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Eugene T. Gendlin's Perspective on Science: A Critical Examination

A thesis submitted to the School of Graduate Studies of the University of Ottawa as partial fulfillment of the requirements for the degree of Doctor of Philosophy

University of Ottawa

September 1998

Dedication

This thesis is dedicated to my partner, Anne Malo, for her unconditional support, her optimism, her continuous encouragement and love during this lengthy academic odyssey. I am deeply grateful for the sacrifices she made in order to see this project come to reality.

The dedication also extends to the lively and furry crew that closely monitored my project: Tuffy, Tascha, Jérôme, Émile, Clémentine, Simone "Brown", Lili, Jeanne, the two Standards Bertrand and Juliette, and Edgar.

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Abstract

E. T. Gendlin's perspective on sciences: A critical examination

Abstract: In establishing the core of his psychotherapeutic perspective, Eugene Gendlin constantly refers to the natural sciences in general terms and the behavioural sciences in particular terms, stressing their limitations in addressing human foundations of subjective experience. He argues, for instance, that science does not have concepts or methodologies to properly address the process of bodily felt experiencing. He argues that science is based on the empirical testing of logical statements, and that these impose an *artificial* order on the *natural* concretely felt human experience, as if everything was reducible to mathematical formulas. This paper examines Gendlin's arguments on the matter in some detail focusing on Gendlin's 1962 book (Experiencing and the creation of meaning) and 1991 book chapter (Thinking beyond patterns: Body, language, and situations), which contain his main arguments. Gendlin's reference to Logical positivism in his characterization of the ways of science is presented and critically examined. Gendlin's claims to a phenomenological perspective is also presented and critically examined. It is concluded that (1) Gendlin overlooked the possibility that the debate over *what science is* might not be resolved with the proposals of Logical positivism, (2) that, consequently, he overlooked the possibility that more recent views of *what science is* might satisfactorily address some or all of the difficulties raised by his possibly outdated view, and (3) that his phenomenology was idiosyncratic rather than profoundly rooted in the philosophical tradition. Popperian Critical Rationalism, as a philosophy of science, is shown to resolve some of the major difficulties noted by Gendlin, and the limitations of this more recent epistemological perspective vis-à-vis the understanding of the conscious flow of human experience are discussed.

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The gods did not reveal, from the beginning,
All things to us; but in the course of time,
Through seeking, men find that which is the better.
But for certain truth, no man has known it,
Nor will he know it; neither of the gods,
Nor yet of all the things of which I speak.
And even if by chance he were to utter
The final truth, he would himself not know it;
For all is but a woven web of guesses.
Xenophanes, DK, B. 18 and 34

Chapter 1

Introduction

Gendlin says, "I learned that I could create a quiet space within me and let my own words come. If interrupted at that stage, I might of course forget *what I was about to say*. But then I would simply burrow in some murky way to get 'it' back again. 'Oh ....yea! ... that's what I was about to say!' And that 'that' was charged with implicit language, but was not a set of words." (Levin, 1994, p. 346). This quote comes from an interview where Gendlin recollected the beginning of his philosophical project, a project that deals with the question of how we come to symbolize experience, to give meaning to experience, especially in psychotherapy, and what the role of the body is argued to be in this process. This short quote presents the issue at stake in this thesis. Chiefly, can science investigate, during psychotherapy sessions, for example, what comes between the words, this murky inner sensation or wordless feeling at the edge of awareness that is symbolized by "....." in the quote, "Oh ... yea!". Can science deal with the interrelation between feeling, reality (situation) and language as they emerge as a bodily *felt sense* in the "....." during the psychotherapeutic process? Throughout his long career, Gendlin has commented on the limitations of science and its logical conception of the world when it is applied to experience. It is this view of the limitations of science that we want to make explicit here and that will be answered in this thesis.

In the remainder of this introductory chapter, we will (1) give a sketch of Eugene Gendlin's career, (2) introduce the central problem he raised, (3) present the methodology used in this thesis, and (4) describe the structure of the rest of the thesis document.

1.1 Who is Eugene Gendlin?

Eugene Gendlin was born in Vienna in 1926. He moved to the United States of America around 1938, where he chose to remain. He received his Ph.D. from the University of Chicago in 1958. He is an existential phenomenologically-oriented philosopher currently working as an Associate Professor of Psychology in the Department of Behavioral Science at the University of Chicago. Jennings (1984) mentions that Gendlin wrote his Masters thesis in philosophy in 1950 on the philosopher Wilhelm Dilthey. He completed his philosophical doctoral dissertation in 1958, the title of which was, "The function of experiencing in symbolization". His major philosophical treatise, which is a refinement of his doctoral thesis, was published in 1962, "Experiencing and the creation of meaning". His lifelong philosophical quest has been to describe and explain how meaning emerges from the interaction of preconceptual experiencing and human symbolizing capacities. Recently, he organized and spoke at "After Postmodernism", a conference held at the University of Chicago (November 14 to 16, 1997) where 93 people, mostly philosophers and some sociologists and anthropologists gathered to discuss how to move beyond the poor alternatives proposed by postmodernism. During that conference, he gave a presentation on science and postmodernism entitled "The Responsive Order: A New Empiricism" (Gendlin, 1997a). One of the questions he addressed was: "Is there a distinct role for logic, and for a kind of scientific objectivity that would not be naive?" He still publishes articles in philosophy. Recently, a collection of critical studies on Gendlin's work in the philosophy of language was published. The book entitled "Language Beyond Postmodernism: Saying and Thinking in Gendlin's Philosophy" (Levin, 1997) contains 15 essays by different philosophers including Gendlin as well as his response to each essay.

Aside from his implication in philosophy, Gendlin is also known for his contribution to psychotherapy. His interest in psychotherapy came out of his collaboration with Carl Rogers during the 1950's and 1960's. He has a history of involvement in the practice of psychotherapy in

the United States as an advocate of new theory in psychotherapy and as a commentator on the profession. He is the founder of a psychotherapeutic approach called "Experiential psychotherapy". He recently published a book called Focusing-Oriented Psychotherapy (Gendlin, 1996b) were the principles of his process-oriented approach are described. In 1963, he founded the journal "Psychotherapy: Theory, Research and Practice", the periodical of the Psychotherapy Division of the American Psychological Association, and served as its first editor until 1976. He received the First Distinguished Professional Psychologist Award in 1970 from the American Psychological Association's Psychotherapy Division, a division he helped found.

He is a prolific writer, the author of more than 200 articles and books in the area of philosophy, psychology and psychotherapy. He became well known by the end of the 1970's due to the success of his self-help book "Focusing" (Gendlin, 1981b), which describes in detail his 'focusing' technique. This led to an involvement in training *focusing* teachers around the world. He helped develop the Focusing Institute, founded in 1986, which is a not-for-profit organization that offers Continuing Education for psychologists and other professionals interested in the area of *focusing*. Today, *focusing* is a collaborative enterprise involving a network of trained therapists around the world. The Institute has its own Web page at www.focusing.org. There is also an annual International Focusing Conference, which celebrated its 10th anniversary in 1998.

As Jennings said in 1984, "In fact, it would be accurate to describe Gendlin's career as a life's task of elaborating, clarifying, and unpacking the implications of this rich quilting conception called '*experiencing*' " (p. 155), and this is still true today. Shapiro (1985) says:

> More than any other contemporary thinker he has sought to clarify the role of the experience of the body, particularly in the setting of psychotherapy. He has described a way of doing therapy wherein the client is directed to "focus" on his or her bodily sense of situations. Through this focus the quality of the client's experience is vitalized; it is given

> body, if you will. The client moves beyond intellectualized and congealed understanding to a fresh sense of his life situation. (p.xv-xvi)

1.2 The problem

In 1955, during scientific investigations done with Carl Rogers on the Client-Centered Therapy approach, Gendlin, along with Zimring developed and proposed a new conception of the process of psychotherapeutic change called "*experiencing*", a theoretical formulation that Gendlin would go on to develop further. By process, Gendlin means that human phenomena should be viewed as an ever-changing, living, moving process, a stream of ever-changing *experiencing*. *Experiencing* refers here to our inner experience of the world, our "living experience" of the world as Wilhelm Dilthey (1833-1911), a pioneering philosopher of the human sciences, called it. On this use of the word *experiencing* Gendlin (1962) writes:

> It is something so simple, so easily available to every person, that at first its very simplicity makes it hard to point to. Another term for it is "felt meaning," or "feeling." However, "feeling" is a word usually used for specific contents — for this or that feeling, emotion, or tone, for feeling good, or bad, or blue, or pretty fair. But regardless of the many changes in what we feel — that is to say, how we feel — there always is the concretely present flow of feeling. At any moment we can individually and privately direct our attention inward, and when we do that, there it is. (p. 11)

It is that conception of human phenomena that led Gendlin to attempt to develop new types of concepts and a new methodology to define and clarify *experiencing*. Since 1955, Gendlin has made the explanation and clarification of the concept of *experiencing* the main focus of his career.

While defining and developing these new concepts and methodologies, Gendlin has tried to position his views of *experiencing* in the context of scientific knowledge. It is this aspect of his work that we address here, and in particular his views of science that have been shaped by his

observations and reflections on the *experiencing* process. For example, in his 1962 book "*Experiencing* and the creation of meaning" Gendlin criticized the Logical positivism position of the behavioral sciences with regard to human observable phenomena and in particular the inability of science to directly address the nature of *experiencing* because:

1. the phenomena are always changing;
2. it is so difficult to generalize usefully and;
3. soon some newly created product or behavior occurs that does not fit;
4. behavior is so complex and finely determined; ....

> This informal list of difficulties in the sciences does not give the basic factor. That factor is *experiencing*. *Experiencing*, it is, that:
> 1. is changing;
> 2. is not equivalent to generalizations;
> 3. soon allows the creation of a new aspect that does not fit;
> 4. is complexly and finely determined; ....
>
> The difficulties of science in this informal list are due to the basic character of *experiencing* — the "preconceptual" type of order it has, and the ways it relates to the logical orders we attempt to impose in scientific inquiry. (pp. 22-24)

This quote suggests that quite apart from adopting an explanatory stance Gendlin holds an explicit discourse on the relevance of science as an explanatory recourse. His treatment of science is presented in a matter of fact way only, as if what science is, was obvious and completely consensual. This attitude toward science pervades even his most recent writings.

In a 1997 article he presents his arguments for a new empiricism:

> Although what I have said so far is obvious, there has been no way to formulate what is empirical and objective in science, because in our new sense of the empirical, *it is a response to what we do* [my italics]. Let us see if our formulations enable us to think further. (Gendlin, 1997a, p. 386)

Furthermore, in his criticisms of science, many of his sources or references are not explicit in the text. We are left guessing. Quite often he makes general statements without any supporting references: "The assumption that empiricism requires a separate given has led many philosophers and scientists to conclude that empiricism is inherently impossible" (Gendlin, 1997a, p. 384). Who are these scientists and philosophers? Another example would be: Many current thinkers say that human-life process is prior to the scientifically construed world. But they think of the science-world as just imposed — just posited" (Gendlin, 1991b, p. 106).

It will be our thesis that most of Gendlin's views on science are naive and not supported. The contemporary and widely accepted view of science called Critical rationalism, presented through the perspective of Karl Popper, does not lend itself so easily to his criticisms and easily answers most of his questions.

1.3 The methodology followed in this thesis

Gendlin is a prolific writer, which makes it hard to set boundaries on his ideas and positions in philosophy and in psychology. The initial step of this study was to organize and read his publications in chronological order, from 1961 up to his latest publications, 1997. The official and comprehensive bibliography of Gendlin's work lists more than 193 publications as main author (Depestele, 1997), and nine as co-author. Each article or book was reviewed and notes were collected pertaining to a number of topics that included his views on science as well as his conception of experiencing . The purpose of this historical approach was to assess the influence over the years of different trends in psychology and philosophy on Gendlin's views on science; the impact of behaviorism and neobehaviorism for example. The documents containing references to science, even if they did not focus specifically on science, where further analyzed (in fact, the only one focusing specifically on science was his most recent piece, "The responsive order: A new empiricism" (Gendlin, 1997a)). In most of his publications, Gendlin's criticisms of science are

limited to a few paragraphs, sometimes a few lines. Aside from his article on the "new empiricism" (1997a), his most clearly articulated criticisms appear in three publications, which he considers part of his four "... philosophical works" (Gendlin, 1996b, p. 240). These philosophical publications are "Experiencing and the creation of meaning", a book published in 1962; a chapter in a book entitled, "Thinking beyond patterns: body, language, and situations" (1991b), and an article, "The primacy of the body, not the primacy of perception" (1992a). His last philosophical work, "A process model" (1981a) is still unpublished according to his latest bibliography (Depestele, 1997) and was not considered for this thesis. Other documents examined for their content relative to science included articles published in a variety of journals and two books, "Focusing" (1981b), and "Focusing-oriented psychotherapy" (1996b).

Because Gendlin's conception of experiencing and the complexity of its links with Continental philosophy is novel, it was necessary to consult texts pertaining to science or experiencing from some of the authors that inspired and influenced his views on science to better understand his position. These include Dilthey, Husserl, Heidegger, and Merleau-Ponty, thinkers that are all part of the Continental schools of metascience (Polkinghorne, 1983). We have also read texts from different school of thoughts that influenced the author, in particular Humanistic psychology, Logical positivism, Phenomenology and Existentialism.

Furthermore, a former colleague of Gendlin, Dr. Yvon Bourbonnais, was consulted to clarify some of Gendlin's philosophical standpoints and references. A clinical psychologist who used the Focusing technique with her clients, Dr. Diane Caron-Bourbonnais was also consulted to better understand the focusing process. Finally, Gendlin himself was briefly consulted at the beginning of the research.

These steps were undertaken to get an understanding and an interpretation of the author within his particular historical horizon or frame of reference. In fact, it can take considerable time before the reader can 'grasp' (make sense of) Gendlin's living conception of experiencing and the way it interacts with concepts and language. He says:

> A philosophy examines and sometimes alters basic conceptions. That is why there is no way to explain a basic conception in terms of other, more familiar ones. One can grasp a basic conception only by grasping it. It is a new conceptual structure, a new pattern. What I mean here by "basic" gets at the difference between philosophy and any science, and also the usefulness of philosophy for science. (Gendlin, 1978-1979, p. 46)

The critical evaluation of Gendlin's beliefs about science has roots in the Critical rationalism tradition (Popper, 1968) where the author's discourse is read carefully to identify arguments. Then the prose is analyzed, the excess eliminated, and the structure of the arguments approximated. From there, the level of dissatisfaction is assessed carefully regarding the completeness, the relevance and the logical consistency of the arguments.

1.4 The organization of the thesis

The remainder of this thesis is organized in six chapters. Chapter 2 describes the historical context, from the point of view of American psychology, from which Gendlin's views on science emerged. Chapter 3 outlines a description of Gendlin's major theoretical concepts and their articulation, enabling the reader to better understand Gendlin's views of science as presented in chapter 4. Chapter 5 is devoted to Karl Popper's understanding of science's purposes within the Critical rationalism standpoint and the critical assessment of Gendlin's views of science from a Popperian Critical rationalism perspective. Finally, chapter 6, presents a conclusion based on a presentation of the limitations of the Critical rationalism movement.

The first step in this critical reading of Gendlin's position regarding science is to describe selected aspects of the American psychological research context during the period between 1945 and 1970, a very influential period in the academic training of Gendlin. The goal is to better understand his present position in light of the influences of the past. Three main sources of experiences have affected and shaped his rapport with science: the Logical positivism movement and the application of its views in psychological research; his psychotherapeutic experience as part of Carl Rogers' team of researchers within the context of the Humanistic movement; and finally his philosophical orientation influenced by existential-phenomenologists like Dilthey, Husserl, Heidegger and Merleau-Ponty, as well as his positioning within the phenomenological movement.

Chapter 2

American Psychology and the historical context of emergence of Gendlin's views on science

In this chapter, we will try to present Gendlin's assumptions on science as they originate from the theories and research methodologies that were prevalent in American Psychology during the post-World War II period. From his publications, it appears that three of the major sources of influences on his thinking were: (1) the Logical positivism philosophy (together with the operationism views as applied in the context of neobehaviorism researches), (2) the scientific investigation of psychotherapy, and (3) the emergence of existential-phenomenological psychology. With regard to the psychotherapy research context, the focus will be on the research program at the Counseling Center of the University of Chicago where Gendlin was part of Carl Rogers' client-centered therapy research group.

2.1 Logical positivism and Operationism

2.1.1 Carnap and the Logical positivism school

According to Benjafield (1994), Logical positivism and Operationism had a profound influence on scientific psychology and its research methods during the 1940's and 1950's. Their philosophical position was radical. They wanted to make philosophy part of the scientific inquiry. They wanted to rebuild philosophy by eliminating philosophical speculation and replacing it with a linguistic analysis based on formal logic, to bring it closer to science. Today,

Logical positivism is still considered a very important subset of twentieth-century analytic philosophy (Marsonet, 1995). We will describe both before introducing Gendlin's integration of these two movements in his views of science.

In the 1920's and the 1930's, as psychology was developing research methods, a European philosophical movement called Logical positivism or Logical empiricism (Hanfling, 1981, Benjafield, 1994) enabled psychology to develop procedures that appear to look like those followed by the more established sciences. It was a philosophical movement that emerged from meetings by a group of physicists, logicians and mathematicians based in Vienna, Austria, who called themselves the Vienna Circle. The Logical positivists were impressed by the success of modern science and the meaninglessness of metaphysics, in particular the statements of philosophers like Hegel and Heidegger (Marsonet, 1995). They thought that philosophy was not a speculative discipline but rather a logico-linguistic activity aimed at clarifying scientific concepts and propositions.

These new empiricists were proposing, like the classic empiricists, that knowledge is composed entirely of items of sense-experience, which they called 'sense data', and that it should be verified in an empirical way. That is, the truth or falseness of statements must be objectively decided, meaning publicly. In a sense, they were very much influenced by the rules and methods of the successful scientific disciplines of the time, such as chemistry and physics.

What was new about their approach was the role of language took in shaping the most important problems in science. According to Hanfling (1981), the primary questions were: 'What is meaning?' and 'What kinds of statements have meaning?'. In that context, words and propositions have meaning by virtue of their relationship with facts and objects in the world.

Language, in this view, is based on phenomena or experiences. Furthermore, they were particularly interested in analyzing scientific statements from a logical standpoint. Carnap (1935-1959), in particular, explored how science is embodied in language. He advocated that scientific statements have to be examined logically by breaking them down into elementary statements (protocol statements) to see how close they are to the sense-experience they are referring to. "Neurath [one of the main promoters of the Vienna Circle] insisted that psychology and sociology must be treated as part of physical science and that all meaningful statements must be reducible to physical terms" (Hanfling, 1981, p. 15). In fact, the truth of these scientific statements had to lie in their correspondence with factual observations. Any statement that was not about observation was deemed unscientific. This position brought about the elimination of metaphysics in science by Logical positivists. In fact, Carnap (1932/1959) wrote a paper on "The elimination of metaphysics through the logical analysis of language". This approach led to the principle of verification, which stipulates that the meaning of a scientific statement is its method of verification. Verifiability is the criteria of meaningfulness. A statement must be verifiable using a particular procedure. If not, the statement is meaningless, or it is a pseudo-statement. However, the Logical positivists acknowledge that logical and mathematical truths are meaningful even if not reducible to experience.

Karl Popper, who has been in contact with some of the members of the Circle, said Logical positivism had "the merit of being the only modern theory of knowledge to have fought for strict empiricism" (Corvi, 1997, p. 20). However, Popper (Corvi, 1997) is also recognized as the one responsible for the death of Logical positivism. Popper found the dogmatic view of Logical positivism, that it is impossible to know with certainty what doesn't exist, unacceptable. According to him, it does not do justice to real scientific practices. Furthermore, Popper successfully rejected the verification principle as a demarcation criterion for determining the

scientific character of theories and proposed instead the principle of falsifiability. The verification principle would have excluded almost everything that characterizes science, yet failed to exclude pseudo-science like astrology.

2.1.2 Operationism in psychology

Psychology appropriated the scientific method developed and practiced by sciences, particularly the physical sciences. This method, called the experimental approach, necessitates a way of viewing the phenomenon to be studied that includes the following partial list of major characteristics as collected by Amadeo Giorgi (1971a)

> The approach is 1) empirical, the point of departure for the study of behavior is through controlled observation, which ultimately means that the variables to be manipulated must be perceivable by the senses; 2) positivistic, speculative content must be dismissed or translated into known empirical and usually, mechanical laws; 3) reductionistic, the phenomenon is made equal to its operational definition; 4) quantitative, to the greatest extent possible, the phenomenon should be described by a mathematical equation; 5) deterministic, all phenomena are assumed to have causes, and if the causal situation of a phenomenon can be duplicated, then the phenomenon will reoccur (Underwood, 1957); 6) certitudinal, whatever the price, the facts established must be certain and immutable; 7) precise, but only that kind of precision that is consonant with the other characteristics of the approach; 8) predictive, the whole reason for experiments is to get facts that will yield laws that will enable us to predict behavior; 9) analytic, a phenomenon, to be understood, must be broken down into its essential elements; 10) repeatability, the phenomenon must be defined in such a way that it can be reduplicated at any other time by any other investigator; and 11) independence of observer, the phenomenon under investigation must be studied in such a way that the data are not influenced by the idiosyncrasies of the experimenter. (p. 7)

The experimental approach was integrated into empirical psychology in the twenties and early thirties in America, the idea being if psychology is to be a science, it must use the natural

science methods. John Watson (1913) defined psychology in his behaviorism manifesto as

> ... a purely objective branch of natural science. Its theoretical goal is the prediction and control of behavior. Introspection forms no essential part of its methods, nor is the scientific value of its data dependent upon the readiness with which they lend themselves to interpretation in terms of consciousness. (p. 158)

Behaviorism from Watson's point of view required psychology to become more materialistic, mechanistic, deterministic, and be more objective, as opposed to its current standing as mentalistic and anthropomorphic, with a tendency to acknowledge free will and be subjective. This view led to the development of operationalism derived, like behaviorism, from Logical positivism. Operationalism was introduced into American psychology during the 1930-1960 period. It had a viewpoint that is quite similar to Carnap's position that all psychological concepts ultimately should refer to publicly observable occurrences. According to Gilgen (1982), it has helped to bolster the neobehavioristic orientation by improving the clarification of ambiguous concepts in psychology. In fact, this movement, like classical behaviorism (1900-1930) and Skinnerian behaviorism (1960-1969), was in reaction to mentalistic psychology and concepts such as consciousness, the mind, will and feeling. In operationism, behaviour is the only legitimate concern of the psychologist, not introspection.

