981) summarized this discrepancy between behaviorism and the actual circumstances of our lives in an even more pithy remark: "Behaviorism: 'It seems to me as if I'm sad, my head is drooping so'" (p. 135).

Chapter Six

¹We treat Maturana's use of the terms "cognition" and "knowing" as synonymous because he does not distinguish between the two either by definition or use. When asked during the Calgary Public Seminar Series (1983) if he did in fact distinguish between the two terms, Maturana's answer was equivocal and inconclusive. Maturana may prefer cognition simply because, as a less frequently used word, its grammar is less well developed and it is thus more adaptable to his purposes. However, since cognition is invariably defined in terms of knowing (e.g.: "the act or process of knowing"--Merriam-Webster Dictionary; "Action or faculty of knowing . . ."--Concise Oxford Dictionary), it draws virtually all of its meaning from the grammar of know. It is as if cognition were a word in a foreign language which we must first translate in terms of knowing before we can understand it.

²It is difficult, for instance, to think of an example from everyday speech in which the two words

could be used interchangeably. Perhaps an old soldier might say, "I have lived the experience of war," which could be paraphrased as, "I have known the experience of war." But here the concept of experience must be brought in to mediate a common ground between the two. In general they are not interchangeable.

³The word "reality" here will be seen by some as a red flag, indicating the Wittgenstein was really a "realist." But this is to miss one of Wittgenstein's most important points; namely, that when we use a word naturally (i.e., in a way appropriate to its grammar), there need not be any philosophy implied at all. The word reality has its appropriate uses which have nothing to do with the various philosophies bearing the label realism. In the same way, we do not abandon the words man and moon just because they were once associated with some erroneous ideas about a lunar inhabitant; we simply try to use them more appropriately next time. The spontaneous use of words cannot be wrong, because this is the only standard against which we can measure right and wrong.

⁴The "Theory of Logical Types," developed by Russell and Whitehead (1910) in the Principia Mathematica, is often cited, especially by Bateson (e.g., 1972, p. 279f.), as a principle theoretical mooring of the systemic position. But Wittgenstein, once a close

friend and collaborator of Russell, was "profoundly dissatisfied with the theory of types" (Kenny, 1973, p. 42). Wittgenstein found the theory "superfluous" because "if one knows the range of applicability [of a word or symbol], one will run no risk of generating logical paradox by extending it beyond its range or type" (Bartley, 1973, p. 78). For Wittgenstein the theory of types represented exactly the type of escape into abstraction and analysis against which he directed the whole force of his philosophy; one must stay with the word, not retreat into theory. As much as any other single issue, the break with Russell over the theory of types emphasizes the sharp diversion of Wittgenstein's philosophy from the mainstream of Western thought. For Wittgenstein, any such theory simply will not do: "If anybody offers me a theory, I would say: No, no, that doesn't interest me. Even if the theory were true that would not interest me--it would not be what I seek" (Wittgenstein, quoted in Waismann, 1965, p. 16). But for most Western thinkers, including the systemic school, the whole object is to establish a theory. Ironically enough, Wittgenstein is sometimes referred to for support by systemic theorists, and even claimed as part of their philosophical heritage (Hoffman, 1985, p. 391). But, tellingly, it is almost always the Tractatus to which these writer refer, thereby allying themselves with Wittgenstein's early philosophy which was still

circumscribed by the parameters of logic and analysis he later came to repudiate. Thus if, as Bateson (1972) asserts, behavioral scientist "can claim approximately sixty years of obsolescence" because they have "ignored the problems of the Principia Mathematica" (p. 279), then Bateson can claim almost fifty years of obsolescence through his ignorance of Wittgenstein's post-Tractatus philosophy.

Bibliography

- Adorno, T. (1967). Sociology and psychology. New Left Review, 46, 67-80.
- Alexander, R. (1981). Evolution, culture, and human behavior: Some general considerations. In R. Alexander & D. Tinkle (Eds.), Natural selection and social behavior (pp. 509-520). New York: Chiron.
- Arendt, H. (1959). The human condition. Chicago: University of Chicago Press.
- Baldwin, J. (1960). Dictionary of philosophy and psychology. Gloucester, Mass.: Peter Smith.
- Barret, W. & Aiken, H.D. (1962). Philosophy in the twentieth century: Vol. II. New York: Random House.
- Bartley, W.W. (1973). Wittgenstein. Philadelphia: J.B. Lippincott.
- Bass, L. (1968). Prospects for mathematics in the life sciences. Hermathena, 107, 31-44.
- Bateson, G. (1972). Steps to an ecology of mind. New York: Ballantine.
- Bateson, G. (1979). Mind and nature: A necessary unity. New York: Bantam.
- Bergson, H. (1911). Creative evolution (Trans. A. Mitchell). New York: Henry Holt.
- Bohm, D. (1980). Wholeness and the implicate order. London: Routledge and Kegan Paul.
- Bonaparte, M. (1940). Time and the unconscious.