Operationalism's basic statement is that, wherever possible, scientists should use concepts definable in terms of observable operations. It introduced the notion of operational definitions, which requires the investigator to specify how a concept is to be measured, e.g. intelligence is a score obtained by a person during an intelligence test, a valid measure being one that actually measures what it is supposed to measure. It also posits a third person viewpoint where the researcher is an observer and an accurate reporter of behaviour.

Operationism was adopted by the behaviorists because of its operational approach and its claims to rigorous objectivity. One of the most influential positivist researchers in psychology during that neobehaviorism period was Clark Hull (1884-1952) (Gilgen, 1982; Tageson, 1982; Benjafield, 1994). As a neobehaviorist, he applied the scientific approach, in particular the hypothetico-deductive method, to a large variety of psychological problems using experimental research, mathematical modeling, and formal logic. He believed in studying the behaviour rather than the mind and consciousness. White rats were his preferred experimental subjects. Hull held, as an assumption in his 1952 drive-reduction theory, that all higher human drives that motivate behaviour like love or belongingness, were eventually reducible to tissue-needs or physiological sources. This position is called biological reductionism and it presents a mechanistic view of humanity where human consciousness research is considered a nuisance (Tageson, 1982). In Hull's logical positivist methodology, a theory was a logical structure made of postulates and hypotheses. Postulates were descriptions of basic process that underly behaviour. From them, hypotheses were derived or deduced and tested experimentally. If the data were consistent with the hypothesis, then the postulates were retained unchanged. If not, the postulates had to be changed. In this research context, all variables received strict and carefully defined operational criteria. According to Tageson (1982), most modern graduate students in academic psychology have been influenced by his approach to psychological research which focuses on scientific objectivity and quantification.

The extent to which these scientific orientations have influenced Gendlin's positions with regard to natural sciences will be addressed next.

2.1.3 The impact of Logical positivism and Operationism on Gendlin's views of science

In his book "Experiencing and the creation of meaning", Gendlin (1962) chose behavioural science, chiefly psychology and psychotherapy, as his main sources of examples. He argues

> Precise logical definitions and empirical testing are necessary to advance science, and only on the basis of these can we continue to work for the unbiased type of truth that makes men free and permits any man, if his findings can be objectively defined and tested, to question or disprove accepted tenets. (Gendlin, 1962, p. 2)

He writes later "... science must be based on empirical tests and that these tests must be so well defined, and the steps so explicit, that they can be repeated publicly anywhere and as often as necessary" (Gendlin, 1962, p. 17). In both quotes, Gendlin acknowledges the main characteristics of the empirical method in science, that is, the use of a rigorous method combining observation, precise definitions and empirical testing of some propositions in order to identify reliable or objective knowledge and to reject unjustified propositions.

From Logical positivism and Operationalism he maintains, in particular, that science is working with precise definitions based on sense-experience or operational definitions. Agreeing with that, Gendlin has tried to define the intimate subjective *experiencing* dimension of daily living in terms that are defined operationally, in ways that can be identified by an external observer, and as theoretical construct as well. Yet, all these conceptualizations of *experiencing* do not successfully address the living dimension of *it*. Science does not have terms to address the process of bodily *experiencing*. Nevertheless, since Gendlin's goal in the 1960s was to be able to show that his approach and its results were applicable to psychological research and theory, he stated his concepts and results in terms "... acceptable to Logical positivism and operationalism" (Gendlin, 1962, p. 226). This enabled him to undertake to measure client's

experiencing during psychotherapy, following psychotherapy's scientific methodology at the time.

In conclusion, in the 1960's, Gendlin does follow the premises of the scientific method to promote the subjective *experiencing* dimension present in every human activity. In many instances, he clearly articulates the scientific theses of Logical positivism and Operationalism, but with the intent of adding to the current positivistic methods, terms that refer directly to experiencing:

> Positivistic science, including positivistic psychology, has achieved so much that it would be highly undesirable and impractical to give up any of its advantages in order to gain this or that specific purpose. We do not wish to lose any advantages of positivism in order to refer directly to experiencing. Hence, our task is to make direct reference to experiencing possible for psychology, by means of an addition, rather than any alteration, of positivistic, behavioral, operational methodology. (Gendlin, 1962, p. 229)

2.2 Carl Rogers and the psychotherapeutic research context in America between 1940 and 1970

Aside from the influences of the positivistic science methods on Gendlin, his conception of science and its methods were also influenced by the research methods used in psychotherapy. Especially, Carl Rogers' conception of scientific research which accommodates subjective data into an empirical research framework. Gendlin collaborated in the 1950's and 1960's with Rogers, the founder of the client-centered therapy approach, on many research projects, mainly as a member of Rogers' Psychotherapy Research Group. Their collaboration took place at a time where clinical psychology was growing dramatically in America (Gilgen, 1982). According to Strupp and Howard (1992), what characterized those years of growth for clinical psychology was a movement toward empirical investigations to try to understand how psychotherapy works.

The research focus was on the understanding of the process and the determination of the outcome of psychotherapy.

To better understand Gendlin's views on science and research, we will explore some of Rogers' ideas on the application of scientific research methods in psychotherapy in the context of the Humanistic movement in psychology, and on the integration of phenomenological views into his theoretical model.

2.2.1 Carl Rogers and his Humanistic approach to research in psychotherapy

Rogers has been a major player in the development of the Humanistic psychology movement. Also called the third force in modern psychology, Humanistic psychology emerged in reaction to the neobehaviorist movement and psychoanalysis. It is important to keep in mind that "Humanistic psychology started as a rebellion against a mechanistic, impersonal, formalized, hierarchical, elitist psychoanalytic establishment and against an overly scientist, cold, removed behaviorism" (Cushman, 1992, p. 55). Rogers and other Humanistic psychologists criticized behaviourism for its excessive concern with method-centered science to a point where they excluded all problems that did not fit their techniques: anything that was not quantifiable, left researchers with simple, trivial questions pertaining mostly to the physiological and organic aspects of human behaviour. From their point of view, science transforms people, in the context of behaviorism, into objects that can be quantified, leaving behind the subjective conception of a person. DeCarvalho (1991) says, "Behaviorists had ignored the concrete human experience of the self. The study of behavior, they [Allport, Maslow, Rogers, May, and Bugental] argued, cannot be singled out and understood apart from the subjective meaning it has in the context of the organism" (p. 44). Rogers was particularly critical of behaviourism's image of human nature

represented as a purely reactive organism composed of a collection of independent habits with little self-identity, that responds to stimulus.

Humanistic psychologists, on the other hand, viewed the person as a complex, self-motivated, self-oriented organism that organizes stimuli and responses, has inner attitudes and motives and experiences an ongoing life process. The Humanistic movement was made up of an "eclectic melting pot" (DeCarvalho, 1991) of psychologists and philosophers, some associated with European classical phenomenology and existentialism. Their Humanistic conception of human nature and their approach to the scientific method of investigation was characterized by a tension between two paradigms: the objective or experimental, and the subjective or experiential. The movement, as DeCarvalho (1991) said, "...represented an attempt to introduce the understanding of phenomenology and existentialism into the heart of the behavioristic milieu... " (p. 4). In the psychotherapy context:

> The theories of psychotherapy designated as humanistic share an emphasis on subjectivity and awareness in understanding behaviour and a resistance against the view of the person as an object, that is to be seen from an external vantage point that ignores the individual's existential reality. (Rice & Greenberg p. 197, 1992)

Rogers rejected, in particular, the biological reductionism of the neobehaviourism, but pursued a research orientation that moved toward developing a science of human subjective experience and behaviour. "I [Rogers] am a psychologist; a clinical psychologist certainly; a psychotherapist, deeply interested in the dynamics of personality change; a scientist, to the limit of my ability to investigating such change; ..." (Gilgen, 1982, p. 180). Furthermore, Rogers was open to the idea of adapting his thinking to empirical data. He believed in psychotherapy as a science, and in that sense his goal was to see psychotherapy "... become a science, applied

with art, rather than an art which has made some pretense of being a science" (Kirschenbaum, 1980, p. 204).

Rogers arrived at a time when psychotherapy researchers were investigating the questions of how psychotherapy works, and why change occurs using a variety of new techniques for studying process and outcome. He contributed to the improvement of the application of the scientific method in the field of psychotherapy research in a number of ways. For example, Rogers was one of the first psychotherapy researchers to use sound recording as well as other innovations like the Q-sort questionnaire to measure personality change. He used factor analysis to reduce the complexity of the psychotherapeutic data. He also designed control studies to establish the efficacy of his psychotherapeutic approach, the Client-centered therapy.

Rogers particular approach to psychotherapy research was called naturalistically based research. He was interested in observing in a therapy setting, not in a laboratory, what was spontaneously happening inside a therapeutic relationship between a client and a therapist. He immersed himself in a therapeutic relationship by participating in the therapy or by listening to audio recordings of the sessions. As Rogers wrote in 1958, "I used myself as a tool ... I have spent many hours listening to recorded interviews — trying to listen as naively as possible. I have endeavored to soak up all the clues I could capture as to the process, as to what elements are significant in change" (p. 142). From this immersion, ideas would develop from an intensive, inductive effort to identify and understand, for example, the essential ingredients for the change process to take place in psychotherapy. It was during those attempts at identifying ingredients through naturalistic observation and phenomenological gathering methods like the Process Scales, that faint patterns or connections between events would sometimes emerge in the mind of researchers. For Rogers (1976), "It is this informed, intuitive perception of intangible hidden connections between events which constitutes the basis for the scientist's hypotheses" (p. 544).

In particular, in therapies with successful outcomes the emphasis was on identifying the ingredients that would lead to a process that could change the client. From this exercise, Rogers and his colleagues would attempt to clarify and conceptualize some of the crucial change processes taking place in a therapy session, and how the therapist facilitated these changes. These conceptualizations would then take the form of constructs like degree of empathy, level of unconditional positive regard and measure of congruence, which were then given operational definitions. The hypotheses were tested by means of verification studies conducted by the usual scientific methods to demonstrate that these patterns do exist in reality. For Rogers, this was the most fruitful way to develop hypotheses. In retrospect,

> Rogers viewed research as consisting of two very different stages. The first involved intensive listening to taped therapy sessions conducted by himself or by colleagues, trying to get a feel for the "process strands" (Rogers, 1958) that characterized positive change and its facilitation, and then letting hypotheses emerge from this experience. Then the second stage was testing of the hypotheses by the usual positivist methods (Rogers & Dymond, 1954; Rogers, Gendlin, et al., 1967). (Rice & Greenberg, 1992, p. 215)

Rogers' goal was to discover "... whether lawful order can be discerned in the verbally expressed meaning and emotionalized attitudes which are central to the relationship of two individuals" (Rogers, 1976, p. 543). In that research context, Rogers was faced with a dilemma that followed him throughout his entire career: How could one reconcile the investigation of subjective therapeutic relationship phenomena, which are an intensely personal experience, with the rigorous constraints of scientific methods that involve objectifying the person. It is the struggle in research between the subjective and the objective, or in psychology, the tension between the psychologists "... who were interested primarily in understanding the person as he experiences himself and the world subjectively and those who were interested only in the

person's behaviour, as viewed from the outside" (Kirschenbaum, 1980, p. 306). Rogers was interested in both to some extent. Kirschenbaum (1980) said about Rogers, "Without science, he was akin to a faith healer. With science only, there could be no client-centered therapy. A warm human being was needed for that" (p. 307). For Rogers, this continuing struggle between the subjective and the objective was desirable and necessary for the behavioural science to develop and be of help to society and the individuals within it. Furthermore, he was interested in developing a new philosophy for behavioural sciences, one that combined naturalistic observations with controlled research design. The approach would be closer to human nature than the neobehaviourist views, which depict humans as complicated machines with a predictive behaviour patterns.

Rogers conducted many empirical researches in his career. Hoping to better understand the psychotherapeutic process, he began with the help of a group of talented graduate students in the 1940s at the Ohio State University to collect audio recordings of psychotherapy sessions. This naturalistic observation process led to a research program that he pursued at the University of Chicago where he met Gendlin. In Chicago, between 1945 and 1957, he conducted a number of empirical researches at the Counseling Center of the University of Chicago which became "...regarded as the most innovative center in the country for research and new methods in psychotherapy" (Kirschenbaum, 1980, p. 241). That period of time was Rogers' most prolific time for research on client-centered therapy. There, Rogers and colleagues (Gendlin included), set up and planned an integrated series of research activities involving a number of researchers for several years that focused on a central problem. He wanted to identify and confirm by empirical means what the crucial therapeutic factors were in the therapist's work that stimulated growth in his/her client. He was always looking for ways to improve his research methods. In Chicago, he tackled a number of research flaws that had occurred in the past. The included: too

small a sampling of experimental subjects; no matching control group; and the lack of measurement tools to assess key ingredients of the change process. He also refined the practice of studying complete transcripts of audio-recorded therapy interviews.

In the late 1950's, two major developments modified the research orientation and methodology of Rogers. The first was a desire to test and prove the effectiveness of client-centered therapy with populations other than the clientele of university outpatient clinics. Rogers searched for hospitalized clients who were maladjusted and disturbed, and in particular, clients suffering from schizophrenia. The second was the development in 1955 by Gendlin and Zimring (1955), of a new process conception of psychotherapeutic change which they called "*experiencing*". For Rogers, this second development opened up new ways of understanding what occurred during therapeutic sessions. This resulted in the development of a process theory of therapeutic changes, a theory that he tried to verify with his five year Wisconsin Schizophrenia project (1958-1963), a large and complex empirical study of the effects of the client-centered approach in psychotherapy with schizophrenic patients. The aim of this research was to define which therapist behaviour constitutes the essential conditions of psychotherapy and what constitutes, in the client, the essential indices of therapeutic process. The goal was to find what are the essential factors of effective psychotherapy. From an empirical point of view the question was, "How can one determine empirically whether certain subtle qualities in a therapeutic relationship are associated with an equally subtle process of change in the personality and behaviour of a hospitalized psychotic person?" (Gendlin & Rogers, 1967/1977, p. 23). The challenge was to find a way to identify process variables and to scientifically observe and measure the new process conception and its associated variables.

Rating scalesare the main instruments used to score the intangible qualities and subtle process that are present in a therapeutic relationship and in the client's process. Based on an initial Process Scale developed by Rogers and Rablen in 1958, Rogers and his team of researchers developed several rating scales to measure different therapeutic processes. These instruments were used to determine whether certain qualities were present in the therapist or the client. For example, in the Wisconsin Schizophrenia project, the people doing the rating were trained to judge the presence and intensity of certain qualities in the therapist as they listened to randomly selected four-minute segments of audio tape from early and late periods in a therapy session. Qualities like empathy, unconditional positive regard and congruence in the therapist were judged as he/she interacted with a client. Eight rating scales were developed specifically for the Wisconsin Schizophrenia project. Among these scales were two of Gendlin: the rating of *experiencing* and the manner of relating.

The termination of the Wisconsin project in 1963 marked the end of the scholarly activity of Rogers' research team of therapists. The members of the team disbanded and no major client-centered research projects were undertaken afterward. Gendlin went his way pursuing his exploration of the *experiencing* concept and the development of the experiential psychotherapy approach.

2.2.2 Carl Rogers' phenomenological views

One of the most central themes in Humanistic psychology and psychotherapy is a commitment to a phenomenological approach (Rice & Greenberg, 1992). However, most of Rogers' writings fail to reveal his obvious indebtedness to the phenomenological method according to Spinelli (1989). Nonetheless, Humanistic psychology is distinct from

phenomenological psychology, though both fields have important points in common (Thinès, 1977).

Rogers's views on existential phenomenology became more explicit in the early 1950's. At this time, when he was increasingly divided in his elaboration of a new approach to psychotherapy between the Logical positivism philosophy and subjectivism. At the suggestion of some theology students at the University of Chicago, he read and reflected on the writings of two existential philosophers, the Hasidic Martin Buber and Soren Kierkegaard. Both philosophers' analysis of human nature had major impact on Rogers' views of the self and on therapy. For example, it is from the writing of Martin Buber that Rogers recognized and understood the importance of the relationship in the healing effect. With Kierkegaard, Rogers grasped "that the aim of life is to be that self which one truly is" (DeCarvalho, 1991, p. 119). His readings made him aware also that he had existential beliefs long before he had heard about European existentialism. "Rogers wrote that he had been pleased 'to find [about 1951] that there are friends here that I never knew I had', and was surprised that the 'central aspect of my therapeutic work could justifiably be labeled existential and phenomenological' " (DeCarvalho, 1991, p. 65).

Rogers' client-centered therapy was phenomenological at its very foundation. His conception of the self as advocate in the early 1950's talks of a phenomenal self that is equated with a gestalt or an internal frame of reference. Writing about his theory of personality and personality change, Rogers wrote that it was "... basically phenomenological in character, and relies heavily upon the concept of the self as an explanatory construct" (Rogers, 1951, p. 532). This self continually organizes its perception of reality as well as its ongoing inner experience of the world by attaching meaning to whatever it perceives. Reality becomes reality-as-perceived by

the self: the self being a center of intentionality. In that respect, Kirschenbaum (1980) wrote "Rogers' theory was a phenomenological theory, that is, a theory which begins with the assumption that every individual perceives a separate world of phenomena all around him and also within himself" (p. 238).

As a therapist, Rogers put increased emphasis on the importance for the therapist of attending to the client's world as the client sees it and of understanding the client from his internal frame of reference. In his book, Client-Centered Therapy (Rogers, 1951), Rogers put the client at the centre of a continually changing world of experience. In this context, the therapist should attend only to the client's perspective on reality or should stay within the realm of experience that is available to the client's awareness (including sensations, perceptions, meanings, memories) at any given therapeutic moment. Rogers speaks of the individual's "internal frame of reference", a "private world of experience" a unique construction created by personal interactions from the past. Rogers, according to Zimring and Raskin (1992), "... puts the emphasis on the world of the client and in understanding the client's internal frame of reference" (p. 642).

His interest in the subjective side of the person, also affects his approach to psychotherapy research. As Carl Rogers said in 1959 and reported by Gendlin (1962)

> There is a rather widespread feeling in our group that the *logical positivism* in which we were professionally reared is not necessarily the final philosophical word in an area in which the phenomenon of subjectivity plays such a vital and central part.
> Is there some view, possibly developing out of an existentialist orientation, which might preserve the values of logical positivism and the scientific advances which it has helped to foster, and yet find more room for the existing subjective person who is at the heart and base even of our system of science? (p. 48)

Gilgen (1982) talks about the influence the existentially oriented theory of Carl Rogers had on his psychotherapy research methodology, where he tried to integrate subjective data into a positivistic frame of research. However, Rogers' more American approach to phenomenology was different than the European approach. In comparing the American approach to human behaviour with European existential analysts' like Husserl, Heidegger, Sartre, and others, Tageson (1982) notes:

> Most American authors, on the other hand, are far less philosophically sophisticated. They tend to begin from a much more pragmatic, less esoteric base, and to develop their own terminology and approach, which, in turn, is heavily laced with methods of controlled observation borrowed, where possible, from operationalism. (p. 32)

Rogers concluded, what many Humanistic psychologists have done is to introduce the investigation of phenomenological variables in their research paradigm. Variables such as inner, private experiences can be communicated to investigators through methods that lend themselves to some form of statistical and mathematical treatment. "Often, the founders of Humanistic psychology equated phenomenology with a method of studying reports of immediate experience and of introspective nature" (DeCarvalho, 1991, p. 68). This approach, developed by several American investigators, is called functional phenomenology as opposed to structural phenomenology, a more qualitative description of the inner-world of a human subject (Tageson, 1982), where the intended goal is to describe or to re-create, in all its richness and variety, the inner world of a subject in order to make it comprehensible to others. According to Tageson (1982), Carl Rogers, Henry Murray, and Gordon Allport were among the first Americans to attempt to develop such a functional phenomenology. However, many researchers were worried about the return of introspection. In the past, the Titchenerian introspective method, in particular, had failed because its lack of empirical precision rendered it unreliable (Bergin, 1970).

In the methods that Rogers and his colleagues developed to study the reports of immediate experience, we find a number of instruments, including Stephenson's Q-technique or Q-sort technique and the Process Scale.

The Q-sort consists of 75 to 100 self-descriptive statements printed on cards. The client sorts these cards into piles ranging from "not at all characteristic of me" to "very characteristic of me". The client's distribution of the cards gives researchers a quantified picture of the client's self-concept, ideal self-concept or level of congruence between the two concepts, depending upon how the test is presented to the client. By administering the Q-sort tests at various times during the course of therapy, the results can be used as a measure of change in the client's self-concept and as such, can represent a useful measure of personality change as a consequence of therapy.

The Process Scale approach was elaborated by Rogers but was based on Gendlin's *experiencing* theory (Gendlin & Tomlinson, 1976). It consisted of seven process variables or experiential variables in the therapy process, with each having seven distinct aspects or stages of interview behaviour. These variables were (1) feelings and personal meanings; (2) manner of experiencing; (3) degree of congruence; (4) communication of self; (5) the manner in which experience is construed; (6) the relationship to problems; and (7) the manner of relating to others. For example, the lower ends of the first scale present a client who does not express his personal feelings, while at the other end of this scale the client is fully experiencing his feelings and personal meanings. The purpose of the scale is to assess the client's degree of *experiencing* for each of the seven variables. It measures the degree of changes a person goes through in his/her manner of *experiencing* during therapy. According to Jennings (1984), "By implementing a broad range of interrelated process variables, the "Rogers' Process Scale" represented the most cogent means of 'getting at' the observable experiential conditions that characterize 'effective

therapy' " (p. 123). It also provided a reliable method of accurately assessing the effectiveness of an ongoing therapy. The scale was used by the staff conducting the rating while they listened to random segments of audio-recording of therapy sessions. The scale through many revisions.

These instruments, once integrated into a methodology, enabled the researcher to quantify individual self-concept, to treat a complex set of data drawn from the internal frame of reference of a subject, and analyze them objectively. Rogers was well aware of the difficulties associated with the development of such instruments.

> It is the hard intellectual work of devising instruments to measure the intangible, constructing nets with which to capture the incredible subtleties of a fluid and changing relationship, or of an internal process of change, and to turn these subtleties into numbers and ranks and objectivity. (Rogers, 1976, p. xvi)

This methodology relies heavily on a type of reductionism called mathematical reductionism, as opposed to biological reductionism (Tagason, 1982). The goal is to reduce the qualitative aspects of human behaviour, in particular the subjective views, to quantifiable phenomena.

> This is a less crude form of reductionism, motivated more by a concern for scientific rigor than by any necessary philosophical presupposition. It can be, and often is, simply a methodological strategy, which need not involve a denial of its limits in representing the data of reality as best it can, while retaining an awareness that much of reality's inherent richness is left aside in the process. (Tageson, 1982, p. 80)

These methods used in the 1950's and 1960's offered an effective way to capture and quantify certain aspects of the client's private experience during the process of therapy. Furthermore, this methodology led to the development of a view of research that combines phenomenological and positivistic methodologies. In todays terms, this earlier methodology

would fit into a branch of phenomenological psychology called experimental phenomenological psychology (Klein & Wescott, 1994).

> So Rogers, like many other American humanistic psychologists [Allport, Maslow, May, Bugental], all had a similar approach to a quantitative phenomenology. In Rogers's case, his psychology of personality was phenomenological but he "... took a quantitative approach to processing and synthesizing the phenomenological data". (DeCarvalho, 1991, p. 70)

In conclusion, Rogers tried some of his understanding of phenomenology to apply to clinical psychology. He was one of those researchers who made a contribution to the development of phenomenological psychology research in America. However, it was not an explicit way, like we might see in a phenomenological psychological research context. As a matter of fact, Spiegelberg (1972), a historian of the phenomenological movement, considers that it is "... rather obvious that [Rogers] never tried to practice phenomenology consciously" (p. 156).

2.2.3 Carl Rogers, Eugene Gendlin and the development of the process conception of therapeutic experience

According to Strupp & Howard (1992): "Process research in psychology dates back to the 1940's, when Carl Rogers and his associates took the bold step of making and studying wire recordings of psychotherapy sessions" (Goldfried, & Wolfe, 1996, p. 1008). In the 1940's and 1950's, researchers were interested in better understanding the nature of therapist-client interaction and answering the question, How is the therapeutic process taking place? Using tape-recorders, researchers spent hours listening to therapy sessions to get at the essence of the therapy experience, at the experiential flow of events. This led to the development of numerous procedures such as questionnaires or scales to monitor the nature of the therapeutic interaction, coding systems, therapeutic markers and methods of classifying a therapist's style of

responding, to analyze therapy sessions. It was part of a search for the basic ingredients of change in psychotherapy. It directed the researchers to process and analyze content in the belief that this intensive study of the transactions between clients and therapists and, in particular, the quality of the client's involvement and participation in therapy, would lead to a better understanding of how psychotherapy achieve certain results.

With regard to the process analysis, the researchers were looking at certain characteristics of clients' behaviour, or sequences of events during therapy to indicate susceptibility, the presence of a therapeutic movement, or of a changing process within the client. Since researchers cannot study the actual experiential flow of events during sessions, the notion of process has been substituted and it is operationally defined "... as those discriminating characteristic sequences which are hypothesized to be indicative of different degrees of ongoing changing" (Gendlin & Rogers, 1976, p. 14).

The trend toward a process conception of therapy was initiated by the observation that therapeutic change happens in clients regardless to the school of thought or therapeutic approach used by the therapist. It was determined that, if the content is not the determining factor, then it could be something in the flow of events happening between the client and the therapist. As Gendlin says (1973):

> For many years, the leading research problem in psychotherapy has been the measurement of whether or not effective psychotherapy is taking place. In the past twenty-five years many cases have been tape-recorded, but the many attempts to define the differing problems that patients verbalize, or methods therapists use, have failed to show any relationship to outcome. Methods emphasizing different, supposedly "basic" psychological factors, show about the same degree of success. Different orientations of therapists concentrate respectively on sexual problems, infantile experiences, lifestyles, self-concepts, interpersonal relationships, or other kinds of "basic" contents. These

> differences do not seem to matter. Some therapies are successful and some fail, with or without any of these content areas. The resolution of this problem along phenomenological lines lies instead in studying how patient and therapist talk, rather than what they talk about. (pp. 310-311)

From these observations and deductions, three factors according to Gendlin and Tomlinson (1976) concurred with the development of a process conception of therapy in client-centered therapy.

The first factor is the observation that when a therapist involves himself in a personal encounter with a client, verbally reflecting to the client his immediate concretely felt affective states, a change would take place in the client's felt personal meaning. This concretely-felt meaning created by the integration of the client's perceptions, memories, thoughts and feelings into a meaningful gestalt representative of the present moment. This subjective felt experience of difficulty is initially not fully conceptualized by the client. However, as the therapist's responses help the client to find words, to differentiate this felt meaning, it changes. New aspects of the felt meaning emerge from the client and are further differentiated and conceptualized with the help of the therapist. From this back and forth movement between client and therapist, and with the interplay between not as yet verbalized, implicitly felt meaning and explicit conceptualization "a self-propelled change process is put into motion" (Gendlin & Tomlinson, 1976, p. 110).

The second factor has to do with Rogers' views of human nature and personality. According to Rogers' evolutionary conceptions of human nature, there is a directional tendency in the development of the human organism. It takes the form of a development toward greater and greater complexity, interrelatedness and order. This natural development is selective and directed only toward positive objectives. It is a kind of automatic subjective actualizing tendency. This

development is seen in the context of a broad evolutionary perspective where human consciousness appears at a certain point in living organisms. This evolution acknowledges there is a biological base to human nature, onto which a symbolizing capacity was created over a nonconscious organismic functioning. For Rogers, the fully functioning person is in touch with their own dynamic organismic actualizing tendencies. The therapist is faced with clients who experience an estrangement between the symbolizing of the self-concept and the immediate organismic experience. This estrangement is reduced in client-centered therapy by the interpersonal climate developed by the therapist in relation to the client. In reaction to the therapist's attitudinal condition of unconditional positive self-regard, congruence, and emphatic understanding, the client will naturally move toward a growth process leading to positive changes and healing. The task of the therapist is to facilitate the client's self-awareness and understanding of their own inner world and feelings, in the hope of better integrating the client's symbolization with the organism's self-actualizing tendencies, which would lead to constructive changes. In that sense, Rogers's view of human nature and personality are imbued with this concept of process.

Finally, the third factor is Rogers's view that optimal functioning in an individual occurs only when the individual's personality organization is based on bodily experience. In that respect, successful therapy encourages the client's increasing use of his own ongoing bodily experience to organize himself and express his uniqueness. This increasing use would result in a heightening congruence between the client's conceptualization and organismic experience, a process leading to personality change.

According to Gendlin & Tomlinson (1976), the next step in the development of the process conception of therapeutic experience was the observation by Gendlin and Zimring (1955) that

new feelings and meanings emerge during psychotherapy and that they change when the client attends to them, or expresses them, or when the therapist respond to them. There were three consequences of this observation. The first is that there is an ongoing *experiencing* process in the client during a therapeutic session and that the behavioural responses of the therapist, or the use of the right word by both client and therapist, have the potential to carry forward, or change the felt personal meaning of the client. Secondly, they introduced the term "*direct referent*" to identify the immediate concrete experience felt by the client. Finally, personality was now viewed as an ongoing feeling process, and not a series of static elements.

In the process conception of psychotherapy, human life becomes a stream of ever-changing experiencing. This new view required a fundamental re-thinking of how to accurately conceive human experiencing. Before, human experience was perceived more from a content conception, a build-up of static elements or discrete units, like traits, instincts, past experiences. The new view saw human experience as fluid, a moving process. The content conception viewed "... personality and behavior as a structured accumulation of 'contents' from past experiences" (Jennings, 1984, p. 95). The total accumulation of elements constitutes the person. In that context, the unconscious becomes a container of accumulated units of experience. Therapy became then a question of reorganizing or deleting old contents or adding new contents. This mechanical view of humanity which Gendlin did not like, saw individuals as boxes with well defined entities, like drives and motives driving them. It is based on the process conception that Rogers derived seven types of client behaviours indicative of positive movement in therapy. This became the process conception in therapy and it was presented to the American Psychological Association in 1957. "It was Rogers' student Eugene Gendlin who began to explore and who helped Rogers to understand in greater depth what this therapeutic process is

which the client undergoes. It centered around Gendlin's theory of experiencing" (Kirschenbaum, 1980, p. 278).

According to Klein, Mathieu-Coughlan and Kiesler (1986), "Rogers and Gendlin contributed in discreet and complementary ways toward an understanding of what experiencing is and in what ways it contributes to the process of therapy" (p. 25). Out of his experience and training with Rogers, Gendlin developed a new view of the process of therapeutic change called "*experiencing*", a view that will have a dramatic impact on our perception of personality and behaviour. It led him to elaborate a psychotherapeutic approach based on a process conception called Experiential psychotherapy.

Process research is still an important area of research today in psychotherapy. According to Goldfried and Wolfe (1996), the practicing therapist needs scientific information from three sources to act clinically: basic research on clinical problems, research on the process of change, and outcome research. In the context of psychotherapy, basic research deals with the 'what' of therapeutic change, while psychotherapy process research is interested in the 'how'. Rogers and Gendlin were interested in the "how".

2.2.4 Gendlin's contribution to Carl Rogers' empirical approach to research

There was close collaboration between Rogers and Gendlin until Gendlin left Rogers early into the 1960s. Initially Gendlin joined Rogers' group of researchers in 1953 (Gendlin & Lietaer, 1983) at the University of Chicago. As a philosopher, he was interested in how people spontaneously symbolize experience and report it, a question which is at the center of the psychotherapeutic experience. This question of symbolization led him in the direction of

psychotherapy as a source of in vitro observation of this phenomenon. He established contacts with the personnel at the Counseling Center and later began working within the context of Rogers' non-directive approach, as it was called at the time. In this approach, they would let the client stay with an inner experience until, slowly, with the help of the therapist, the client would symbolize and express what was there. Gendlin's work during the years following 1955 was largely devoted to a collaborative effort to further theory and research in client-centered therapy. Rogers had a major influence on Gendlin's understanding of psychotherapy and psychotherapy research, because Gendlin's interests and academic training were initially in philosophy. For example, Rogers' research methodology, his phenomenological views of psychotherapy and psychotherapy researches, as well as the philosophical questions with which Rogers was dealing, were fertile ground for Gendlin's elaboration, articulation and empirical testing of his own theory of *experiencing*. Gendlin also influenced Rogers significantly with his theory of experiencing.

> In listing the most important sources of his ideas, Rogers (1980) placed much value on what he had learned from graduate students and colleagues. For instance, Eugene Gendlin, a graduate student and later a colleague, formulated the concept of "experiencing" (Gendlin, 1962), based on the view that, within human beings, there is an ongoing flow of experiencing to which the person can turn, under the right conditions, in order to discover the "felt meanings" of experiences. Rogers felt that the concept of experiencing had influenced his view of therapist empathy as well as a number of other important issues. (Rice &Greenberg, 1992, p. 201)

Through Rogers' different research projects, it appears that Gendlin had the opportunity to experience first hand the difficulty associated with psychotherapy research methodology involving the subtle changes in human subjects. Gendlin had a leading role in Rogers most important research project, the Wisconsin Schizophrenia project. He participated as a research coordinator for Psychotherapy Research Group of the Wisconsin Psychiatric Institute at the

University of Wisconsin, and was in charge of the development and implementation of the project. In fact, he was involved in the conception of the research project, participated in its planning, and design, and worked as a therapist. The research design was very complex. It involved a sample of 48 subjects divided into three groups of 16 participants: the more chronic schizophrenics, the more acute schizophrenics, and a group of normal volunteer adults from the community. Each group was composed of eight matched pairs based on gender, age, socio-educational status, and degree of psychological disturbance. In each pair, one individual was designated at random as a therapy subject and the other one as a control subject. Eight participating client-centered therapists, including Rogers and Gendlin, worked with three clients each over many months. All therapy sessions were audio-recorded and the interaction material between client and therapist was analyzed using different rating scales. Three major clusters of variables were used in the experiment. One cluster measured the degree of congruent empathic understanding and unconditional positive regard in the therapeutic relationship. The second cluster used outcome measures to assess therapeutic effectiveness, and the final cluster consisted of process measurements of the therapeutic experience. Gendlin was involved in the development of two of the four scales used for the last cluster of variables. The clients underwent a battery of tests at three and six month intervals. This led to a huge accumulation of data and months of data analysis. The findings of the study were reported in a book called, "The therapeutic relationship and its impact", originally published in 1967 but not put on the book market before 1976 (Rogers, Gendlin, Kiesler, & Truax, 1976), where Gendlin wrote a number of chapters with Rogers and other colleagues. In the introduction to that book, Rogers wrote, "Dr. Eugene Gendlin initiated the program, with all of the detailed arrangements which that implies, and has contributed a basic theoretical formulation upon which a number of our process measures have been built" (Rogers, Gendlin, Kiesler, & Truax, 1976, p. xviii).

Gendlin made a significant contribution to Rogers' research efforts as a theorist, clinician, and experimental researcher. He introduced the idea of experiencing, he helped clarify the process conception of therapy, and he worked at developing ways to translate terms that refer directly to experiencing into scientifically measurable observations. His *experiential psychotherapy* is perceived as an improvement on client-centered therapy, and his ideas are considered unique. In a chapter of a book called, "Client-centered and experiential psychotherapy in the nineties" (Lietar, Rombauts, & VanBalen, 1990), we can find chapters on both approaches. In fact, Gendlin is saying in this book that he is pursuing the path initiated by Rogers. "..., I feel I am following in his footsteps" (Gendlin, 1990, p. 206).

Altogether, Gendlin worked with Rogers, between 1955 and 1963, and pursued a number of empirical studies, initially as a collaborative effort to further the theory and research in client-centered therapy. These initial researches prepared Gendlin for the development and the promotion of his own approach, the *experiential psychotherapy*. More will be said on Gendlin's own experimental research process in the next section.

2.2.5 Gendlin's own empirical research effort

After leaving Rogers and the client-centered therapy research group in the early 1960s, Gendlin continued to develop the concept of *experiencing*. His two main goals were (1) to give persuasive experimental support for the vital role of *experiencing* in the therapeutic process and outcome, and (2) to develop a method to teach *focusing*. For that purpose, he pursued empirical researche until the beginning of the 70s with a team of researchers and continued to articulate his theoretical understanding of the *experiencing* process from a philosophical point of view.

During a ten year period Gendlin conducted, with collaborators, approximately seven researches where he used a correlational research paradigm (Jennings, 1984). It involved translating, as he had learned from Rogers' research methodology, subjects' terms referring to *experiencing*, into quantifiable observational statements that were later correlated with empirical criteria of change, mostly obtained from personality tests like the Cattell Personality Test and the Rorschach. The aim was to demonstrate the relationship between expressions by the client of high levels of *direct references* to internally felt experience or *experiencing* and successful therapy outcomes defined as positive changes in the psychological make-up of the client.

Between 1960 and 1961, while an important member of Rogers' Wisconsin Schizophrenia Study team, Gendlin and his colleagues initiated three researches, where they tried to formulate quantifiable variables from the *experiencing* conceptions. For that purpose, they used two categories of research instruments: tests, and a measure of galvanic skin response. The first instrument included the counselors' rating scale of process and outcomes (i.e., external judgement of the counselor), and the client's Q-sort measure of experiencing (i.e., judgement of the clients themselves). Both were used to identify and measure key elements of the experiencing process. The second instrument, employed in 1961, was a device to measure galvanic skin responses. The researchers were looking for physiological correlates of the experiencing process.

In 1963, after Rogers' Wisconsin Schizophrenia Study ended with disappointing results, he continued the development of the *experiencing* concept by using research studies of the Experiential scale (EXP) and looked at ways to empirically validate a number of questions. This scale, which Gendlin and his colleagues developed further, was based on Rogers' Process scale that became, around 1960 and through Gendlin's work with Tomlinson (Gendlin & Tomlinson,

1960), the Experiential scale. This new scale was developed after they found that four of the seven scales of the Process scale were so inter-correlated that only one scale was necessary. It consists of a seven-point scale that a judge uses to quantitatively measure the level of experiencing of a client while listening to a few four-minute segments of tape or reviewing transcripts of the psychotherapy. The scale helps define the progression of client involvement in therapy from refusing to participate, to focusing easily and being well connected to inner referents. It is through the use of the Process scale and the EXP that Gendlin and his collaborators became convinced that the level of *experiencing* was the most important factor of positive therapeutic change in psychotherapy. This conviction was based, according to Gendlin, Beebe, Cassens, Klein, & Oberlander (1968), on the results of eight studies: four that used neurotic clients, as reported in articles published between 1959 and 1962; and four that used schizophrenic patients, as reported in articles published between 1963 and 1967. They conclude that, without showing the data of the eight studies "In all these studies, the finding was that the more successful clients showed significantly higher levels on the Process Scale both early and late in psychotherapy" (Gendlin, Beebe, Cassens, Klein, & Oberlander, 1968, p. 224). What supports this statement? (1) There was no reference to the number of successful clients out of the total number of clients, and there was no reference to the statistical techniques used to reach this conclusion; (2) there was no information provided concerning the similarity or the dissimilarity of the single studies. Furthermore, there are problems with the Process scale: (1) it only provides a gross approximation of what is happening in the client during therapy. The scale featured a seven stage continuum that does not provide a reliable measure of the client's ongoing *experiencing*; (2) was what the scale measured, i.e. the experiencing level, the most important variable in predicting the outcome of psychotherapy? We know that there are other therapist/client variables relevant to the outcome of therapy (Seeman, 1997).

To complicate matters even more, Gendlin goes on to suggest that success in therapy depends on a certain mode of in-therapy behaviour that he characterized as high experiential attention and involvement. This led him to try to show empirically that if this behaviour (focusing) is present from the start, as assessed by the EXP scale, it is possible depending on the initial level of *experiencing* of a client, to predict the outcome of psychotherapy. To test this idea, he reexamined the results of 50 cases (38 neurotic patients and 12 schizophrenic patients) taken from data pooled from previous studies. He found that 15 out of the 38 neurotic patients (39 percent), corroborate the prediction of a positive relationship between initial level of *experiencing* and outcome (Gendlin, Beebe, Cassens, Klein, & Oberlander, 1968). His conclusion was "... there is a fairly strong relationship between initial EXP level and case outcome, but there are enough exceptions to warrant consideration" (Gendlin, Beebe, Cassens, Klein, & Oberlander, 1968, p. 228). In a recent review of the most statistically valid seven empirical studies looking at the relationship between level of *experiencing* and psychotherapy outcome, the author comments on the 1968 research article by Gendlin, Beebe, Cassens, Klein, & Oberlander: "Gene [Gendlin] clearly acknowledged that the prediction, while significant, was not robust" (Seeman, 1997, p. 16).

After critically reviewing the research methodologies and procedures used by Gendlin and his colleagues during the 60s to demonstrate that changes in *experiencing* level caused or influenced important psychological changes, Jennings (1984) concluded that "... there is little convincing experimental support for the hypothesis that 'experiencing' brings about therapeutic change" (p. 176). Jennings (1984) ends by saying that Gendlin's empirical researches were on the whole "... methodologically flawed and inadequate, and it failed to produce any convincing experimental evidence of the presumed crucial role of 'experiencing' in therapy" (p. 191). His conclusions were based on the fact that (1) two of the seven studies did not use individuals in

psychotherapy, but college students. (2) there were major methodological problems with all the researche except the portion done as part of the Wisconsin Schizophrenia Study with Rogers (Rogers, Gendlin, Kiesler, & Truax, 1976), and (3) the correlational approach to research cannot be used to determine that *experiencing* is the factor responsible for the outcome or the success in therapy. Still, Gendlin refers to these studies to support the validity and the efficacy of his approach.

In 1974, he writes:

> When people during therapy are high on the Experiencing Scale (Klein, Mathieu, Kiesler, & Gendlin, 1970), they are successful. A series of studies (Gendlin et al., 1968) has now replicated this finding. It represents the only measure of the effectiveness of ongoing therapy. (Gendlin, 1974, 241)

In his 1978 self-help book called "*Focusing*" (1981b, second ed.), Gendlin makes a number of statements on *focusing* that he says are supported by empirical research results. For example, "We found we could predict success or failure right from the start just by analyzing the early interviews. According to a careful statistical analysis, there was less than a thousand-to-one chance of getting the same finding accidentally" (Gendlin, 1981b, p. 4). Another statement, "The research shows plainly, and repeatedly, that successful patients do indeed improve in this key skill, but the research also shows that they had it to some extent right at the beginning" (Gendlin, 1981b, p. 5). In the book's appendix, he includes a chapter called "Research summary and references" that contains 25 entries, mostly articles on ways to teach *focusing* and applications of the method to people with different concerns and issues, and no work on further basic research on *experiencing* . Out of all these entries, he refers to only three articles in support of his research statements. In these three articles, two have him as first author, and one is the

article mentioned earlier by Gendlin, et al. (1968). The second one (Gendlin, 1969b) has a chapter entitled, "The research background" that refers the reader to six additional studies made by different researchers between 1962 and 1968, including Gendlin's et al. (1968) article, and Rogers' Wisconsin study, suggesting that there is a correlation between *experiencing* level and successful outcomes.

We find references to these same researches in many of Gendlin's articles over the years. For example, in his 1978-1979 article on Heidegger's concept of *Befindlichkeit*, Gendlin discusses a series of research studies and refers to the 1968 article by Gendlin et al. It is presented this way: "A series of studies has shown that patients who engage in the kind of steps I described are successful in psychotherapy, ..." (Gendlin, 1978-1979, p. 53).

A review of literature on the *Experiencing* Scale (*EXP*) conducted by Klein, Mathieu-Coughlan, & Kiesler (1986), who were colleagues of Gendlin during Rogers' Wisconsin study, makes some conclusions based on the results of six studies done between 1969 and 1982:

> ... when EXP was considered very early in therapy, EXP predicted outcome in two of six studies. ... When EXP has been considered at the therapy midpoint, there have also been mixed results. ... Positive results have emerged more consistently when EXP late in therapy or EXP change scores over therapy (which also reflect high late-therapy levels) are considered. (p.51)

These authors concluded that there is an association between experiencing and therapeutic outcome using EXP levels at different points in therapy, mostly after the first few sessions! This contradicts Gendlin's statement made in a 1986 article "What comes after traditional psychotherapy research?" that those who have high score on the EXP scale at the beginning of therapy are success cases. Gendlin writes (1986)

> Rather than predicting prognosis, let us change therapy to be more regularly successful. For example, we had predicted that success cases would increase on the Experiential Scale. Instead we found (Gendlin, Beebe, Cassens, Klein, & Oberlander, 1968) and continue to find (Mathieu-Coughlan & Klein, 1984; Klein, Mathieu-Coughlan, & Kiesler, 1985) that scores on the Experiencing Scale are significantly higher also in the first period of successful therapy. We might have used the finding as a prognosis measure. (p. 133).

In 1991, Gendlin says in a short chapter on psychotherapy research, "In a number of research studies it was found that a high incidence of such steps [carrying-forward steps] correlates with success in psychotherapy" (1991b, p. 85). However, this time, he refers to the review of literature on the *Experiencing* Scale (*EXP*) done by Klein, Mathieu-Coughlan, & Kiesler (1986).

Finally, in 1997, Seeman's review of seven valid empirical studies (from 1959 to 1986) linking the level of *experiencing* to psychotherapy outcome concludes "The evidence is mixed with respect to the question of association between early-therapy level of experiencing and outcome success. There is, however, a sufficient proportion of positive relationships to conclude that lawful non-random effects are present in the relationship between early-therapy level of *experiencing* and therapy outcome" (1997, p. 15).