International Journal of Psychoanalysis, 21,

427-468.

Bronowski, J. (1965). The identity of man. New York:
The Natural History Press.

Bronowski, J. (1973). The ascent of man. London:
British Broadcasting Corporation.

Bronowski, J. (1978). The origins of knowledge and
imagination. Binghamton, N.Y.: Yale University
Press.

Brown, L.R. (1970). Human food production as a process
in the biosphere. In M. Fagan (Ed.), Civilization:
Readings from Scientific American. San Francisco:
W.H. Freeman.

Bruner, J.S. (1957). Freud and the image of man. In B.
Nelson (Ed.), Freud and the twentieth century
(pp. 277-285). New York: Meridian.

Cassirer, E. (1944). An essay on man. New York: Yale
University Press.

Cassirer, E. (1953-1957). The philosophy of symbolic
forms (Vols. 1-3). New Haven: Yale University Press.

Castell, A. (1965). The self in philosophy. New York:
McMillan.

Childe, V.G. (1981). Man makes himself. Bradford-on-
Avon, Wiltshire: Moonraker (Original work
published 1956)

Coates, W.H., & White, H.V. (1970). The ordeal of

- liberal humanism: An intellectual history of Western Europe: Vol. II. Since the French Revolution. New York: McGraw-Hill.
- Cook, J.W. (1965). Wittgenstein on privacy. Philosophical Review, 74, 281-314.
- Dawkins, R. (1976). The selfish gene. New York: Oxford University Press.
- Dell, P. (1982). Beyond homeostasis: Toward a concept of coherence. Family Process, 21, 21-41.
- Dell, P. (1985). Understanding Bateson and Maturana: Toward a biological foundation for the social sciences. Journal of Marital and Family Therapy, 11, 1-20.
- Devane, R.S. (1948). The failure of individualism. Dublin: Richview.
- Durant, W. (1954). The story of civilization: Part I: Our oriental heritage. New York: Simon & Schuster.
- Durant, W. (n.d.). The story of civilization: Part II: The life of Greece. New York: Simon & Schuster.
- Durant, W., & Durant, A. (1961). The story of civilization: Part VII: The age of reason begins. New York: Simon & Schuster.
- Ehrenfeld, D. (1978). The arrogance of humanism. New York: Oxford University Press.
- Eliade, M. (1963). Myth and reality (W. Trask, Trans.). New York: Harper & Row.
- Ewen, R. (1980). An introduction to theories of

- personality. New York: Academic.
- Fann, K.T. (1969). Wittgenstein's conception of philosophy. Berkeley: University of California Press.
- Ferguson, M. (1980). The aquarian conspiracy. Los Angeles: J.P. Tarcher.
- Feynman, R.P. (1985). Surely you're joking, Mr. Feynman! (E. Hutchings, Ed.). Toronto: Bantam.
- Finch, H.L. (1977). Wittgenstein--the later philosophy. Atlantic Highlands, NJ: Humanities.
- Freud, S. (1933). New introductory lectures on psychoanalysis (J.H. Sprott, Trans.). New York: W.W. Norton.
- Freud, S. (1960). The ego and the id (J. Riviere, Trans.; J. Strachey, Ed.). New York: Norton. (Original work published 1923)
- Freud, S. (1963). An autobiographical study (J. Strachey, Trans.). New York: W.W. Norton. (Original work published 1925)
- Freud, S. (1969). The question of lay analysis (J. Strachey, Trans. & Ed.). New York: W.W. Norton. (Original work published 1927)
- Freud, S. (1974). Introductory lectures on psychoanalysis (J. Strachey, Trans.). London: Penguin. (Original work published 1916-17)
- Freud, S. (1975). The interpretation of dreams (J. Strachey, Trans.; J. Strachey & A. Richards, Eds.).

- New York: Penguin. (Original work published 1900)
- Freud, S. (1985). Civilization and its discontents. In J. Strachey (Trans.); A. Dickson (Ed.), Civilization, society and religion (pp. 243-340). New York: Penguin. (Original work published 1930)
- Galt, W. (1940). The principle of co-operation in behavior. Quarterly Review of Biology, 15, 401-410.
- Gier, N.H. (1981). Wittgenstein and phenomenology. Albany: State University of New York Press
- Goodman, P. (1945). The political meaning of some recent revisions of Freud. Politics, 2, 197-203.
- Hamilton, W.D. (1964). The genetical evolution of, social behavior. Journal of Theoretical Biology, 7, 17-52.
- Hartcollis, P. (1974). Origins of time: A reconstruction of the ontogenetic development of the sense of time based on object-relations theory. Psychoanalytic Quarterly, 43, 243-261.
- Henderson, V., & Nite, G. (1978). Principles and practice of nursing (6th ed.). New York: MacMillan.
- Hoffman, L. (1985). Beyond power and control: Toward a "Second Order" family systems therapy. Family Systems Medicine, 3, 381-396.
- Huxley, J. (1912). The individual in the animal kingdom. London: Cambridge University Press.
- Huxley, J. (1948). Man in the modern world. New York:

Mentor.