Aside from trying to demonstrate empirically the value of using the experiencing concept in therapy, in 1986 Gendlin also published a theoretical paper "What comes after traditional psychotherapy research?" (Gendlin, 1986). In this article, he proposes 18 strategies, mostly more specific research variables called subprocesses (desensitization, two-chair techniques and focusing are subprocesses) and the microprocesses (a new level of specificity) associated with

them, to improve psychotherapy research, to make it more productive and meaningful. From him, studying these specific research variables is more productive than approaching psychotherapy methods as a whole in relation to outcome per se.

Overall, Gendlin's own research effort does not offer convincing support, in terms of empirical data, for his claim that *experiencing* brings about therapeutic change. He pursued Rogers' effort to study the fluid nature of the therapeutic process by investigating on his own the *experiencing* process. However, his attempts at conducting empirical research outside of Rogers' research program were not credible. His methodologies and his results presentation have a number of problems. Still, he found that *focusing*, as a skill, can be successfully learned by clients.

2.2.6 The impact of Carl Rogers on Gendlin's views of science

With Rogers, Gendlin learned to conduct scientific researche within the context of psychotherapy. Furthermore, he introduced a new research strategy based on a variable called level of *experiencing*, used as an indicator of psychotherapy effectiveness. Overall, it seems that Rogers' empirical approach to psychotherapy research had a lasting impact on Gendlin, the philosopher. He initially holds the same position toward the integration of scientific psychology and existentialism concepts as Rogers. Like him, he used research strategies that combine phenomenological data gathering and positivistic methodologies. He pursued the development of Rogers' Process Scale that became the EXP. The junction of empirical psychotherapy research in a phenomenological context had a profound impact on Gendlin's view of the integration of philosophy and science.

However, Rogers was committed to scientific experimentation and validation; Gendlin was not. Gendlin worked with Rogers in the 1950s because, as a philosopher, he was interested in the type of theoretical problems Rogers faced within the client-centered approach, not because he was interested in scientific research per se. At the beginning of the 70s, he put aside his own research effort to validate *experiencing*. He let other researchers carry on the task of exploring the impact of *focusing* in different therapeutic contexts. He realized that without extended efforts, he would not be able to prove empirically the value of *experiencing* in psychotherapy. In addition, the philosophical basis to support the empirical validation of such a concept was adequate. Furthermore, according to Jennings (1984), he was not convinced that the confirmatory power of scientific evidences was the only way to justify the value of *experiencing*. Gendlin had the attitude that if it is confirmed at a phenomenological level, if you are convinced that the phenomena is truly based on your personal experience, then why do you need an experimental confirmation? His position was that experimentation presents convincing evidence only "... to those who already believe in the confirmatory power of experimentation" (Jennings, 1984, p. 193). Nevertheless, he was not opposed to using experimental researches on his *experiential psychotherapy* , because empirical confirmation provide added persuation. Yet, in his view, it was not a necessary measure. In developing his experiential approach to therapy, Gendlin discovered other philosophical approaches, especially Heidegger's view of existence in 1963, that enabled him to distance himself from the absoluteness of experimental justification. Science, with its empirically validated data, is not the absolute proof of the true value of an explanation of a phenomenon. For him, the vital role of *experiencing* in therapy is supported clinically on practical phenomenological grounds, on empirical data coming from case study evidences, and on philosophical justification (Jennings, 1984).

In the 70s, instead of trying to improve the scientific methodology and the experimental procedures developed by Rogers, Gendlin felt that his time and energies would be better invested in the teaching of *focusing*, because therapists often failed to teach this basic technique, and in the refinement of the *experiencing* concept so he could continue to clarify it at a philosophical level.

In the coming section, the philosophical roots of Gendlin's view of science will be explored.

2.3 The influences of philosophy and in particular the existential-phenomenological movement on Gendlin's views of science

2.3.1 Gendlin's academic training in philosophy and his philosophical writings

Philosophy has been Gendlin's main focus since the beginning of his career, with psychology coming second. Both his masters thesis and doctoral dissertation topics were philosophically oriented. In his 1950 masters thesis, he explores the ideas of Wilhelm Dilthey (1833-1911). This German philosopher and historian tried to establish a human science based on an entirely different model of investigation than natural science, one that anticipated the phenomenological approach. In his 1958 doctoral dissertation "The function of experiencing in symbolization", Gendlin describes how the felt dimension of human experience has to be taken into account by behavioural science, how it can be studied, and how this understanding of *felt experiencing* can be applied in different fields of knowledge, including philosophy and psychology, and more specifically, psychotherapy. Even during his period of collaboration with Rogers, he remained a philosopher, using knowledge gained through client-centered therapy to further his understanding of the concepts associated with *experiencing*.

> While client-centered theory with Rogers as its architect had 'discovered' experiencing through the material gathered via direct observations of therapy hours, Gendlin was approaching the same phenomenon from the perspective of the phenomenological philosophers. It was primarily the writings of Merleau-Ponty and Husserl that led Gendlin in the direction of psychotherapy as a possible source of in vivo phenomenological processes. (Klein, Mathieu-Coughlan, and Kiesler, 1986, p. 25)

In this section, we will retrace some of the philosophical movements and philosophers that influenced his views of science.

2.3.2 Main philosophical influences on Gendlin

At the undergraduate level, Gendlin had a desire to develop a method that would enable him to communicate with people across various disciplines and philosophical systems. He quickly realized that a word or a concept is meaningful only within a specific system. This led him to search for something that could carry hold across different systems, a method, a way to think that is larger than concepts. In his quest for a method, he came across three major sources of philosophical inspiration at the University of Chicago (Gendlin, 1989a). They were Richard McKeon, one of his philosophy teachers, the phenomenological philosophers as presented to him by an existentialist author, Jean Wahl, especially Sartre (1905-1980), and Merleau-Ponty (1908-1961). Later he became interested by Heidegger (1889-1976) and a German philosopher called Wilhelm Dilthey introduced to him by Joachim Wach, who had worked under Husserl (1859-1938). Amid these influences, Gendlin recognized himself to be a philosopher that had a very strong interest in the phenomenological side of philosophy.

Due to these sources, he improved his method and became interested in how we symbolize our living experience, and how language works. "Philosophy begins with the understanding that

you cannot just observe or experience and then report what you see, because how you conceptualize and symbolize alters experience. On the other hand, it's also clear that you cannot conceptualize and symbolize any way you want to" (Gendlin & Lietaer, 1983, p. 78). His interest and work in philosophy led him to psychotherapy, because in therapy he could observe people actively symbolizing experience. With Rogers, Gendlin tried to give the phenomenon of subjectivity new credence by elaborating a theory that bridges philosophy and psychotherapy, and at the same time added to the Logical positivism, the existentialism view that is missing. For Gendlin, what is important is to understand this relationship between the subjective immediate experience and the symbolizing process. Part of Gendlin's philosophical originality comes from the role he attributes to a special kind of bodily experience in the symbolizing process, or how a bodily *felt sense* of the situation operates in the formation of meanings.

His sources of inspiration for his contributions to philosophy and psychology are drawn from many philosophers, including, Plato, Aristotle, Kirkegaard, Dilthey, Husserl, Heidegger, Buber, Sartre, Merleau-Ponty (Jennings, 1984, Levin, 1994). Most of these philosophers are associated with the phenomenological or existential movement and are of European philosophical traditions. For example, Gendlin wrote a number of articles where he addressed some aspect of the felt experience from the point of view of phenomenological and existential philosophies. The title of some of his articles on the phenomenological point of view are "Expressive Meaning" (1965), "Experiential Phenomenology" (1973), "Phenomenological concepts versus phenomenological method: A critique of Medard Boss on dreams" (1977). From an existential point of view, he wrote articles such as "Experiential Explication and Truth" (1965/66) and, "Existentialism and Experiential Psychotherapy" (1966). He also wrote a number of articles on Heiddeger, who had had a major impact on his thinking. His articles have titles like "Befindlichkeit: Heidegger and the philosophy of psychology" (1978/79), "Two

Phenomenologists Do Not Disagree" (1982), and "Dwelling" (1983). Martin Heidegger was a German philosopher associated with other existential-phenomenologist philosophers, mainly Sartre, and Merleau-Ponty. Gendlin did not read Heidegger until 1963. About Heidegger, he wrote:

> My own work for many years preceded my reading of Heidegger. I came to him quite late. Both the Personality Change theory and the philosophical work, were written before I read Heidegger. But I had read those philosophers that most influenced Heidegger, and so I emerge from the same sources, at least to some extent. I had also read Sartre, Buber, and Merleau-Ponty, who were greatly and crucially following Heidegger. Hence my own work continues from Heidegger, and stands under his influence, although I did not recognize that until later. (Gendlin, 1978/79, p. 70)

We will see more of Heidegger's influences on Gendlin's views of *experiencing* in sections 2.3.2.1 and 2.3.2.2.

According to Levin (1994), "... Gendlin has drawn on and carried forward the thought of many philosophers ..." (pp. 345-346) as we just saw with Heidegger. But this philosopher is not the only one. For example in his article, "The primacy of the body, not the primacy of perception", Gendlin mentions, "The purpose of this paper is to save and carry forward some of Merleau-Ponty's crucial insights" (Gendlin, 1992a, p. 341). He did the same for Dilthey according to Scharff, a philosopher interested in the work of Dilthey (1997).

Other areas of interest for Gendlin are anthropology (Levi-Strauss), sociology (Habermas), literary criticism (Derrida), history (Foucault) and Feminist literature. The area of social change is also of interest to him.

In the following sections, some of the core concepts of phenomenology and existentialism will be presented with Gendlin's own idiosyncratic views of each of them. Following this overview, we will look at the relationship between phenomenology and empirical sciences. Finally, we will consider the impact of existential-phenomenology on Gendlin's views of science.

2.3.2.1 Gendlin and the Phenomenological tradition

Gendlin identified himself as a philosopher of phenomenological orientation. What is phenomenology and what is Gendlin's implication in that movement ?

The term phenomenology derives from the Greek word "phainomenon" which literally means "appearance" or what shows itself. Furthermore, the word phenomena is used by philosophers to refer to the appearance of things. However, Edmund Husserl, a German philosopher, adopted the term, gave it a new meaning, and in the process founded a philosophical school known as phenomenology. His phenomenology was called Pure or Transcendental and means the science of the essential structure of pure consciousness (Spiegelberg, 1982). Transcendental for Husserl has to do with his radical commitment to a subjectivism, which is to him the source of all objectivities. One of Husserl's key approaches to experience is his insistence on "returning to the things themselves" by clearing away assumptions and preconceptions about experience.

In a more contemporary context, phenomenology is defined as a science of phenomena, which explores how objects are experienced by the subject and how they present themselves to his consciousness in all their particularities and concreteness (Spinelli, 1989).

According to the Cambridge dictionary of philosophy (Audi, 1995), in contemporary philosophy, phenomenology is "neither a school nor a trend" (p. 578) but more a movement in development with several related currents and a variety of concepts. The variety of phenomenologies is so great that it is difficult to give a simple definition. Some say that it is the study of essence, as Husserl does, but others, like Heidegger, try to put essences back into existence. Phenomenology has been said to be a method of describing and analyzing consciousness, and also a method of giving an immediate description of subjective experience. Spiegelberg (1982) said something similar in the introduction to his book called, "The phenomenological movement":

> What is phenomenology? The question is more than legitimate. But it cannot be answered, since, for better or worse, the underlying assumption of a unified philosophy subscribed to by all so-called phenomenologists is an illusion. Besides, 'phenomenologists' are much too individualistic in their habits to form an organized 'school'. It would go too far to say that there are as many phenomenologies as there are phenomenologists. (p. xxviii)

However, Husserl is still recognized as the founder of the phenomenological method and his work still provides the most articulate description and defensible arguments for phenomenologists. He is also the most radical representative of the movement (Spiegelberg, 1982). Nonetheless, phenomenologists do share some core concepts. However, it is important to keep in mind that each element of this core is interpreted differently by each of the major phenomenologists. Some of the core concepts are (Audi, 1995) :

1. The relationship between phenomenology and science is complex. The position of phenomenology with regard to science is that phenomenology is the foundation of science while science offers new problems to phenomenology.

2. Where initially events, objects or experience of the world are apprehended with a natural attitude, phenomenology tries to move beyond it in order to grasp how it appears to consciousness or, like Husserl says, 'to go back to the things themselves'. In order to step outside the natural, most phenomenologists use a reduction method or "epoché". For Husserl, this reduction method involves two steps, the first one called "epoché", a Greek term meaning "abstention", the second one called eidetic reduction, from "eidos", a Greek word meaning "essence". The "epoché" involves the bracketing or the suspension of beliefs; temporarily set aside all initial biases, prejudices, expectations or assumptions that do not derive immediately from experience. It enables phenomenologists to impose openness on the immediate experience and to remain focused on it. The purpose of the second step, the "eidetic reduction", is to gain insight into the general structure or essence of the object, in order to identify to what class it is associated. Through imaginative variation, the phenomenologist looks at all the possible ways of imagining and apprehending variations of an object, for example. From this exercise, he will integrate these variations into a synthesis that grasps the essence or the necessary structure of a phenomenon.

3. For phenomenologists, the essential and general feature of all mental acts is intentionality. The word is taken from the Latin 'intendere' which means "to stretch forth". The term intentionality is derived from medieval Scholasticism, and refers to the underlying connection between object and subject. Husserl derived this concept from Franz Brentano, his philosophy teacher. Brentano had characterized intentionality as a special kind of directness upon an object.

Husserl rejected the notion of object and adapted Brentano's idea by saying that one of the features of consciousness is that it is always a consciousness of some thing, meaning that it is always directed toward the physical world, stretching forth into the world, in order to interpret it meaningfully. As a consequence of this, it is impossible to know the ultimate reality of an object, since we experience the world only through this relationship.

4. Philosophy's basic concern according to phenomenology is to answer the question concerning the "Meaning and Being" of beings, and that subjectivity is the way to explore this question.

5. Intuition is an important concept in phenomenology. It emerges during the process of reaching to the essence of a phenomenon. It points at something unique, it is directed toward an object and it is pretheoretical. Husserl refers to intuition as "pure description", the essence being some thing, object, event or experience stripped of its empirical, particular, aspect.

Spiegelberg (1982), in trying to give a capsule formulation of the core elements of phenomenology, was overwhelmed by the diversity of approaches and only managed to organize the varieties of phenomenologies under a systematic classification based on the method. Even core elements are interpreted differently or are the source of major disagreements between the main philosophers representing the movement. Still, the most characteristic core, the one which presents the least disagreement, is its method and its steps. According to Spiegelberg (1982), the following first three steps out of seven are accepted by those who aligned themselves with the phenomenological movement. Step 1. Phenomenological description or the investigation of a particular phenomena which begins, according to Spiegelberg (1982), with a silence. It is a process of classification of the phenomena. Step 2. Investigating general essences (eidetic intuiting) is a process by which the researcher proceeds from the particular to the general, the

ideating abstraction. Step 3. Apprehending essential relationships or connections. Out of this systematization, he came to the observation that the main feature of the phenomenological method is, in his words, the "reverence for the phenomena" (Spiegelberg, 1982, p. 717) which means "... the unusually obstinate attempt to look at the phenomena and to remain faithful to them before even thinking about them" (Spiegelberg, 1982, p. 717). This is something Gendlin has followed religiously with his clients during psychotherapy. "To be phenomenologically specific is, I think, one of the main things that I do" (Gendlin & Lietaer, 1983, p. 81).

Initially in 1901, Husserl's research intention was to find the basis for the principles of mathematics and logic based on a descriptive psychology of the concept of number. In 1913, this translated later into a phenomenological method, and finally into a phenomenological psychology (1923 to 1927). For this purpose, he translated phenomenological philosophy into a psychological system, mostly by applying the phenomenological method to psychological questions. Over time a contemporary phenomenological psychology emerged that had many similarities and differences from Husserl's views and methods.

Phenomenological psychology is preoccupied by personal, subjective experience. According to Amadeo Giorgi (1975), the founder of the Journal of Phenomenological Psychology, it is "the study of the structure, and the variations of structure, of the consciousness to which any thing, event, or person appears" (p. 83). For Klein and Westcott (1994), who wrote an article on the changing character of Phenomenological psychology, it is "... the study of experience" (p. 137). For von Eckartsberg (1986), Phenomenological psychology is "the study of the fundamental types of psychological phenomena in their subjective aspects only, regardless of their embeddedness in the objective context of a psychological organism" (p. 7). Its goal is to attempt to describe the essences of experiences. As Klein and Westcott (1994) mention in their article,

the contemporary phenomenological psychology is the result of an evolution of practices and theories that span over 80 years to include many different research methods and numerous scientifically oriented publications in North America. According to these authors, there are four types of phenomenological psychology: empirical, experimental, traditional, and hermeneutic. Hermeneutics and existentialism are two significant additions to phenomenological psychology.

2.3.2.2 The phenomenological movement and Gendlin's experiential phenomenology

Phenomenology did not catch on very quickly in United States. Most of the philosophical field was divided between the Logical positivism of the Vienna Circle, the Oxford School, and American Naturalism (Tymieniecka, 1989). European or Continental philosophy, meaning philosophy outside the British Isles, was almost nonexistent. Phenomenology as a philosophy began to take root in America around the 1920s with the help of Marvin Farber and Dorion Cairns. It was Marvin Faber, along with European émigré scholars, who founded the American-based International Phenomenological Research Society in 1939, at the University of Buffalo, and the quarterly Journal of Philosophy and Phenomenological Research in 1940 (Spiegelberg, 1982). After the Second World War, the return of American servicemen and émigrés who had studied in Europe brought a change in philosophy that stirred a humanistic interest for existentialist literature with a phenomenological background, especially Sartre, Marcel, Camus, Heidegger. It triggered a violent humanistic reaction against the prevailing reductionism attitude of the positivistic philosophers. The main theme of the reactionary philosophers was the belief that "... there is no philosophy worthy of the name, without metaphysics playing an essential role in it" (Tymieniecka, 1989, p. xvi). It led to the creation of The American Metaphysical Society. Metaphysics refers here to a way of philosophizing that does not reduce philosophy to basic empirical, positivistic and naturalistic assumptions. The

next breakthrough came late in 1955 with John Wild's publication of the book, "Challenge of Existentialism" and Herbert Spiegelberg's presentation of the different schools of phenomenological thought in his book, "The phenomenological movement" (Tymieniecka, 1989). Both books contributed to the spread of phenomenology. This led to the creation of the Society for Phenomenological and Existential Philosophy. The 1960s brought a new interest and curiosity in Continental thinking. Still, the spread of phenomenology, presented as the philosophy of our age in the United States, has always been seen as against a dominant body of logically and rationally oriented philosophers. It is in that context that Gendlin approached and studied phenomenology.

As mentioned earlier, there is a variety of phenomenologies and phenomenologists. Out of this movement, Gendlin developed his own idiosyncratic approach or method to phenomenology called *experiential phenomenology*. While Gendlin's main emphasis is existential, he uses phenomenology "... as a method for handling the subjective existential aspect of the living process" (Spiegelberg, 1972, p. 155).

Phenomenology is interested in examining our experience of the world as we live it rather than as presented by a system of thought like science. It also holds that phenomena or experience cannot be equated with a system of words or concepts, also called a scheme. In that sense any statement is based on an approach or a view of the world in which we live and experience. As a consequence, the situation we live in cannot be rendered by verbal statements because it is already organized by culture, education, past experience and by language. Gendlin and Heidegger believe that language and living develop together as we grow, that language and living develop together as we grow, that experience and situation develop together and as a consequence, experience will be organized in part linguistically and in part by situation. When

we talk from our experience, we organize or change the complex organization of experience. Furthermore, Gendlin has rediscovered what other phenomenologists had suspected, that there is a feeling function associated with stating. We feel how a statement fits as we express it. It is as if the external situation, language, and feelings are intimately related. He concludes that we cannot say anything about experience. We cannot study pure experience. Since phenomenology is trying to describe what appears in the flow of lived experience prior to reflection, then Gendlin's first question to them is, How can they study the structure of experience without imposing a scheme on it? Do they have access to direct experience? The second question is What contains a phenomenological statement? What is the phenomenological basis that enables it to be more direct than the usual scheme imposed on experience? How can a phenomenological statement be more of a solid ground for the correctedness of assertions than other statements? Gendlin's solution to this problem of, "How can lived *experiencing* be a basis for assertions?" (Gendlin, 1973, p. 290), is a phenomenological method where he studies the process of stating, and how experience and statement interact or affect each other in the process of stating something. In his 1962 book, Gendlin identifies and categorizes the different functional relationships he has observed between the lived experience and words. Since experience and its complexity cannot be equated by a set of words, it leaves the door open for further differentiation of the aspects of a situation or experience. In a sense, *experiencing* has no definite scheme or set of units. As you apply words, new aspects of its organization emerge. This led Gendlin to develop a phenomenological method called *experiential phenomenology* that takes into account "This aspect of experience - its vast capacity to be further schematized and unitized in relation to verbalization, and thereby revealing aspects which, we now say, it most truly 'was', has not been recognized at all in philosophy until now" (Gendlin, 1973, p. 302). This method will be presented in section three as it is integrated in Gendlin's psychotherapeutic approach that makes use of *focusing* and its experiencing steps. "Focusing consists of phenomenologically laid out

steps for getting (one kind of) phenomenological steps (Gendlin, 1989a, p. 407). "The essence of psychotherapy -- when it is effective -- is phenomenological, not perhaps in the conception of the therapist or the theory, but in the process of the patient" (Gendlin, 1978-1979, p. 64). The patient's process has to do with a progression where what is said has the potential to lift something out from the *experiencing, a felt sense*.

Gendlin's original phenomenological method led him to try to modify phenomenology itself, to attempt reform it (1989a). He tried to show other phenomenologists that phenomenology is not just descriptive statements about a phenomena. "Phenomenologists have not well understood all this. .... Phenomenologists have felt compelled either to insist on only the face value of human experience, a hopelessly inadequate view, ..." (Gendlin, 1978-1979, p. 66-67). It is a process that involves more than statements.

> ... as Heidegger said, phenomena are mostly buried, and it is just for that reason that we need phenomenology. Far from staying rooted at what someone momentarily construes or feels, phenomenology is a process (a hermeneutic), steps of interplay between a "responding" felt concreteness and our explicative words or action. (Gendlin, 1965/1966, 1969 reprint, p. 201)

Phenomenology is modified in order to become a certain kind of "progression" of non-logical steps or unpredictable moves based on a bodily, fuzzy, *felt sense*, which shows a precise understanding of a whole situational complexity as lived by the organism. Gendlin has moved away from the descriptive side of phenomenology to a method focusing instead on a "progression". However, Gendlin's efforts to popularize this reform of phenomenology with publications and conferences has not succeeded in reforming it the way Gendlin envisioned. He said in 1989, "My reform of phenomenology was not taken up. Of course I think: That is why phenomenology is rejected today" (Gendlin, 1989a, p. 409).

2.3.2.3 Existential philosophy and Existentialism

In developing his *experiential psychotherapy*, Gendlin's main emphasis was on the existential aspect of it, on the subjective aspect of the living process. What is existential thinking and is it different than existentialism? According to Spiegelberg (1972), existentialism is the offspring of existential thinking that began long before the phenomenological movement. It can be defined by its central theme "existence", "... a term used by Soren Kierkegaard (1813-1855), a Danish philosopher who is the father of existentialism, in a new sense, for the way in which a single individual experiences his being in the world" (Spiegelberg, 1972, p. xxix). Existential philosophy's focus is upon human existence. It seeks to answer the question , "what does it mean to exist as a human being?", a question posed by Kierkegaard. In that sense, it hopes to provide an adequate account of human living, to do justice to what it means to exist as a human being. Some of the most prominent Existential philosophers after Kierkegaard were Nietzsche (1844-1900), Jasper (1883-1969), Buber (1878-1965), Heidegger (1889-1976), Sartre (1905-1980), Camus (1913-1960), and Merleau-Ponty (1908-1961). Some of the general themes of existential philosophy are the following (Kim & Sosa, 1995).

The first general theme is subjectivity. The comprehension of human existence is undertaken from the subjective standpoint of one involved in living something. According to existential philosophers, the way humans exist is not well understood. So that approach is a form of inquiry that tries to give an accurate account of the character of lived reality and the manner of existing of a subject. The lived reality is understood and perceived through the eye of the one involved in living, a first-person rather than third-person account. This movement is in opposition with the positivistic and rationalistic approach to human reality, which emphasizes a

third-person account of reality, which tries to protect the particular character of human selfhood. By absolutizing the status of subjectivity, existential philosophy has positioned itself at the opposite side of positivism, which values objectivity.

The second general theme has to do with the dislike of existential philosophers for determinism. The subjective self is the way he is, in a manner that is not determined in advance. Nonetheless, the subjective self is in part based on his own doing. Subjectivity is not governed by language, nor by culture, logic or reason. It transcends causal order and social relations. It is not an objectively accessible dimension of human life.

The third general theme has to do with the attempt of the existential philosophers to achieve an understanding of the fundamental character of the living subject, not just to stay within a description of the various lived experiences of the person. In that context, Heidegger developed an existential analysis of the "Dasein" or the way of being-in-the-world. It suggests that there are general features or structures that characterize our life experience. Furthermore, human beings' relationships with things and other human beings is characterized by possibilities, so humans have the power of choosing. In that sense, "Dasein" is defined by its own possibilities.

Aside from this list of general themes, each existential thinker, like phenomenologists, has their own approach and method for the interpretation of existence.

Existentialism is historically a European philosophical and literary movement that emerged in France after World War II. "Existentialism, the offspring of existential thinking that began long before the phenomenological movement, can be defined primarily and best by its central theme "existence", a term used by Kierkegaard in the same sense, for the way in which a single

individual experiences his being in the world" (Spiegelberg, 1972, p. xxix). Its most extensive elaboration are found in the work of Jean-Paul Sartre. The central theme or problem Sartre expresses is the "...problem of the reconciliation between subjective freedom and objective being" (Spiegelberg, 1982, p. 481).

In America, existentialism has been a major source of inspiration for Humanistic psychology. DeCarvalho (1991) talks about the fact that European existentialism was discovered in the late 1950s after the main founders of Humanistic psychology had already formulated the core of their theories. What the founders of Humanistic psychology shared with existentialism was: (1) the uniqueness of each person; (2) a denial of human determinism in destiny; (3) a focus on the inner self; (4) a valuing of self authenticity; (5) the purpose of becoming fully oneself; (6) the themes of freedom, responsibility and human meanings; and (7) the essence of human nature. Still, humanistic psychologists were critical of the anti-scientific and anti-biological dimensions of existentialism and against the nihilism of Nietzsche, the nothingness of Sartre and the absurdity of Camus.

Gendlin found in the existentially-oriented approaches to psychotherapy an attractive ground for his concepts. In 1962, he said "The values of the existential therapists (their emphasis on problems of importance, their wealth of implicit hypotheses, their richness of observations) deserve to lead to much more than current 'protest movement' " (p. 18). For Gendlin, existentialism portrays human nature in a way that is very close to his own views: that it is an ongoing living process, concretely anchored in the world, sentient of itself and of others; as a being "in the world" and "being with", as Heidegger said, a being that is never just a factual thing, but something affected by what happens around it, a being in process, sensitive, open to being affected. We change depending on the situation and with our surroundings. There is

nothing finished in us or around us. As we move in a situation, we change. In that conception, personality is conceived as separate and independent from another's, only as we move in and toward situations. That concrete sentient experience of living, that flow that people experience as direct concrete living. This experience is prereflective, preobjective and preontological. Before we can elaborate concepts about the world, before we objectify the world, and before ontology is formulated, it is lived directly before it is perceived by the senses. Existentialism is about the ongoing felt sentience of living, experienced on a day-to-day basis by humans. It is a being here, one's way of being here experienced as a feeling, a *felt experiencing*. A client in therapy gets in touch with the ongoing sentient experiencing and expresses it accurately. In doing so, the words that feel right connect with the *felt experiencing*, triggering a movement that is characterized by a physically sensed relief, called by Gendlin a step process or a *carrying forward* associated with an experience of change. From this process of unfolding based on experience, Gendlin developed a psychotherapeutic approach based on existential philosophy, called *experiential psychotherapy*. The three main principles of the approach are the relationship, the effective listening and the *focusing* (Gendlin, 1997b). In existentialism, the relationship is crucial. In this relationship, the therapist tries to relate concretely to the client, to stay constantly in touch with the client in a moment-by-moment response to what the client is trying to say. The effective listening enables proper response so that the client is naturally brought into contact, in a bodily fashion, with the non-verbal side of his troubles, to have a direct referent. The focusing process leads from there to a better contact with the bodily sense of what is there. When this bodily sense opens, further steps follow, changing the client's way of sensing the problem. The stress is put on the validation of the client's subjective experience and the relationship, both enabling the emergence of a true human encounter that will help the client develop a more meaningful relationship with himself.

Gendlin (1966) says of existentialism that it:

> ... is phenomenological; that means it aims to explicate directly what we concretely are, live and experience. .... Everything we say, both in theory and in person self-expression, is a 'lifting out', a 'making be' of order, meaning, pattern, and situation, a 'surpassing' in the very process of concrete living and doing, speaking and thinking. (p. 233)

2.3.2.4 Existential-phenomenological philosophy

The most significant change in the phenomenological philosophy came from existentialism and hermeneutics. According to von Eckartsberg (1986), the pure phenomenology of Husserl, meaning the study of the essential structures of consciousness or of essence, was enriched by the existentialist movement, associated with Kierkegaard and Nietzsche, to become the existential-phenomenology movement as associated with writers like mainly with authors like Heidegger, Sartre, and Merleau-Ponty. It represents a shift, because the existentialists replaced Husserl's idea of essence with that of existence. For Valle and King (1978):

> Joined together ... existential-phenomenology can be viewed as that philosophical discipline which seeks to understand the events of human existence in a way which is free of the presupposition of our cultural heritage, especially philosophical dualism and technologism, as much as possible. When applied more specifically to human psychological phenomena, existential-phenomenology became existential-phenomenological psychology, and as such, has become that discipline which seeks to explicate the essence, structure, or form of human behavior as revealed through essentially descriptive techniques including disciplines reflection. (p. 7)

For von Eckartsberg (1986), this approach emphasizes: (1) The importance of pre-conscious lived experience. For example, Merleau-Ponty mentions that the body presents in its actions an understanding of situations and possibilities before there is an explicit awareness of it. This suggests that there are a more primitive grounds for our awareness, grounds where the body and the world meet and from which meaning emerges. In a sense, our bodily existence gives rise to

meaning. (2) That existential philosophers are interested by the human situated experience like Heidegger's concept of being-in-the-world, which involves more than Husserl's human consciousness because it encompasses the total embodied human response to a perceived situation. (3) That existence as studied by existential philosophy refers to a subjective personal concrete embodied involvement in a life situation, the subject being characterized as unique and irreplaceable

Gendlin (1966) says about existential-phenomenology that it "... aims to explicate directly what we concretely are, live and experience" (p. 233). When applied to psychology, the concern of the philosophical approach becomes the conscious experience. In psychotherapy, clients are encouraged to identify and symbolize their own inner experience rather than by having someone else provide the pertinent information. Secondly, the client has privileged access to his unique, inner experience and so is viewed as expert in his own experience.

2.3.3 Phenomenological psychology and its relationship with science

Phenomenology and existential-phenomenology have left the domain of philosophy to move into mainstream psychology, partly because it offers an alternative to positivistic psychology, with its philosophical and methodological reductionism approach to human phenomena. While the aim in science is an objective point of view, phenomenology focuses on the subjective, on the manner in which each individual structures the world. The felt inadequacy of natural science research in dealing with the human phenomena is well presented in the upcoming three quotes. The first one is by van Kaam (1969).

> Irrelevant empirical research is produced by the totally detached, abstract, and isolated investigation carried on by the neutral spectator of behavior who is indifferent to the relationship between his abstract game and the life situation. (pp. 26-27)

Von Eckartsberg (1986) presents an eloquent description of the role of existential-phenomenology as a human science as well as the limitations of natural sciences in dealing with human subjects.

> Foremost among these insights has been the effort to reject the notion that humans are merely objects of biology whose every thought, feeling, and action could then be said to be determined by a complex network of causes. This conception of human nature, borrowed from the natural sciences and ultimately from those philosophers who first extended the notion of causality to human beings, is the implicit assumption of much of traditional psychology. These natural science psychologies have been unable to account for human freedom and the meaningfulness of human experience. Instead they resort to quantitative, mechanistic, and computer models of human nature which, at best, record various regularities of behavior and make predictions, while, at worst, do violence to our forms of self-understanding. (p. 2)

Existential-phenomenological psychology attempts to account for the fullness of human life by re-conceiving psychology on properly human grounds. The model of the natural sciences, appropriate as it is for such fields as physics or chemistry, is nevertheless of limited usefulness when it comes to the study of the meaningful character of lived experience. Thus it has been suggested (Strasser, 1963; Giorgi, 1970) that for psychology to fulfill its promise, this natural science model should be set aside in favor of a truly human science one. The human science approach recognizes that our privileged access to meanings is not numbers but rather perception, cognition, and language. Insofar as everyday human activity is continuously informed and shaped by how we understand others and ourselves and by the meaning of the situations we find ourselves in, this is a most significant point. It indicates that the way for psychology to understand human behaviour and experience as it is actually lived in everyday social settings is for it to begin by soliciting descriptive accounts of actual experiences in such settings. "Exploration of the inner world of experience by phenomenology enables researchers to reclaim

that part of the human being that has been so long neglected due to the prevailing view that human science must be natural science" (Osborne, 1994, p. 168).

Moustakas (1994) for example, in his book on phenomenological research methods, presents an integration of the common features of some research models in human science researches, in particular ethnography, grounded research theory, hermeneutics, empirical phenomenology, and heuristics. According to him, all these models have certain common features that separate them from natural science traditional quantitative research theories, and methodologies. These common links include:

> (1) recognizing the value of qualitative designs and methodologies, studies of human experiences that are not approachable through quantitative approaches; (2) focusing on the wholeness of experience rather than solely on its objects or parts, searching for meanings and essences of experience rather than measurements and explanations; (3) searching for meanings and essences of experience rather than measurements and explanations; (4) obtaining descriptions of experience through first-person accounts in informal and formal conversations and interviews; (5) regarding the data of experience as imperative in understanding human behavior and as evidence for scientific investigations; (6) formulating questions and problems that reflect the interest, involvement, and personal commitment of the researcher, viewing experience and behavior as an integrated and inseparable relationship of subject and object and of parts and whole. (p. 21)

One of the advantages of the phenomenological method is that it enables the researcher to approach a phenomenon from a nomothetic point of view but also an idiosyncratic one. Where the experimental approach seeks universal laws that can apply to all individuals, the existential-phenomenological method is interested in describing what is specific to an individual's experience of the world.

Aside from the purely descriptive researches, a number of scientists have acknowledged that the rigid natural science orthodoxy was outdated and that new methodologies, better adapted to explore human experience are in a process of development or are already available (Klein & Wescott, 1994; Osborne, 1994, Polkinghorne, 983). Van Kaam (1969), says in that context of "relevant research": "Relevant research is that which explores, describes, and empirically tests human behavior while preserving a "lived" relationship with it in the reality of life" (pp. 26-27). Osborne (1994), in his review of psychological qualitative methods, writes that there is a trend toward a complementarity of both approaches that should lead to an integration of quantitative and qualitative scientific methodology.

Some of the problems associated with the integration of phenomenological approaches in psychological research methodologies are, according to Osborne (1994): (1) the translation of phenomenological methods (i.e. phenomenological reduction) and concepts (i.e. essences) developed within a philosophical frame of reference into psychological research practices; (2) the epistemological status of "description" of inner experience; and (3) the role of induction. This last point is a major issue: Phenomenologists claim to be non-empirical in their quest to uncover the "essences of phenomena", that is, to get the invariant and necessary features of an object they use an intuiting of the general essences of it. However, in this process there is a transition from a specific description of a phenomena to its essence, a process called by Husserl "ideating abstraction" (Osborne, 1994). The essence is perceived as being similar to generalities about the phenomena or universal statements about it. This transition process seems similar to an inductive process as used in the natural sciences (Osborne, 1994). In fact, Klein and Wescott (1994) mention that Merleau-Ponty argued that Husserl, later in his career, moved toward the view that the intuitive process in phenomenology is similar to induction. If this is the case, then the essence of the phenomenon as grasped by "ideating abstraction", has the same limitations as an

inference done in empirical research. That is, we are never sure of the truth or falsity of a statement unless it is tested empirically, which means relying on a large number of subjects.

2.3.4 Impact of the existential-phenomenological tradition on Gendlin's view of science

In reading Gendlin's publications from the point of view of his position vis-à-vis science, one question that occurs is To what extent does he base his criticisms of science on phenomenological positions per se? The arguments in favour of his phenomenological affiliations are: (1) he is interested in *experiencing* as a phenomenological, private event; (2) he refers to phenomenologically and existentially oriented authors and he borrows ideas from them; (3) he reacts to their philosophical positions; (4) he regularly presents papers at Heidegger's conferences or publishes articles in the Analecta Husserliana publication; and (5) he identifies himself as a phenomenologist.

However, the arguments against a strong phenomenological affiliation are: (1) in his 1962 book, he did not approach *experiencing* from a clearly phenomenological point of view although he elaborates his approach from an inner person point of view; (2) he is critical of other phenomenologists (Gendlin, 1973, 1989a); (3) there is no mention of phenomenology's methodological concepts or jargons like Husserl's "epoché" and "eidetic reduction", or "braketing"; (4) there is no mention of phenomenological psychology in his writing although his name appears on the board of the "Journal of phenomenological psychology"; (5) he makes references to philosophers such as Dewey, Dilthey, Kant, Wittgenstein, Ryle, Austin, Heidegger, Sartre and Merleau-Ponty, not just phenomenologists or existentialists; (6) his criticisms of science from 1962 to 1997 are not from an orthodox phenomenological point of view and there is no clear, explicit reference to an articulated phenomenological epistemology in

his approach; (7) his writings are not about self-report of subjects describing their *experiencing* but more of an analysis of the structure and meaning of the external (observer) and internal (subject) processes associated with *experiencing* from which he extracts generalizations.

From this we conclude that with regard to his view of science: (1) his reference to a strong phenomenological epistemology is weak; and (2) he stays within his own theoretical universe. He makes no reference to the ways in which empirical phenomenological psychology could validate his concepts, for example. His discourse on science does not seem to be reducible to a particular epistemology aside from a common sense perspective.

Chapter 3
Some of Gendlin's theoretical concepts

Before addressing Gendlin's view of science, a brief overview of some of Gendlin's theoretical statements and basic concepts, which are related to his views of science, will be presented. Over the years, Gendlin has systematically developed his conception of *experiencing* and his description of how *experiencing* functions. He has explored that question conceptually from a philosophical point of view, and practically from a psychotherapeutic point of view. The concepts, that he has proposed have been integrated into a theoretical structure that articulates the relationship between experiencing and symbolizing. The theoretical structure, along with concepts like *direct reference*, *experiencing*, and *patterning*, as they appear in his major publications, will now be presented.

3.1 The relationship between experiencing and symbolizing.

Gendlin's lifelong interest is the study of the relationship between *experiencing* and symbolizing and, in particular, verbalization. According to him, this is an important problem in psychology and specifically in psychotherapy. He writes in 1962, "The problem of the interaction between *felt experiencing* and symbolization is crucial today both in philosophy and in the behavioural sciences" (p. 5). In 1978-1979, he goes on further to say, "How language relates to feeling and living needs re-thinking" (p. 52). His interests have gravitated around the following questions: How do we come to symbolize or conceptualize? How do we put words or statements, onto what we concretely live and experience? Is the choice of words governed by the situation or by the feel of it? "How can lived *experiencing* be a basis for assertions?" (1973, p.

290): "How is experienced meaning related to articulated meaning such that the latter can be said to be articulation of the former?" (1962, p. 55).

Gendlin's theoretical reflection has emerged from intensive listening to recording of psychotherapeutic interviews which where analyzed for moment-to-moment processes. In order to present his reflections in context, we will present a verbatim example of a client during a Focusing-oriented psychotherapy session. This excerpt will be followed by an analysis of the change process based on Gendlin's views and concepts. Finally, his theoretical articulation will be presented with some of his basic concepts. To facilitate the location of key segments of the verbatim, line numbering has been added to this excerpt.

3.1.1 The symbolization process as it presents itself in a psychotherapy session

Here is an example of Gendlin's interpretation of the processes that take place during a psychotherapeutic interview.

Example 1: Verbatim taken from Gendlin's excerpt of a psychotherapeutic interview (Gendlin, 1978-1979, p. 50-51).

1- She says:
2- "I'm late. I knew I would be.
3- I have this magic way of saying 'It will be all right,' when I don't have any idea how.
4- When I make a schedule or a plan I put more things in it than I could possibly get done.
5- But I can't choose among them.
6- I'm afraid of making the wrong choice, I guess."

7- There is some silence. Then she says:
8- "It's not about making a wrong choice. I don't know what that is."

9- More silence. Then:

10- "There's something there, like 'I want it all!'
11- That's really childish, like kids wanting everything they see."

12- More silence.
13- "It's not wanting it all.
14- It's not wanting what I'm supposed to want.
15- My sister was the one that did all the right things.
16- I couldn't do what she did, always fit in.
17- I became the one that had secrets, and did the things that were dangerous and not supposed to be done.
18- I still like to endanger myself, go out with men where I can tell it won't be nice.
19- It's an excitement, like violence, it takes over your whole mind.
20- Living dangerously.
21- That's what that wanting is."

22- More silence.
23- "Well, I don't really want that.
24 - When I think of them telling us how we're supposed to be, then I get this feeling of wanting that violence and excitement.
25- But, if I just think, well, what would I like, then I don't want that stuff."

As can be observed during this therapeutic process, the client struggles to put words on an internal experience. The excerpt is not just an interplay of thoughts and words. There is the presence of something, a feeling, grounded in a direct sensing of the body, which tells her that a statement is right or wrong as if this feeling has an understanding of her whole situational complexity. In Gendlin's view, she is following a process of steps called *Focusing* during which her intricate experience will take form before it changes.

The steps come from the silence, as in line 7, 9, 12 and 22, or what Gendlin calls a silent bodily sensing which has its implicit language in the "....." . Gendlin identifies in his writing

these periods of silent bodily sensing with symbols like "....." (1987, p. 289) or "_____" (1991b, p. 47). At line 7, the client experiences an unclear bodily sense of a situation during her silence. From this comes the first step. On line 8, she verbally refers to something felt, vague, localized, but not identified that she tries to conceptualize. Gendlin calls this feeling a *direct referent* (also called a *felt sense* or a *felt meaning*). Feeling has a new meaning here since it refers to sensed complexity, not to an emotion. The feeling points to a bodily felt holistic complexity in which the client has a concrete feel of herself living in her situation. For an external observer, her expression on line 8 would suggest that she is struggling to make explicit what is for now felt implicitly. As she tries to articulate this implicit meaningfulness, she rejects what does not feel right, as on lines 8 and 13, as if she is checking her sense of the verbalized concept against something felt directly. There is here a process of trial and error where she is checking if the words resonate with the *felt sense*. In between periods of verbalization, the silence enables her to better contact her *felt sense*. These periods are followed by a step, that is a change in the form or the content of the verbalization. It can manifest itself by a correction of the content or a content transformation, as seen on line 8, "It's not about ...", line 10, "there is something there, ...", line 13, "It's not ... .", and line 23, ".... I don't ...".

However, from line 20, "Living dangerously.", to 23, "Well, I don't really want that", there is a *felt shift*. Through a step process, or an order of steps, since these steps have continuity, something in her changes as it moves forward. She comes progressively to a proper symbolization of the *felt sense*. Each step leads to a change in the content and the feeling of the *felt sense*, something called a *carrying forward*. In line 20, the unclear feeling "opens" as Gendlin says. As we look back at the change process, we see that starting from line 8, the client is actively working around the clarification of the meaning of the *felt sense*. As she continues to explore the feeling, new understandings emerge further down the process steps: line 10, "I want

it all", line 13, "It's not wanting it all", and finally line 20-21, "Living dangerously. That's what that wanting is". There is a progression, a movement from implicit to explicit, and as this occurs, the feeling itself changes in the process. That process follows a direction of its own, independent from the client's intention. For Gendlin, the process has a very complex determination that is not arbitrary. The sequence of steps could not be deduced or predicted from preceding steps. This is something Gendlin refers to as a "non-Laplacian sequence" (Gendlin, 1991b, p. 95).

Through this step process, the client struggles with the proper symbolization of a feeling, something experienced, something meaningful, felt as part of a continuous stream of feelings in the client phenomenal field. The relationship between symbols and felt meaning will be explored in section 3.1.2.