- Jacoby, R. (1975). Social amnesia: A critique of contemporary psychology from Adler to Laing.
Boston: Beacon.
- James, W. (1950). The principles of psychology (2 vols.).
New York: Dover. (Original work published 1890)
- Jaynes, J. (1976). The origins of consciousness in the breakdown of the bicameral mind. Boston: Houghton Mifflin.
- Jones, E. (1961). The life and works of Sigmund Freud.
London: Penguin. (Original work published 1953).
- Keeney, B. (1982). What is an epistemology of family therapy? Family Process, 21, 153-168.
- Keeney, B. (1983). Aesthetics of change. New York: Guilford.
- Kenny, A. (1973). Wittgenstein. London: Penguin.
- Krishnamurti, J. & Bohm, D. (1985). The ending of time.
San Francisco: Harper & Row.
- Kuhn, T.S. (1970). The structure of scientific revolutions (2nd ed.). Chicago: University of Chicago Press.
- Lee, D. (Ed.). (1980). Wittgenstein's lectures, Cambridge, 1930-1932. Oxford: Basil Blackwell.
- Laing, R.D. (1967). The politics of experience.
London: Penguin.
- Lamont, C. (1949). Humanism as a philosophy. New York:

Philosophical Library.

Lawrence, D.H. (1983). Fantasia of the unconscious.

London: Penguin. (Original work published 1922).

Leigh, E. (1977). How does selection reconcile individual advantage with the good of the group?

Proceedings of the National Academy of Sciences, 74, 4542-4546.

Lukes, S. (1973). Individualism. New York: Harper & Row.

Malcolm, N. (1963). Knowledge and certainty.

Englewood Cliffs, NJ: Prentice-Hall.

Malcolm, N. (1969). Wittgenstein's "Philosophical

Investigations". In H. Morrick (Ed.), Wittgenstein and the problem of other minds (pp. 45-81). New

York: McGraw-Hill.

Malcolm, N. (1981). Wittgenstein: The relation of language to instinctive behavior. Swansea:

University College.

Malcolm, N. (1984). Ludvig Wittgenstein: A memoir (2nd ed.). Oxford: Oxford University Press.

Malcolm, N. (1986). Nothing is hidden. Oxford: Basil Blackwell.

Marcuse, H. (1974). Eros and civilization: A philosophical inquiry into Freud. Boston: Beacon.

(Original work published 1955)

Maturana, H.R. (1978). Biology of language: The epistemology of reality. In G.A. Miller & E.

- Lenneberg (Eds.), Psychology and biology of language and thought (pp. 27-63). New York: Academic.
- Maturana, H.R. (1983). Public seminar series [Video cassette series, transcribed by J.E. Lawrence]. Calgary: Foothills Hospital Family Therapy Program.
- Maturana, H.R., & Varela, F.J. (1987). The tree of knowledge. Boston: Shambhala.
- Medawar, P.B. (1957). The uniqueness of the individual. London: Methuen.
- Medawar, P.B. (1960). The future of man. London: Methuen.
- Meehl, P. (1978). Theoretical risks and tabular asterisks: Sir Karl, Sir Ronald, and the slow progress of soft psychology. Journal of Consulting and Clinical Psychology, 46, 806-834.
- Meiges, F. (1982). Time and the inner future. New York: John Wiley & Sons.
- Mendez, C.L., Coddou, F., & Maturana, H.R. (1985). The bringing forth of pathology: An essay to be read aloud by two. Unpublished manuscript.
- Monod, J. (1971). Chance and necessity (A. Wainhouse, Trans.). New York: Vintage.
- Moore, G.E. (1969). From "Wittgenstein's lectures in 1930-1933." In H. Morrick (Ed.), Wittgenstein and the problem of other minds (pp. 119-126). New