3.1.2 Experiencing and symbolizing

For Gendlin, the problem of knowing how to use a word in a particular situation is complex. Our choice of words and the distinctions we make seems to be guided by a knowledge that is more similar to a knowing how to use words, than by an organized verbal scheme. We know when to use a word and whether it feels right or wrong to use that specific word. Why does it feel right to say this or that? It is as if our use of words is associated with a sense of the situation that takes into account the complexity of a whole life situation. For Gendlin, this know-how that manifests itself in the verbal organization of words in situations, is not the consequence of a logical deductive process. The range of details governing the complex selection of words in any given situation is huge. Instead, he suggests, in the footsteps of Husserl, Heidegger, and Merleau-Ponty, that there is an experiential sense that guides our selection of words, as if

experience, language and situation are all interconnected. Merleau-Ponty, in his analysis of language, in his book, "Phénoménologie de la perception" (1945), talks of an emotional essence that fills the verbal patterns with meanings. It is our experience. We already know or feel what we are about to say. Language is not made of arbitrary symbols, it stems from a sense, which is the most primitive way of articulating our experience of the world, a felt meaning. If I ask myself the following question: How are language and meaning connected? I might think of responding logically to this question using mentally verbalized words and concepts articulated around precise deductions. However, associated with this type of verbalization there is a feel for the question, a *felt sense* of it. I have a sense of what the question means. This sensing carries a meaning that is concretely bodily felt. A felt meaning is our experience of meaning; it is the experienced dimension of meaning. In Gendlin's view (1962) without the feel of the meaning of a concept we only have verbal noise. "The thought of a meaning necessarily includes the "feel" of this meaning, that is *felt meaning*" (Gendlin, 1962, p. 67). My *felt sense* leads to words about the situation that I am in.

In Gendlin's conception, a complex living system like the human organism in its interaction with a milieu, will experience highly organized reactions based on the evolutionary history of the body, the culture, the language, and the situation. In that sense, experience or anything felt from a living system has meaning. Words do structure experience further as we will see later. More specifically, "Meaning occurs for us when something experienced assumes a symbolic character" (Gendlin, 1962, p. 45). Meaning is the product of some kind of symbolizing. Meaning takes place whenever we use symbols like words, acts, images or even when focusing our attention on something we have become aware of. "Meaning is formed in the interaction of *experiencing* and something that functions symbolically" (1962, p. 5).

A *felt meaning* is the whole gestalt of something that is in awareness and from which articulation and symbolization proceed from. To differentiate the whole gestalt from the symbolization, Gendlin refers to the concepts of implicit and explicit meaning. In the case of the implicit meaning, a meaning can be implicitly felt but not explicitly known, as we will see later in the case of Gendlin's *direct reference* concept. It is preconceptual, or anterior to conceptualization. In the second case, a meaning is explicit when it is known. In its verbalized form, explicit meaning has a precise symbolized meaning. In its implicit form, the *felt meaning* has many meanings, each of which can be further elaborated. Still, the implicit meaning is, before symbolization, incomplete, as long as it is not conceptually formed and explicited.

The term 'symbol' is associated by for Gendlin with anything that performs the function of referring or specifying. A symbol can be something kinesthetic, visual, or it could be an action, a situation or an object. It can adequately conceptualize, or not, the *felt meaning*, since initially the felt meaning is implicit. For example, in psychotherapy, as a client interacts with a *felt meaning* using verbal symbols, he may sense at one point the symbols used represent or conceptualize exactly what he experiences. In a sense, he feels what the symbols mean since the meaning has become explicit or explicitly known. The impression of the client can be expressed this way, "I know exactly what it means". That is, the symbols represent the experience and those symbols become contents, a content being a symbolized meaning. For example, I can have a *felt meaning* about an issue and after a few minutes of trial and error with different words, suddenly find the one that exactly represents my inner experience, like in Example 1 on line 20 with the "Living dangerously" statement. Once the right symbol is found, it will change what it symbolizes or the situation that caused it to occur, such as on line 23 of Example 1. For Gendlin, a situation is something that needs to be changed by some phrases or actions.

In this relationship between *experiencing* and statements, it is obvious that the symbol does not correspond to the experience. Statements cannot capture the complexity or the intricacy of our living in a situation. In addition, we cannot speak of experience itself, since we can only talk about it through statements. However, even if explication statements cannot be equated with experience, words are not just arbitrarily imposed on experience. There is a connection. So how can experience be accessed? Gendlin's solution is to study how symbols and experience affect each other, or how stating or conceptualizing affects experience. "What we can do is to study it in the process of being stated" (Gendlin, 1973, p. 291). This provides us the opportunity to study how experiences respond to symbols or statements, and to describe how experience can be characterized in the process of being explicated. This orientation of study has enabled Gendlin to identify seven very different modes in which symbols function together with *felt meaning*. They have been grouped into parallel and nonparallel functional relationships. The first type includes functional relationships where the *felt meaning* and the symbols are on a one-to-one relationship, or parallel. These types of relationships are called *direct reference*, recognition, and explication. The nonparallel or creative functional relationship refers to situations where partly unsymbolized *felt meaning* interact with symbols that are already meaningful to create a new *felt meaning*. These functional relationships are called metaphor, comprehension, relevance and circumlocution.

According to Gendlin (1962), these relationships between symbols and *felt meaning* are more fundamental than logic and logical relationship. For Gendlin, "... meaning and logical patterns are first formed in the interaction of symbols and *felt meaning*. Logic is therefore secondary and operates only after the formation of meanings" (Gendlin, 1962, p. 138). Logic applies its rules to concept; what precludes before conceptualization -- the creation, differentiation and symbolization of concepts -- is anterior to logic.

The most original mode is probably the *direct referent* and it will be presented in section 3.2. For Jennings (1984), this concept of *direct reference* is one of Gendlin's most important contributions to the theory and practice of psychotherapy.

3.1.3 The role of the body in the symbolization of a situation

In Gendlin's conception of the body, the word body does not refer to the usual body conception as presented by physiologists or people in the medical profession. "I want the concept of body to get much wider than physiology ... . We live every situation with the body" (Gendlin, 1978, p. 215). He is referring more to a living body conception as defined by existential phenomenological philosophers like Maurice Merleau-Ponty and Gabriel Marcel. In his phenomenological, non-dualistic account of existence, Merleau-Ponty distinguishes between two types of bodies based on a perceptual distinction: the "lived body" and the objective or physiological body. The latter can be scientifically observed and analyzed; the lived body is the body experienced in a non-objective way. The term "lived body" comes from the German word *Leib* that refers to living bodies as opposed to inanimate bodies. The "lived body" is the "... corps dont je fais l'expérience actuelle, ..." (Merleau-Ponty, 1983, p. 90). At the heart of this concept is the notion of the "lived body" as an "intending entity", an embodied intentionality directed toward an experienced world. It is the subject-body, which experiences and constructs this world. By the lived body, the world is constituted and responded to. In Merleau-Ponty's view, the lived body, the body as it is lived, and the physiological body, or the body as it appears in observations, are one and the same body, a lived physiology that is both physiological and lived. This union takes place according to Merleau-Ponty "... à chaque instant dans le

mouvement de l'existence" (Merleau-Ponty, 1983, p. 105). Gendlin, however, goes further than these thinkers in his understanding of the role of the body in our lives.

Gendlin also approaches the body existentially. It is experienced as a living organism, a life-maintaining system, a movement, a process, a flow. Since we live life with our bodies, this ongoing concrete living is experienced psychologically by the individual as an internal bodily sensing of life flow. Because this body is immersed in an environment in which it is in an ongoing interaction, Gendlin adds that we experience the world bodily. The body reads the situation and experiences the world bodily by a process that is anterior to the perceptual act. "It [body] is a living in its environment, both physically, as with food and air, and psychically, with other people, situations, and the cosmos. And the distinction between these is artificial" (Gendlin, 1978, p. 342). There is no separation between the physiological and the interpersonal. Gendlin mentions that the physiological body and the situation we are in are like two departments of the same organization. In that sense, the situation we are in is partly in our body, the same way as past situations are crystallized in it.

The body has a special role in this context of symbolization since the *felt sense* will manifest itself bodily as a special kind of physical, somatic sensation before it leads to statements. Gendlin talks of a body-sense. As seen in Example 1, the silence is in fact a silent bodily sensing, a "....." in which the client can sense the rightness or wrongness of what she has just said. At other times, the *felt sense* is sensed as a murky physical discomfort, for example. For Gendlin, "It is a bodily sense of some situation, problem, or aspect of one's life" (Gendlin, 1996, p. 18). According to his views, the body-sense and the living situation of the client as in Example 1, are not two different things. In fact, the bodily *felt sense* or the "....." is part of the situation in which the person is living. More specifically, the situation is in the "....." while the

"____" is sensed or located in the middle of the body, and the body, in therapy, is located spatially in a room. As Gendlin says, "Please be struck by the fact that attending in the body leads to statements about one's situation" (Gendlin, 1991b, p. 82). The bodily *felt sense* is how the client is implicitly living the situation. "The body has the situation implicit in it" (Gendlin, 1991b, p. 82), or every human situation is lived implicitly in the body. It is concretely there, since for Gendlin, the body-sense is not subjective, nor internal, nor private. "Your bodily "____" is your situation" (Gendlin, 1992a, p. 347). You are, and you feel the environment.

For Gendlin, the interactional body is our first contact with the world. At birth, the baby's body has an intricate interaction with its environment. This living complex interaction comes first, and only then is perception possible. "Perceptions enter into an already intricate implied environment in which the five senses are already related" (Gendlin, 1992a, p. 350). This is why in Gendlin's 1992 article, he says "The primacy of the body, not the primacy of perception" (1992a). The body is in interaction with its environment before the senses become involved. In that conception, this interactional body exists before and without language. Still, according to Gendlin, this interactional body remains after the development of perception and language. So the "____" comes from this early interactional body, but it functions in our language and thinking. "An earlier and wider symbolizing exists, and it is richly elaborated by language" (Gendlin, 1987, p. 291). In that conception, we are fundamentally complex organized living bodies that were further complexified or shaped by culture, society, learning and history. The initial order was bodily. It was only later in the development of the human living organism did body, situation and language become inherent in each other.

Since the living body interacts with its environment, this means that it is exposed to considerable situational and environmental information. In addition, this information is not

organized like a verbal scheme because the bodily sense is anterior to language. As a consequence, the bodily "....." contains information that is implicit, that is not conceptualized yet. The "....." is a sense of the whole situation, of the intricacy of a situation. It contains more than it is possible to think about in terms of words and concepts. So in Example 1, when the client attends, through her silence, to this bodily *felt sense*, she is in fact accessing a bodily appraisal of her complex present situation that also includes her past as it functions implicitly in the present. This is why Gendlin talks of an implicit language in the bodily ".....". The words that follow from this "....." are bodily. "The body implies, and comes up with, our words and actions. It knows (senses, feels, is ... .) the language and the situation" (Gendlin , 1991b, p. 104).

For Gendlin, the body has an interactional intentionality and a situational understanding. From the "....." emerges a step that can take the form of a sense of the rightness or wrongness of what has just been said, or of a new phrasing, or of an action, a body movement. It is as if the body physically implies the next step in the process. Our body senses itself and senses our human situation as well as our physical environment. This sentience of the body, this function of the body, gives us a sense of the situation. From this sense, the body will make decisions and prepare the next move before there is the time to think about it. It is implicitly at work in you. For example, if you write a text and stop in the middle of a line looking for the next piece of inspiration, you will experience the *implying*. As you think in silence, there is a vague ".....". In that bodily *felt sense* there is a working of what the next line will say already there. For Gendlin, the "....." will herald the arrival of new material, over which we have no control. It involves millions of possibilities, connections to past and present words and issues. This working goes on until something new emerges from that vague blank, a new step. What emerges *carries forward* what was implied. It means in therapy that the personal issue that was

presented before the "....." has been carried forward into a new way of sensing the situation. This *carrying forward* is not predetermined. The next step cannot be inferred from what led to the ".....". Furthermore, the *carrying forward* steps differ from inferential sequences, from narratives and from emotional catharsis according to research studies (Gendlin, 1991b). It does not distort the previous situation. The emerging words, images, or actions, are very realistic, well related to the issue at hand, and yet remain novel.

When you sit in front of a stranger you can sense the person in your body before saying anything. Furthermore, your nonverbal behaviour will say a lot about your sense of that person before you verbalize any greeting. If you think of a person you love and then quickly think about someone you dislike, you will sense a change in your body's reading of both persons. That is why Gendlin talks about a bodily *felt sense*. During periods of silent sensing or ".....", the body prepares for action or speech.

3.2 The concept of direct reference

In 1955, when Gendlin and Zimring were listening to recorded interviews of clients in psychotherapy they noticed by listening to the clients' reactions that they were aware of the presence of meaningful bodily sensed feelings even though they could not verbally label the feeling. They would say phrases like "what is this?", "this "....." ", or "I feel it strongly" then they would try to put a word to "this". *Direct reference*, see figure 1, refers to the experience of pointing to, and focusing on an "it", a *direct referent*, on something concretely sensed, a *felt meaning*, without an explicit conceptualization of what the felt data are, something that is felt as it sits at the fringe of awareness. Basically, the attention of the client is given over to a feeling, an object of reference. In order to do that, a minimum of symbolization is necessary. What

happens here is that the preconceptual *experiencing*, in its functional relationship with symbolization processes, can be directly referred to or partly symbolized. It can take the form of words like "this ____" that is there" or non-verbal expressions. When Gendlin talks of symbolization, he differentiates between *direct reference* and conceptualization. In the former case, the symbols "this "____" " refers to something, a direct referent, without conceptualization or representation of the *felt meaning*. It does not say anything about the *felt meaning* itself or its content. The symbol only directs our attention to it. However, in conceptualization, a symbol ends up representing or conceptualizing what it represents. It can also have nothing to do with the *direct referent*, or be totally arbitrary. However, if it symbolizes adequately the meaning of the *felt*, then the meaning changes. The "____" becomes a word, for example, that represents in itself what it symbolizes. It has its own meaning, whereas in *direct reference*, the "____" points to a *felt meaning* but has no meaning in and of itself.

One of the arguments Gendlin gives to support his assumption that *direct reference* is not contaminated by our assumption system, is the observation that the *direct referent* has two independent characteristics or properties: independent access and response (see figure 1). With regard to the independent access, the idea is that we can access it without conceptualization. It is an "Oh! There it is", without conceptualization of what it is. Sometimes, this *direct referent* arises or is lifted out as a reaction to a formulation. However, what is felt is independent of the previous formulation. The response properties have to do with the testing of different conceptualizations on the *felt meaning* until the right one is found. The client senses if the *felt meaning* responds differently to different symbolization, something akin to saying, "that is not it", ... "that is it". With the appropriate conceptualization a shift, called a felt shift, in the felt sensing takes place. The concept of response will be explored further in section 3.4.

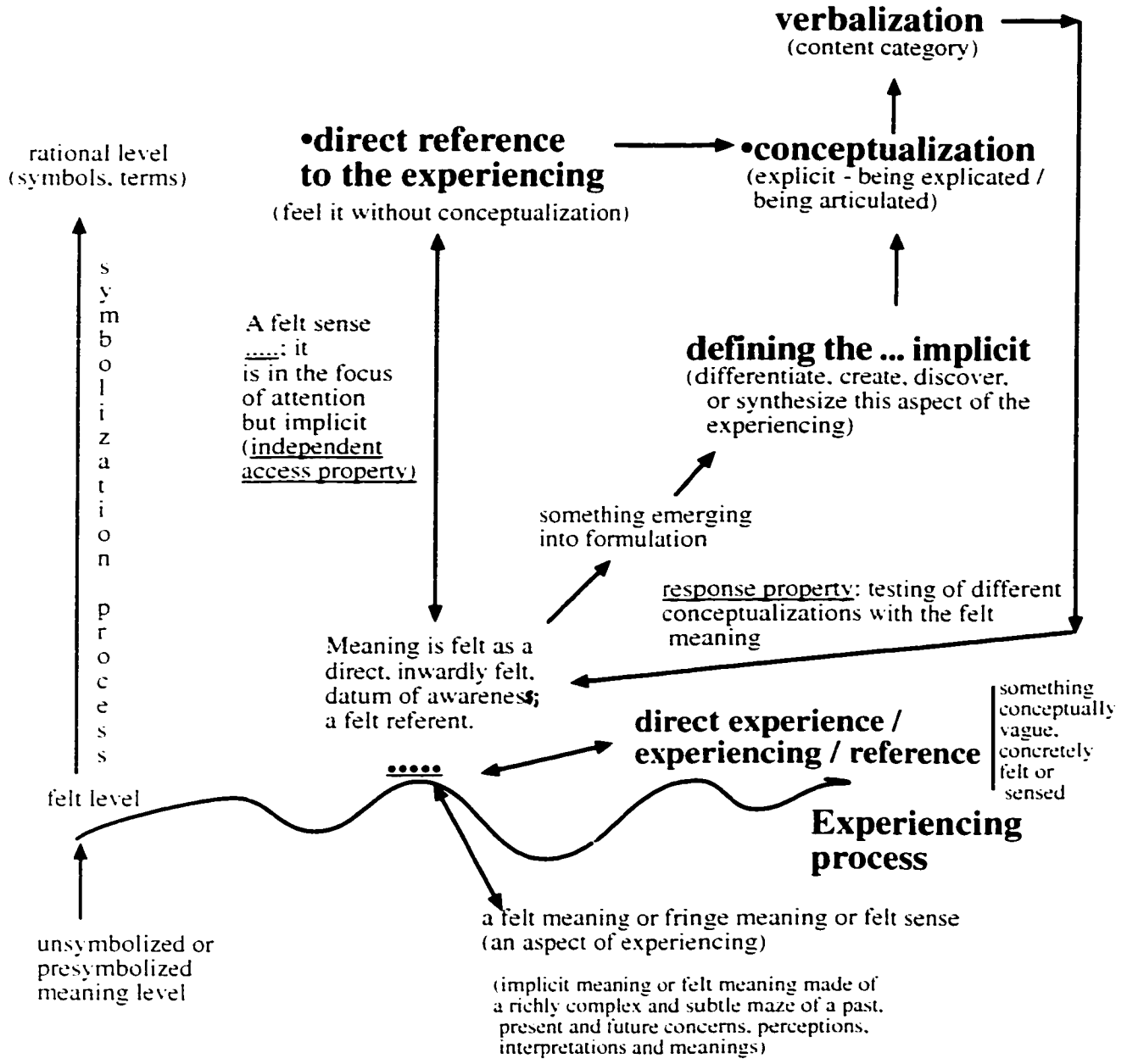

Figure 1. The relationship between felt meaning and symbolization in the case of *direct reference*

In psychotherapy, a client will experience a *direct referent* as something distinctly felt but conceptually vague. However, if he attends to it for a period of time, he may conceptualize some aspects of it. This will increase the intensity of the *felt meaning* leading to a partial symbolization of what it is. The implication of *direct reference* in therapy is that a positive therapeutic change in the client's situation can be characterized by shifts (*felt shift)* in his *felt experiencing*, and not necessarily by an accurate conceptualization of experience. There is no need, according to Gendlin, for a distinctly articulated conceptualization of inner feelings or an insight, as thought by other approaches in psychotherapy to bring personality change. In that sense, the primary aim of the therapist is to ground the client in the immediately given, bodily-felt process of *experiencing* and to keep him there.

Direct reference is one of many modes of *experiencing*. In the next section, we will define the concepts of *experiencing* and *felt sense*, as well as the procedure developed by Gendlin called *focusing*, that help facilitate this crucial experiencing process. *Focusing* permits the gradual step-by-step expliciting process of the meaning of the *direct referent*. Also the *direct referent* is the mode of *experiencing* used during *focusing*.

3.3 The concepts of experiencing and of felt sense

Gendlin talks, in his publications, of the difficulties of behavioural science with the *experiencing* phenomenon. We would like to briefly describe the phenomenon with his conceptual ramifications.

3.3.1 The concept of experiencing and its application in the *focusing* technique

For Gendlin, *experiencing* refers to an inward referent, a concrete sensing of body life, an inwardly felt process that you can attend to as you turn your attention inward. The "ing" in the word *experiencing* refers to the fact that experience is viewed here in the context of a process. As such, it is the immediate, organic, concrete, stream of bodily-felt process of implicit felt meaning that continually flows and changes in response to the changing circumstances of moment to moment living. It is not a specific content like a feeling, a thought or an emotion. It is "how" we globally experience or sense this bodily felt flow, which is made of countless organized aspects, that can be implicitly felt but are not yet conceptualized. In that sense, it is preconceptual or presymbolic and concretely experienced. When we turn our attention inward, we can detect it, an inward sensing, the nature of which is broader than specific contents or formulation. Since *experiencing* as a phenomena is not composed of units of patterns, and because it is preconceptual, any description of it imposes assumptions, structures and forms. For Gendlin, *experiencing* differs from conceptualization. That is, "What experience is, ... cannot be said" (Gendlin, 1987, p. 268-269). However, we come to know this body life, this *experiencing* through its interaction. "Experiencing is essentially an interaction between feeling and symbols (attention, words, events) just as body life is an interaction between body and environment" (Gendlin, 1964, p. 114).

Since experiencing is something felt and can be directly referred to and be present in awareness, it can be defined in terms of observable characteristics. In psychotherapy, these characteristics have to do with the quality of the client's participation in the therapeutic process. In that context, the manner of *experiencing* has characteristics such as richness of detail, degree of involvement, level of awareness of internal processes, presence of emergent contents, to name a few (Klein, Mathieu-Couglan, & Kiesler, 1986).

Over the years, Gendlin has associated *experiencing* with various concepts: in 1965-1966, he associated it with phenomena; in 1973, with nature; and in 1978-1979, with living. In 1965-1966, he said "There is a relationship between formulations and the *experiencing* (phenomena) on which we try to 'base' them" (p. 197). In this article, *experiencing* has the character of phenomena: preconceptual, preobjective, prereflective, preontological (Gendlin, 1965-1966). In 1973 he wrote about the interpretation given by philosophers of experience (and nature). In 1978-1979, *experiencing* is associated with living and the essence of human nature. "The nature of human nature, of living and feeling, is therefore of a much finer texture than any theory or system of sharp cognitions" (Gendlin, 1978/1979, p. 66).

Experiencing was usually studied during psychotherapy sessions, initially within the client-centered therapy approach, and afterwards in the context of Gendlin's experiential psychotherapy. Within this approach, he developed a general procedure or method called *focusing* to facilitate *experiencing*. *Focusing* teaches people how to recognize a sense a *felt sense* and how to work from it. With regard to psychotherapy, Gendlin has realized over the years that for some clients it is easy to sense their body inwardly, but others have no idea what to look for or, "Oddly enough, ... cannot sense their bodies from inside" (Gendlin, 1996, p. 18). For that purpose, he developed a sequence of six movements or steps to bring about a *felt shift* identified by a physical relief of tension. The steps are (Gendlin, 1966, pp. 71-75): (1) clearing a space; (2) having a *felt sense* of the problem; (3) getting a handle on it; (4) resonating the handle; (5) asking; and (6) receiving. These steps are presented in figure 2 below and in the next paragraph. For more information on the *focusing* steps, see the attached appendix (p. 207) which includes a detailed explanation of each step.

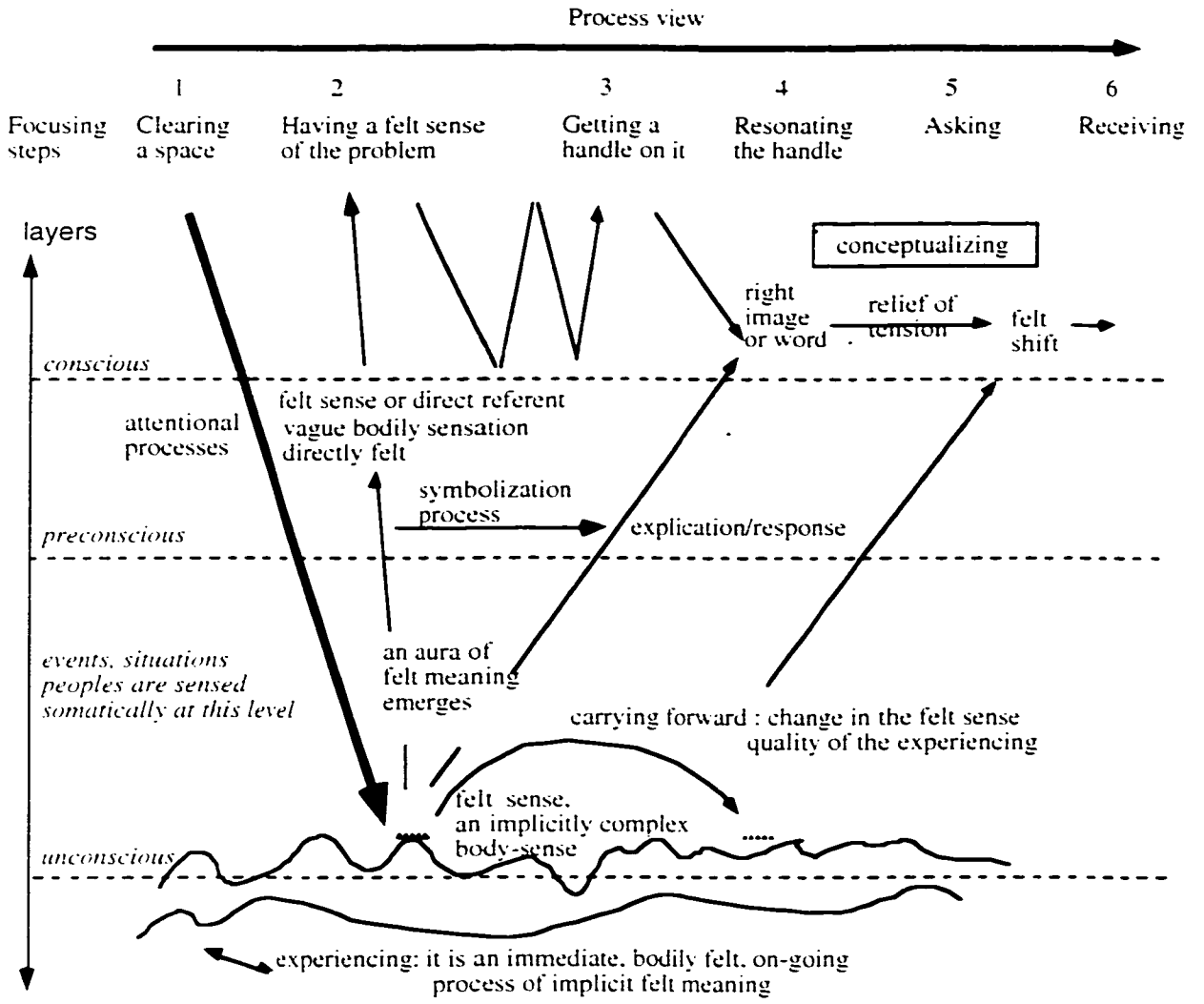

Figure 2. The focusing process and the order of steps

Experiencing and the *focusing process*, as studied by Gendlin in a therapeutic context, takes place during a therapeutic interaction between a client and a therapist as we saw in Example 1. According to Gendlin's observations, the phenomenon will follow a certain order of steps. Initially, a rhythm of interaction is established between client and therapist. For example, the client makes a statement, the therapist replies, and if this response is not precise enough for the

client, it is corrected. The therapist accepts the corrections, and reflects this back to the client. If the wording is right, the client may breathe a sigh of relief, usually followed by a silence. This silence is characteristic because it prepares the ground for the next thing to come, something that is implicitly there at the fringe of awareness. The silence creates a space so that the client can attend inwardly in order to let something emerge into awareness (step 1: clearing a space).

At that moment, the client may physically sense the problem he is trying to grasp, yet may not have the words. It is a "....", or a *felt sense*, also called a direct referent, an implicitly felt datum sitting at the edge of awareness. It can take the appearance of an unclear, muddy bodily *felt sense* of the issue. In this particular mode of functioning, the client experiences something that he focus his attention on, a this "....." , and yet does not understand it and has not yet conceptualized the felt meaning to which it refers (step 2: having a *felt sense* of the problem). Gendlin talks of a *felt sense*, a preconceptual body-sense that would capture the problem of the client as a whole. The therapist may then ask the client to focus his attention on the *felt sense*, that is to spend time attending to that unclear sensation of the problem usually spatially located in the middle of the body. As a result of this attending, something will form. The client becomes aware that this *felt sense* has been narrowed to felt sensing of something as yet unknown to him. At that point, the client experiences a direct referent, since he has no explicit knowledge of what the *felt sense* "means", but he may use verbal symbols to point to, or refer to this particular datum.

As a result of attending to this intensely-felt referent, conceptual symbols will emerge directly or present themselves from the *felt sense*. By describing the qualities of this murky, fuzzy, and vague *felt sense*, both client and therapist try to find a word, an image, a phrase, or a movement to describe it. Gradually, they come to find a symbol that fits exactly and captures the quality of

the *felt sense* (step 3: getting a handle on it). By going through a trial error, back and forth process of moving between the *felt sense* and the symbols, the implicit meaning of the *felt sense* opens up, leading to a handle on the *felt sense*. Finding a handle indicates the client has found a symbol that comfortably fits with the *felt sense*. During that process of finding a handle, the client has to constantly sense inwardly the physical effect of what he says in order to check whether the symbol or the handle resonate with the *felt sense* (step 4: resonating the handle). When the symbol resonates with the *felt sense*, there is a bodily release, a *felt shift*, a step. This will tell the client and the therapist that the handle is right. From there, in the asking phase (Step 5: asking), the client can spend more time staying with the explicit meaning of the *felt sense*, asking questions in the hope of recalling forgotten material, or becoming reacquainted with it. The client can also move right away to the receiving phase (step 6: receiving), where he can take the time to create a space to welcome the step and to listen to it. This last step prepares the client for another round of focusing steps.

For the client, the explicited *felt sense* would have characteristics of novelty and intricacy but still be realistic. They could be words, images or new sensations that have something to do with the present situation of the client and that will be experientially felt. "An implicitly intricate body-sense functions in every situation — and in a highly orderly way" (Gendlin, 1991b, p. 90).

In response to this conceptualization, the client will sense a relief of tension that comes with a shift in his *experiencing* called a *felt shift*. As the meaning of the symbols is explored and explicited, the client checks with his *experiencing* to see if there is congruence between the explicited content and the *felt sense*. The explicating process furthers *experiencing*, opening up new aspects of the initial *felt sense*, affecting its felt quality, and *carrying forward* "that which" is contained in the implicit meaning of the felt sensing. This sequence of steps coming from the

client cannot be predicted by either parties. It is a change that will lead to another step, another change, and this can continue until several series have been explored.

When these steps are analyzed afterward, it is possible to see a progression in these steps, although it is never a logical one. The steps usually surprise both client and therapist by their originality, yet each follow and add to the previous one. Furthermore, there is a sense of direction in them.

> Such steps do not follow by logic, and yet they make sense -- we can follow them. They have a certain kind of order, different from logic and from irrationality, something deeper, more exact, more specific, more intricate; maybe not every time but often. (Gendlin, 1990, p. 211)

Gendlin has been puzzled by the organization of these steps or *carrying forward*. "The previous step functions in producing the next, but not by deriving it, not by imposing its form on what follows" (Gendlin, 1989b, p. 208). The therapist does not impose the steps and they do not seem to already exist as units in the client. They come out of the interaction with the therapist. The contents can include past experiences, combined with present information, that is sometimes presented in a surprising way. For Gendlin, these steps have an order of their own, an order that is not imposed from outside but comes from within the body: "But most steps came as her body's responses to her own statements" (Gendlin, 1989, p. 208). He writes about this order in many older publications: "The majority, in the behavioral sciences, senses order in human behavior and experience, yet it also senses that this is a special type of order"(Gendlin, 1962, p. 21), and in more recent one, "I want to talk about a kind of order that is not 'forms'. There is another kind of order: persons and bodies have that other kind. It is not forms stamped on, not patterns, shapes, distinct, fixed laws. Instead, it is an 'order of steps' " (Gendlin, 1990, p. 209).

We will come back to that *order* of steps in section 3.4 and to the *order* itself in section 3.5.2.

3.3.2 The *felt sense* concept and its characteristics

The central concept of *experiencing* is the *felt sense* or body-sense (Jennings, 1984). As we have seen up to now, it is a kind of bodily awareness, a mode of awareness (Gendlin, 1981b), or a crucial bodily attention (Gendlin, 1996), to which Gendlin gave the name *felt sense*. It is, according to Gendlin, his discoverer, a special kind of bodily sense, because it is the sense of a situation. "Currently there is a great deal of concern with the body, but most people have not yet discovered that special kind of bodily sense that is the sense of a situation" (Gendlin, 1996, p. 304). It is named a *felt sense* because "... there is no common word for this utterly familiar bodily-sense of the intricacy of our situations, along with the rapid weighing of more alternatives than we can think separately. In therapy we now call it a '*felt sense*' " (Gendlin, 1992a, p. 347).

According to Gendlin (1981b), a *felt sense* is defined in the following way:

> A felt sense is not a mental experience but a physical one. Physical. A bodily awareness of a situation or person or event. An internal aura that encompasses every thing you feel and know about the given subject at a given time — encompasses it and communicates it to you all at once rather than detail by detail. Think of it as a taste. ... . A felt sense doesn't come to you in the form of thoughts or words or other separate units, but as a single (though often puzzling and very complex) bodily feeling. (p. 32-33).

For example, if you let yourself think about difficult situation, you could spend a lot of time trying to identify and list all the different characteristics and facets of that situation. However, the *felt sense* of that situation would give you an all-inclusive sense of everything that happened during that situation, in a single great aura sensed in your body. Furthermore, if you identify properly this *felt sense*, it will change and modify itself.

According to Gendlin (1996), a *felt sense* or a "....." has eight characteristics. We will briefly comment on each of these characteristics. They are:

(1) a *felt sense* forms or emerges at the border zone between conscious and unconscious;
(2) a *felt sense* has an unclear quality at first, but is distinguishable because it is sensed as a unique and unmistakable sensation;
(3) a *felt sense* is bodily experienced;
(4) a *felt sense* is experienced internally as a single datum that contains a complex whole;
(5) the *felt sense* moves through a step by step process called *felt shifts* or a *carrying forward*;
(6) each step brings the client closer to being that self;
(7) the process step follows its own growth direction;
(8) a theoretical explanation of a step can only be devised retrospectively.

With regard to the first characteristic, Gendlin means as an individual attends inwardly, he will get in touch with a directly sensed bodily experience, something that is different from a perception or a thought. This experience will emerge at the edge of his awareness or, as Gendlin says, at the border between the conscious and the unconscious (see figure 2). For Freud, the unconscious contains material that escapes our conscious knowledge and which is truly inaccessible, but in the preconscious the material can be accessed. Referring to Freud's nomenclature, Gendlin says there is a layer called *felt sense* that comes immediately after the unconscious and before the preconscious, where the material can be sensed but only somatically. From that layer, a direct and unclear body sense can emerge called a direct referent.

The second *felt sense* characteristic indicates that what we sense at the border zone is always, at first, unclear. It will be fuzzy, vague and indistinct. It is usually difficult to characterize or

define it. However, it will be vague only conceptually, since the individual can clearly attend to it, talk about it, point to it, and feel its special qualities.

The third characteristic is that a *felt sense* occurs bodily as a physical, somatic sensation. However, that bodily *felt sense* can have a very distinct feeling. According to Gendlin, the *felt sense* is the organism's response to how we "physically sense a situation as a whole" (Gendlin, 1996, p. 19). It involves an unusual way of sensing as well as a very distinct feeling. It can mean that what emerges can

> ... cross the lines between thought, feeling, desire, image and sheer body sensation, but not often. Nor is a felt sense a combination of these many together. Although it can come along with any of them, and also lead to any of them, a felt sense differs from them all (Gendlin, 1996, p. 20).

Anatomically, the *felt sense* is most often localized somewhere in the middle of the body, quite often in the chest, throat or viscera. The therapist can ask the client to concentrate on the middle of the body in order to allow the *felt sense* to come.

As a fourth characteristic, Gendlin observes that the *felt sense* is experienced internally as a single datum that contains a whole. Experience has proven that this single datum contains the whole of a situation. As Jennings (1984) puts it, "Experiencing or felt meaning implicitly contains all the relevant values, perceptions, memories, attitudes, and social/cultural meanings in a given life situation, and this is all known as it is felt" (p. 2). It contains a wealth of implicit meaning. For example, if you think of your partner in life, or a friend, and you allow yourself the time to let a *felt sense* come, you will notice a distinct "inner aura", a single datum that gives you a sense of all there is to say about that person. It will come all at once in a single bodily-

sensed aura that includes every one of those thousands of past and present experiences concerning that person. That whole instantly contains a multiplicity of implicit information.

The fifth characteristic has to do with the capacity of the *felt sense* to change or to go through a *felt shift* or a *carrying forward (see section 3.4.1)*. As a result of attending to the direct referent, the *felt sense* is usually narrowed to felt sensing of something as yet unknown to the individual. Then a process of explication begins, where conceptual symbols present themselves from the *felt sense*. As the individual tries different words or symbols, he may find one that describes or explicates the implicit meaning of the *felt sense*. At that moment, the individual will experience a pleasant feeling of easing and relief of tension called a *felt shift*. It manifests itself in an actual body-felt sensation of a change. It is as if the *felt sense* suddenly opens up, because what was said made the implicit meaning explicit, with the accompanying experience of meaningfulness. The unclear sense of the issue presented by the individual has been directly affected by what was said. It also confirms that what was said was true or right.

In Gendlin's experiential psychotherapy, positive therapeutic growth is characterized by shifts in *felt experiencing*, rather than clear articulated insight or appropriate conceptualizations of subjective feeling. The *felt shift* marks the freeing of stuck life processes and a move for the individual toward more life. He has been liberated through the focusing on a *felt sense* and the explication of the implicit meaningful experiencing. "When a 'felt sense' forms, the 'self' becomes, in a new way, free and different from that whole. The formation of a felt sense is itself a new bodily step, a bit of a new kind of living" (Gendlin, 1996, p. 56). The process of identifying the implicit meaning of a *felt sense* enables the individual to concretely disidentify himself from the sense. The individual realizes that the *felt sense* was something he had, but not something he is.

The fact that each step brings the client closer to being his true self appears to Gendlin to be another characteristic of the *felt sense*. This is the sixth characteristic.

The seventh characteristic is that with the *felt shift* comes a step and that step has its own growth direction. What was discovered before the *felt shift* was the result of a process. The step undertaken by the organism and the steps that follow as the therapy continues, suggests to Gendlin that there is a direction in the progression of steps but that these steps cannot be inferred or deduced in advance.

Finally, as the last characteristic, Gendlin would say that a theoretical explanation can be applied, but only after the change, in retrospect.

3.4 Concepts associated with the change process

One of Gendlin's key contributions to psychotherapy is his explanation of the change process explicited in 1964. Since then, he has furthered its articulation by introducing new concepts. The two major ones presented here are the concepts of *carrying forward*, with its associated concepts of *explication*, *response*, and *felt shift*; and the concept of *implying*.

3.4.1 The *carrying forward* concept

Gendlin talks about the *explication* process when a statement comes to symbolize some implicit aspect of a *felt sense*. To *explicate* a *felt sense* is to *explicate* the situation you are up against. This connection triggers a step also called a response, a concept introduced in section 3.2. Only certain forms, that is words, sentences or statements will have this effect on the *felt*

sense, and will trigger a response: the other words leave the *experiencing* unchanged. The response is very exact and specific as to what it reacts to. That is, what is experientially felt or directly felt, the "....." changes as it is properly symbolized. When a contact is made between a form and a *felt sense*, the contact changes the form. The *explication carries forward* what it explicates and in doing so brings a new ..... that feels different. For Gendlin (1991b), "The silent "....." 'talks back' " (p. 76). There is a shift in the *felt sense* called a *felt shift*. The unfolding of this *felt sense* has two advantages for the client in psychotherapy. First, it informs the client as to the meaning of the implicit *felt sense*. Secondly, it triggers a global change in the whole manner of *experiencing* by bringing a new *experiencing*, a new facet of *experiencing*.

Associated with the correct symbolizing of the *direct referent* comes a sense of rightness associated with a certain degree of easing of the tension felt before the proper statement was found. Gendlin (1964) says "... a direct referent always involves a surprising and deeply emotional recognition of the good sense of our own (previously so seemingly irksome) feelings. 'Of course', we say over and over, 'Of course !' " (p. 119).

In Gendlin's view, what is felt, the "....." , is an incomplete implicit meaning that is experienced as conceptually vague. What the *explication* process does is to complete the implicit meaning by connecting it, through a process of trial and error, with appropriate symbols. When this happens, the process is *carried forward* and the explicit meaning forms. What is being *carried forward* is the body-sense. For Gendlin, how we formulate or think about an event, is in a fixed form. However, the body-sense, the "....." behind that form can be *carried forward*. This is where important changes come from psychotherapy clients.

One characteristic of the *carrying forward* is that the response moves the step process in the "right direction". Gendlin has observed that the direction of the change taking place during the *carrying forward* is always toward an improvement of the condition of the client. According to Gendlin, the step process goes progressively in the direction in which it needs to change as if the bodily sense has its own direction of health. Gendlin would say "... , let the body answer" (Gendlin, 1978, p. 340). Or ".... each set of symbols gives a different meaning -- and not whatever meaning we wish, but only just this meaning, which results from the application of this set of symbols to this aspect of *experiencing*" (1962, p. 28).

3.4.2 The concept of *implying*

"The '....' implies a *carrying-forward* step that has not yet been said" (Gendlin, 1991, p. 78). By *implying* Gendlin refers to the multiplicity of forms and patterns that can be found in a *direct reference*. This body-sense contains "... all the training, all the language, all the social forms, all the culture, everything we read and then they still imply more ..." (Gendlin, 1990, p. 214). An implicit meaning contains more than can be said. When an animal is getting ready to jump, we can say that the actual jump or the action is *implied* in his jumping preparation. Human situations also carry many possibilities of actions that implicitly implie further events. Gendlin (1991b, 1995) talks about the poet who is contemplating his last line and is now facing a blank. When that line does come, he will say that the blank, or the "...." he *experienced* before the blank implied the emergent line. The "...." knows what needs to be said and will reject an imperfect match. It can bring something new through the *carrying forward*, something that was implicit is changed by explicating it. The *carrying forward* movement suggests that before this happens, there is already an *implying* of that movement in the *felt sense*. Since body, situation and language are interrelated, it means that the next line was all in the "...." which implies the next step.

In Example 1, after each period of silence something new arises. It is as if the "....." implies what will arise next. There is an internal process at work during that silent period. Something is gestating. Once it is stated, the "....." is *carrying forward*. What was implied has occurred. What she was working on, in line 6, "I'm afraid of making the wrong choice, I guess", is not how it appears because embedded inside is, within it, how it can be *carried forward* by the correct symbolization. Implied in line 6 is line 10 statement, "There is something there, like 'I want it all!' ". So for Gendlin, the present form is not its only nature. It also includes how it implies the steps of the *carrying forward* that are implicit at work in it. A form implies more than what its form suggests. Furthermore, it is impossible to deduce from the present form, by its stated meaning, what will emerge next.

Because of the *implying* characteristic, the *carrying forward*, with its *order* of steps can be seen as a self-organizing process where what was implied before the *carrying forward* will occur after the step, at which point a new *implying* will arise. Each step retroactively changes the previous form. "Each kind of progression (each kind of steps) can further create the others so they become its instances. But what this 'instances' is the order I was after" (Gendlin, 1989a, p. 406).

The *implying* implies something that will change the *implying*—not into something else—but change it in a special way so it no longer implies as it did before. What was implied has now occurred: the *implying* is carried forward.

3.5 The concept of intricacy

3.5.1 Experience, intricacy and patterns

According to Gendlin, experience (or nature) has been ordered in the Western philosophical tradition according to two major orientations. One says that experience is ordered by the nature of our thoughts (idealism, rationalism). The other says that knowledge receives its forms from nature (empiricism). For Gendlin, in both traditions, experience (or nature) has been shaped by the kind of forms, relations and connections that knowledge requires. However, Gendlin's assumption is that experience does not have the same character or order as logic, science, or knowledge, which are perceived as schemes or patterns imposed on experience. A pattern encompasses things like forms, concepts, definitions, categories, distinctions, rules, ... (Gendlin, 1991b). Experience cannot be described appropriately with such patterns as generalities or commonalties. If you answer the question are you happy? Your verbal reply will impose an order on something felt. Or, as you attend to this unclear sense of the complexity you feel in your body, your reply could be formulated based on this experiential intricacy. It has a different kind of ordering process (Gendlin, 1987, 1991b). There is a reversal of the usual procedure of imposing the conceptual order into a preconceptual one. In Gendlin's view, by directly referring to a "....." , this "....." can enter into a symbolic relationship with any forms in order to create intelligibility. In that sense, Gendlin says that, "... the forms are not just given; they form from intricacy, dissolve into it, and reform from it. Intricacy is not these or those forms. It is not a gap between forms. Intricacy is alive" (1991b, p. 67).

Patterns and their logical relationships cannot refer to the complex intricacy of people, situations and how they interact because "Experience is not organized like a verbal scheme"

(Gendlin, 1973, p. 282). Furthermore, human nature is internally very complex and this complexity is experienced in a *felt sense*.