- York: McGraw-Hill.
- Morrick, H. (Ed.). (1969). Wittgenstein and the problem of other minds. New York: McGraw-Hill.
- Morris, C. (1972). The discovery of the individual 1050-1200. London: Camelot.
- Moustakas, C. (1956). True experience and the self. In C. Moustakas (Ed.), The self: Explorations in personal growth. New York: Harper & Brothers.
- Mumford, L. (1967). The myth of the machine: Vol. I. Technics and human development. New York: Harcourt Brace Jovanovich.
- Munn, N. (1971). The evolution of the human mind. Boston: Houghton Mifflin.
- Neimeyer, M. (1951). The one and the many in the social order according to Saint Thomas Aquinas. The Catholic University of America Philosophical Studies 130.
- Pears, D. (1985). Wittgenstein. London: Fontana.
- Pennock, J.R. (1972). Individualism. Encyclopaedia Britannica, Vol. 12, pp. 162-164.
- Pilbeam, D. (1984). Descent of the hominoids and hominids. Scientific American, 250, 24-51.
- Popper, K. & Eccles, J. (1977). The self and its brain. London: Springer.
- Progogine, I. & Stengers, I. (1984). Order out of chaos. Toronto: Bantam.
- Reese, W.L. (1980). Dictionary of philosophy and

- religion. New York: Humanities.
- Rogers, C.R. (1951). Client-centered therapy. Boston: Houghton-Mifflin.
- Russell, B. (1948). Human knowledge: Its scope and limits. New York: Simon and Schuster.
- Ryle, G. (1968). The concept of mind. London: Penguin. (Original work published 1949).
- Schaltenbrand, G. (1967). Consciousness and time. Annals of the New York Academy of Sciences, 138, 632-645.
- Schultz, D.P. (1969). A history of modern psychology. New York: Academic Press.
- Selvini Palazzoli, M., Cecchin, G., Prata, G., & Boscolo, L. (1978). Paradox and counterparadox. New York: Jason Aronson.
- Selvini Palazzoli, M., Cecchin, G., Prata, G., & Boscolo, L. (1980). Hypothesizing--circularity--neutrality: Three guidelines for the conductor of the session. Family Process, 19, 3-12.
- Shaffer, L. (1950). [Review of The Principles of Psychology]. Journal of Consulting Psychology, 15, 416.
- Skinner, B.F. (1953). Science and human behavior. New York: MacMillan.

- Smith, H. (1982). Beyond the post-modern mind. New York: Crossroad.
- Steele, E.J. (1979). Somatic selection and adaptive evolution. Toronto: Williams-Wallace.
- Stevens, W. (1978). The collected poems of Wallace Stevens. New York: Alfred A. Knopf.
- Suhr, E.G. (1959). The ancient mind and its heritage: Vol. I: Exploring the primitive, Egyptian and Mesopotamian cultures. New York: Exposition.
- Tageson, C.W. (1982). Humanistic psychology: A synthesis. Homewood, IL: Dorsey.
- Tomm, K. (1983). One perspective on the Milan systemic approach: Part I. Overview of development, theory and practice. Unpublished manuscript, University of Calgary
- Ullmann, W. (1967). The individual and society in the middle ages. Baltimore: Johns Hopkins Press.
- Van den Berg, J. H. (1961). The changing nature of man. New York: W.W. Norton.
- von Bertalanffy, L. (1981). A systems view of man (P. LaViolette, Ed.). Boulder, Col.: Westview.
- Waismann, F. (1965). Notes on talks with Wittgenstein. Philosophical Review, 74, 12-16.
- Watson, J. (1968). The double helix. London: Atheneum.
- Webber, R. (1978). The enfolding-unfolding universe: A conversation with David Bohm. Re-Vision, 7, 24-51.

- White, L. (1959). The evolution of culture: The development of civilization to the fall of Rome. New York: McGraw-Hill.
- Whitehead, A.N., & Russell, B. (1910). Principia Mathematica. Cambridge: Cambridge University Press.
- Whitrow, G.J. (1980). The natural philosophy of time (2nd. ed.). Oxford: Clarendon.
- Wigner, E.P. (1967). Symmetries and reflections. Bloomington: Indiana University Press.
- Williams, G.C. (1966). Adaptation and natural selection: A critique of some current evolutionary thought. New Jersey: Princeton University Press.
- Wilson, E.O. (1975). Sociobiology: The new synthesis. Cambridge, Mass.: Belknap.
- Wittgenstein, L. (1963). Philosophical investigations (G.E.M. Anscombe, Trans.). Oxford: Basil Blackwell. (Original work published 1953).
- Wittgenstein, L. (1967). Zettel (G.E.M. Anscombe, Trans.; G.E.M. Anscombe & G.H. von Wright, Eds.). Berkeley: University of California Press.
- Wittgenstein, L. (1969). On certainty (G.E.M. Anscombe & D. Paul, Trans.; G.E.M. Anscombe & G.H. von Wright, Eds.). Oxford: Basil Blackwell.
- Wittgenstein, L. (1975). The blue and brown books. Oxford: Basil Blackwell. (Original work published 1958)

Wolman, B. (1981). Contemporary theories and systems in psychology (2nd ed.). New York: Plenum.

Zimmerman, E.J. (1966). Time and the quantum theory.

In J.T. Fraser (Ed.), The voices of time (pp. 479-499). New York: George Braziller.