A *felt sense* includes so many givens, so many facets of what we must avoid, our wishes, etc. This complexity or intricacy is metaphorically like an oriental rug (Gendlin, 1978). For example, a human feeling is in fact a rich, complex nexus of textures and patterns comprising contents, emotions, feelings, past experiences and so on, that are unique to each individual. When a client is asked to attend to a *felt sense*, he attends to this experiential intricacy. So, to return to the metaphor, what is internally felt is not a simple, clear-cut piece of that oriental rug, but it is associated with this intricate patterning that is the oriental rug. In fact, for Gendlin and other philosophers, there is a sense of "experience" not yet organized verbally, but which possesses an order of its own that is beyond schemes or patterns and is anterior to them.

Language, for example, is made up of forms, rules and categories. But these forms and rules are "incapable of encompassing the intricacy of people and situations" (Gendlin, 1991b, p. 22). For instance, the verbal description a person can give of an ordinary experience can be made more and more specific. Each concept, each word used, will structure and define a specific aspect of this experience. One distinction can lead to a vast number of other distinctions, as if the more you focus on the particulars, the more you are rewarded by finding new distinctions. Overall, our description of an ordinary experience can be further and further specified, patterned, formed and organized. It is as if forms and distinctions are working with something wider and more intricate that can always be more patterned, ordered, as if behind the imposed order is what is more than an imposed order. So when examined closely, ordinary experience or

> Human experience does not consist of the simple pieces our language or psychologies suppose but, instead, it is much more organized, much more richly patterned, than any of our logics and theories. ...
>
> A given psychological content, feeling, emotion, thought, pattern —anything that goes on in a human—is never just the single thing it seems. Instead, there is always a rich complex texture inside and just below any human feeling. (Gendlin, 1978, p. 325)

In view of the fact that there is more to human experience than forms, patterns and rules, Gendlin (1973, p. 283) concludes that, "Our living in situations is said to be a great deal more complex than any scheme". This complexity that is under any scheme, any pattern, Gendlin conceptualizes as the more *intricate order*, "...that which exceeds patterns (forms, concepts, definitions, categories, distinctions, rules ...)" (Gendlin , 1991b, p. 21). According to Gendlin, there is interplay between the forms, the patterns, and a wider, more complex and intricate order that Gendlin calls nature or experience.

3.5.2 The concept of a responsive order

Gendlin talks of an *order* that is more than form, that functions in language and cognition (1991b). This order is noticeable during the *carrying forward* part of the step process. In the next paragraph, the *responsive order* concept is presented.

Based on Example 1, we can see that the client moves from her initial verbalization "I am afraid of making the wrong choice" (line 6) to, after consulting her *felt sense*, another statement on line 10 that is quite different from the initial one, "I want it all". Then the step-process brings her to acknowledge that her desire is to live dangerously (line 20). Based on that example, Gendlin would make the following five observations and interpretations. First, each step has a characteristic of novelty. Something keeps happening. It arises. Secondly, some of the steps

begin by contradicting the statement that was just made, as in lines 8 and 13. It is as if the body sensing between each step corrects the client's statements and changes the direction of her thinking in an unpredictable way. Thirdly, when a statement explicates the implicitly *felt sense*, there is a release. Gendlin talks of the precision of the choice made by the intricate order. Fourthly, we cannot predict the next step from the previous one. The step-process does not follow a logical path, or a rational process. Finally, there is a sense of continuity, and in fact of a progression from one step to the next. All these characteristics of the process derive from the sensing that happens during the silences.

These observations suggest to Gendlin that there is something at work underpinning that step-process, something that seeks the right form or statement through a progression, an *order* of forms. However, these forms are not independent, they are not a pattern imposed by the therapist. Gendlin talks of an *order* of steps that is organized and ordered rather than a series of arbitrary bodily reactions. A series of steps takes place that follow an unpredictable course, during which new forms and new patterns arise. It is as if the *direct reference*, the "....." judges which direction is to be taken during each period of silence. In that sense, this process is a forming *order* instead of something already formed, that emerges at a right moment. "It is neither a finding of order, nor an imposing of order" (Gendlin, 1987, p. 281). Gendlin talks in fact of experiencing as being a greater *order* that manifests itself, at least in the way the steps are ordered.

This notion of *experiencing* as a greater *order* has been specifically pursued by Gendlin in his more recent publications. In 1997 (Gendlin, 1997a), he devoted an article to the intricate *order* presented as the responsive order.

Chapter 4
Gendlin's views of science

Whenever Gendlin writes about Western science, he is very critical because he believes it does not take into account the *experiencing* order and it cannot adequately portray human nature, because it puts humans' ongoing interactive living experience outside the scientific realm. His goals are to demonstrate the reality of the *experiencing* order and how it explains behaviour of living organisms, and the limitations of science in addressing issues related to that order, or dimension of phenomena. Nonetheless, he also wants to show that both views are needed to understand the living *order*. "We need both" (Gendlin, 1997a). In the next two sections, Gendlin's expression of his positive attitude toward science will be presented first, section 4.2, followed in section 4.3, by an articulation of his criticisms regading the logical, scientific order.

4.1 Gendlin's positive outlook vis-à-vis science

In general, Gendlin's attitude is toward improving science instead of negating it. This translates in his writing as an attitude similar to, "can we add anything to science". As the following paragraphs will make clear, Gendlin has a positive attitude toward science. He presented himself as a member of the scientific community, and his publications over the years repeatedly expressed his desire for the advancement of science.

Gendlin considers himself a scientist. In 1991, he indicates this in two ways. In one statement he says, "The difference is that as scientists we impose the empty space of time and space patterns ..." (Gendlin, 1991b, p. 121). In another , he talks of "our science", "Then I will show how that can advance our science." (Gendlin, 1991b, p. 118).

In his 1962 book, Gendlin writes in several places that what he hopes to achieve with the introduction of the *experiencing* order is to advance, extend, augment, or improve the positivistic science methods: that science is missing something important. For example, he notes, "Logical positivism and existentialism can be advanced, not by changing either, but by adding a missing systematic piece between them." (Gendlin, 1962, p. vii) or, "Current scientific methods need to be not only analyzed as they are now, but extended" (Gendlin, 1962, p. 3), or:

> Presently, we must leave the logical and the empirical testing orders intact, but must add still another, third, dimension: concepts that can refer to experiencing. We must, again, provide systematic methods to allow logical and objective concepts to profitably relate to the quite different experientally referring concepts. (Gendlin, 1962, p. 8)

In reference to Logical positivism and operationalism in psychology he says,"The method proposed in this essay augments, but does not alter, the current methods of positivistic science" (Gendlin, 1962, p. 268).

In 1991, the same attitude is also present, "... section B will show that the new ways of thinking can relate and contribute to current science" (Gendlin, 1991b, p. 24), or, "Let us now see if our concept of 'implying' (and the others implicit in it) can add anything to the scientific conception of a living body" (Gendlin, 1991b, p. 110). And in 1995, "Meanwhile our science is already quite powerful but greatly in need of better formulations" (Gendlin, 1995, p. 550).

However, as we will see in section 4.3, he also has an articulated discourse on the limits of science, discourse that at times has a pedantic connotation, "But won't we just disorganize science, if we insert our incomplete concepts of the incompleteness of all concepts?"

(Gendlin, 1991b, p. 110), or, "We would not want to lose all that science gives us, ..." (Gendlin, 1997b, p. 198).

4.2 Gendlin's criticisms of science

For Gendlin, scientific psychology should take into account the directly felt, experiential dimension of human experience, as defined by *experiencing*, in its investigation of human behaviour. For him, it is another dimension of knowledge in addition to what he calls the logical and the operational dimensions. However, he faces many obstacles in 1962 in his quest to have subjective experience accepted by neobehaviourists and the operationists. He writes: "The recent positivistic trends toward operational definitions are now making it very difficult, in psychology, to refer at all to the everyday phenomenon of subjective experiencing" (Gendlin, 1962, p. 228). To correct that, Gendlin introduces new concepts, new variables and new methodologies in the behavioural sciences in order to investigate the relationship between symbolizing, determine what is said about a lived situation, and learn more what preconceptual experience or what is directly felt. Presented differently, Gendlin wants to inquire into the ways the logical order or logical constructs (science) can relate to concretely felt experience, a problem referred to in existential philosophy as the difficulty of applying logic and concepts to experience as it is actually felt and lived. However, the challenges presented to Gendlin's philosophy of *experiencing* in 1962 by Logical positivism and Operationism took different forms as Gendlin moved from the role of research coordinator for Rogers' Wisconsin Schizophrenic Study to one of philosopher, proposing a new empiricism (Gendlin, 1997a) that incorporates the insights and criticisms of the postmodernist movement in order to move past it. We will focus here on the range of criticisms that Gendlin formulated in his writings with regard to science over the past 15 years.

Basically his criticisms are that science, by its methods and concepts, imposes severe limitations on the investigation of human behaviour and, in particular, of *experiencing*, that partly unformed concrete stream of feeling that humans have during every moment of their lives. These limitations can be organized into seven categories: the first addresses the fact that science is not aware of the experiential dimension of knowledge. The second has to do with subjectivity: the positivistic study of human behaviour does not take into account the private, subjective side of human living. The third underlines the lack of concepts science has to address the *experiencing* phenomena. There is a need for new concepts and new operational definitions to address the relationship between symbolizing and *experiencing*. The fourth limitation of science is its methodology, which should be adapted to integrate *experiencing*. The fifth has to do with the use of theories: science needs new ways to use theories. The sixth limitation is that science can only impose patterns or forms on experience, when in fact, experience has its own way of responding which is different than the scientific logical order. And finally, the seventh and last addresses the incapacity of science to explain the process of change as described by Gendlin during psychotherapy. Let us now see in more detail how each of these limitations is formulated by Gendlin.

4.2.1 Experiential nature of conscious flow

According to Gendlin, over the years science has developed concepts to account for two different orders of knowledge: the logical order, based on deductions and logical symbolization, and the objective or operational order, based on sense perception. According to Gendlin, science has overlooked an important dimension of knowledge that is directly related to human behaviour. This dimension is the concretely felt dimension of experience (see figure 3), a dimension of human life associated with behaviour

that plays a primary role in the symbolization process, in particular in the formation of concepts and meaning.

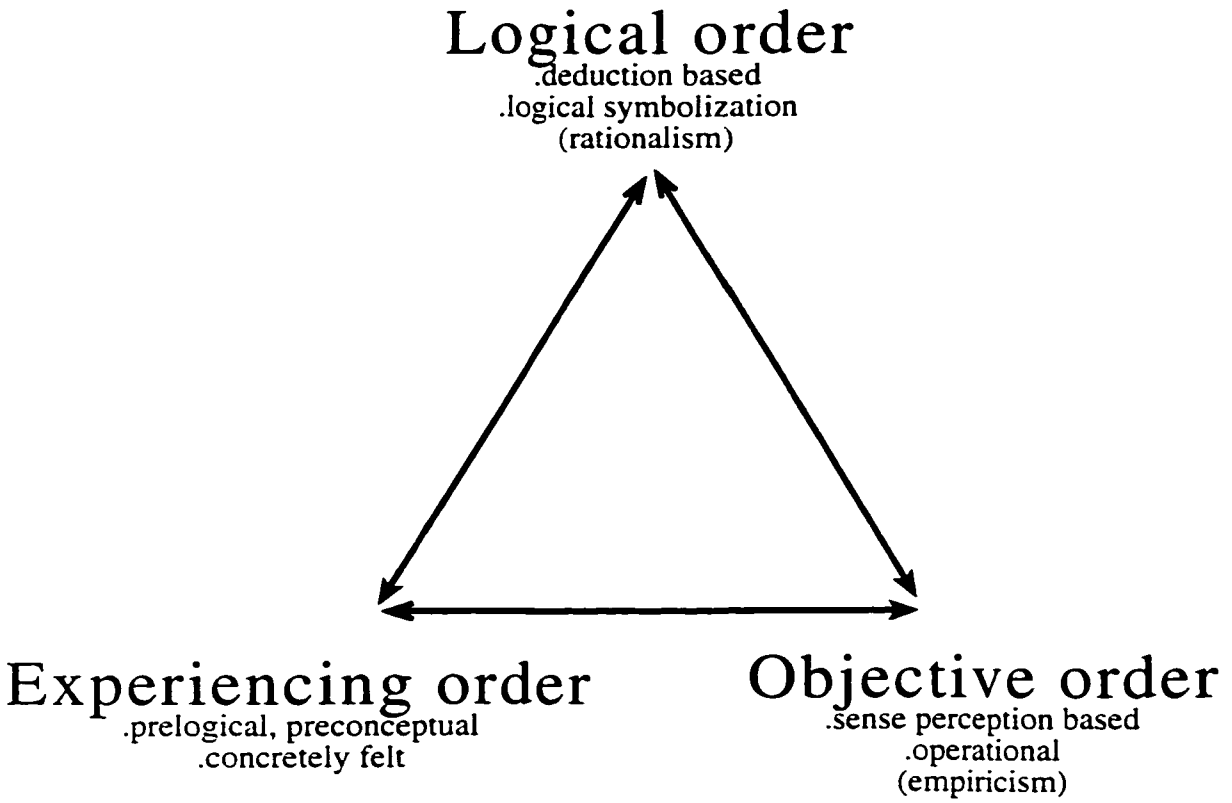

Figure 3. Three dimensions of knowledge

An example of that dimension is manifest in psychotherapy when a client is experiencing a neurosis. The client may have a good intellectual understanding of the issue and of the causes, but is incapable of changing his *experiencing* of it. The therapist can frequently explain the reasons surrounding the manifestation of the conflict without modifying the *experiencing*. Gendlin would say that conceptual understanding or knowing does not change the client's problem. However, since personality changes do take place in therapy, then something else is involved in the process of change. According to Gendlin, the two ingredients observed in that internal reworking of personality are a feeling process and an ongoing personal relationship (Gendlin, 1964). The feeling process or the emotional digestion of an issue is the directly felt reworking of something. This reworking involves

intellectual, behavioural and felt operations. According to Gendlin, the felt process functions differently than language. It contains implicitly more than can be conceptualized or formulated. Gendlin refers here to the *experiencing* order, the subjective or natural knowing side (Gendlin, 1995) as opposed to the logical order or the side of logical forms (language, concepts).

His line of reasoning for this missing piece in science is the following. Gendlin mentions that Bergson (Gendlin, 1962), Sartre (Gendlin, 1962), Heidegger (Gendlin, 1978-1979) and Merleau-Ponty (1992a) pointed out in their writing the existence of this experientially felt dimension of human life. However, they have also indicated how logic and concepts could not adequately grasp it without modifying it and that only intuition or concrete living experience could grasp it. Since science, as seen from the viewpoint of Logical positivism and Operationalism is defined by logical and empirical requirements, with requirements of precise logical definitions and empirical testing, the fear is that it will not apprehend this dimension of life without distorting or deadening it. In other words, abstracting *experiencing* to fit it into a logical set of concepts, or objectifying it to meet empirical operational criteria would change it for the worse. Furthermore, since *experiencing* is preconceptual, meaning it operates at a level that is anterior to logical formulation while still playing a role in the formation of concepts, and because science functions at a logical level, then staying at the level of science would not help to understand how *experiencing* interacts with logical concept. Therefore, for Gendlin, *felt experiencing* must be investigated differently, because science imposes severe limitations with its concepts on its analysis. As a consequence, the scientific method will have to be augmented if it is to take *experiencing* into account as it applies to the investigation of human behaviour.

From a historical perspective, Gendlin presents the introduction of this new dimension of knowledge into science as a struggle similar to what the seventeenth century empiricists faced as they fought to introduce empirical testing into the dogmatic theorizing of the time. He talks about Galileo's (1564-1642) challenge to the orthodox ways of making science (logical deductive) and his use of systematic empirical testing to add to the logical process of science. With Galileo, a new order of concept appeared. The objective order, statements referring to the observed operational consequences of empirical testing, was added to the previous logical deductionist order. Out of this challenge, two kinds of order concepts could then be used to question or confirm a statement about the world: a logical kind, based on logical deduction, and an operational kind, a new conception based on the observed consequences of concrete experimental procedures.

> Rather, the empiricists added to logical science a relationship to concrete operations. This relationship could be made systematic (the systematic criteria of empirical testing). As a result of this relationship one could now have two — carefully distinguished — kinds of concepts: the logical deduction on the one hand, and the statement of the observed consequence of a concrete operation on the other hand. ... Thus the two orders of concepts could be put into systematic and fruitful interaction with each other without their being confused. (Gendlin, 1962, p. 7-8)

Gendlin seems to be referring here to the rationalist and empirical conceptions of knowledge. However, his goal is to introduce another order of concepts into science and into philosophy, concepts that refer directly to the *experiencing* dimension of life. In that respect, concepts refer directly to what is experienced and, in addition, are formed by experience. That is, concepts point to what the person experientially wishes to say, or to express the kind of meaning that is allowed to form when different concepts are experienced. This approach would enable the formulation in behavioural sciences of new concepts that can describe and systematize the process of referring to what is experientially lived. Furthermore, the relationship between experience and symbolization leads to an analysis of

the emergence of meaning and its influence on behaviour and perception. This is why Gendlin hopes that his articulation of *experiencing* will be used by science as a reference in the development of scientific concepts, as we will see in section 4.2.4. More specifically, Gendlin's 1962 project and in fact his life project is:

> ... to learn how, in a rational way, to relate concepts to direct experiencing; to investigate the way in which symbolizing affects and is affected by felt experiencing; to devise a social and scientific vocabulary that can interact with experiencing, so that communication about it becomes possible, so that schemes can be considered in relation to experiential meanings, and so that an objective science can be related to and guided by experiencing. (p. 4)

For Gendlin, the experiential dimension of life has to be integrated into both behavioural and general science's frame of reference. Psychology's subject matter has to include the *experiential* nature of the human being. He says (Gendlin, 1962), "The problem of the interaction between *felt experiencing* and symbolization is crucial today both in philosophy and in the behavioral sciences" (p. 5). The bridging of the two orders, *experiencing* and symbolizing, or the subjective and the objective (Gendlin, 1995), is also seen by Gendlin as a missing element in science, one that can link Existentialism and Logical positivism. However, one of the problems faced by Gendlin is that *experiencing* has to do with subjectivity, a type of knowledge that is not yet employed as a reference for scientific concepts. Scientific knowledge is an objective knowledge, justifiably independent of preferences, feelings of conviction or mental state. It presupposes a realistic philosophy, one where the world or truth exists independently of man and where humans are objectified or reduced to things with processes. However, for Gendlin, the subjective is the natural form of human knowing. The opposition between these two modes of knowing and their consequences is another reason why Gendlin is critical of science. This issue will be addressed in the next section.

4.2.2 Subjective nature of conscious flow

The second limitation is subjectivity and, in particular for Gendlin, the subjectivity of *experiencing*. It refers to the individual's private, intuitive, not easily communicated felt data. "Subjective experiencing is a dimension of events that everyone knows intimately. Every individual lives in his subjective experiencing and looks out at the world from it, and through it" (Gendlin, 1962, p. 228). However, the researchers ignore subjectivity.

> The recent positivistic trends toward operational definitions are now making it very difficult, in psychology, to refer at all to the everyday phenomenon of subjective experiencing. There are views (the empty organism theory) that hold that there is no such thing as subjective experiencing. (Gendlin, 1962, p. 228)

Rogers tried to solve this conflict between the experimental and the experiential approaches in the mid-1960s by proposing blending Humanistic psychology, an approach integrating human subjectivity with Logical positivism mode of knowing, with phenomenological knowing (DeCarvalho, 1991). Gendlin pursued this approach. He proposed that researchers should take into account what is directly referred to in the subject's own phenomenal field, as well as what is observed by the counsellor as he observes the subject. However, in Gendlin's case, the subjective and the phenomenal modes of knowing have far more ramifications than Rogers' approach allowed for. Subjective knowledge is not just private knowledge; knowledge that only has significance for the person. Subjective knowledge means the person is living in situations where external events, feelings and language are intimately related, involved in each other and experienced as *felt meaning*. In his effort to integrate Humanistic psychological objective with subjective knowledge, Gendlin designed the Experiencing Scale, which is an instrument that captures the quality of a client's participation and implication in a therapy session (Klein, Mathieu-Coughlan, and Kiesler, 1986).

Gendlin criticizes scientific researchers for their fear of investigating what in human behaviour cannot be empirically based and, consequently, the exclusion of important psychological areas of research. "They consider it a threat to science to attempt investigations that (as they see it) *cannot* be scientifically based, fearing that the vagueness and unmanageable morass of subjectivity will overtake and destroy the hard-won integrity of scientific methods" (Gendlin, 1962, p 16). Furthermore, he writes:

> Thus, while in psychotherapy and related fields the whole subject matter concerns persons who grapple with and try to articulate intensely felt experiences, the science that studies this subject matter often insists that only external observations may be employed as empirical referents. There is widespread dissatisfaction with the present method's inadequacy in dealing with subjectivity, but subjectivity itself is not yet being employed as a reference of scientific concepts (Gendlin , 1962, p. 49).

In this quote, Gendlin addresses three issues. The first one is the lack of understanding of science with regard to the internal processes taking place in the human mind during activities like psychotherapy, creative writing (poetry) or other creative acts. The second issue is the use of subjective data in empirical research and the third is the use of subjectivity in the development of new concepts in research. We will now look more closely at each one of these issues.

The first issue has to do with our day-to-day experience. An individual will sense something internally and is disturbed by it without knowing why. The person can refer to the experience directly in his body. As he attends to "that", and looks for the right explanation, something suddenly eases in him. There is a release of tension as he reaches an undertanding of what he felt. Gendlin has proposed experiential concepts or terms to identify the functional relationship existing between *felt experiencing*, an internal, subjective experience, and symbolization or formulation, an outward manifestation. Concepts like

direct reference, felt sense, implying, carrying forward allow the researcher to talk about subjective issues. These terms serve to identify and differentiate the phenomena that are taking place in a person. Furthermore, they enable researchers to explore the special functions that the private, internal processes have in shaping what will be said, and how it works with cognitions.

The second issue concerns the use of private information offered by subjects in science. It refers to the fact that day-to-day life is lived from the point of view of a subjective *experiencing* , so that the study of this category of events should be part of psychology as a science, even more so as psychotherapy research. However, the quote reflects the attitude of researchers in psychology during a period when Skinner was rejecting the mentalistic view of man. He claimed that subjectivity was unscientific and supported the view that scientific analysis of behaviour doesn't need an inner man. In fact, for Skinner, "abstract thinking is the product of a particular kind of environment, not a cognitive faculty" (Skinner, 1971, p. 191). Gendlin is aware of the limitations of subjective references in research. Because *felt meaning* has an ever-present role in cognitions, Gendlin acknowledges the problem of the validity of private statements about personal feelings. However, his response to this is:

> The argument against private data has been mistaken by some to imply that one's statements about one's own feelings are incorrigible, that they cannot be found to be in error (or true, therefore). But this is a misunderstanding. We will show that one can both be mistaken and can later correct what one said and believed about one's feelings. (Gendlin, 1973, p. 293)

Before presenting Gendlin's argument, we have to remember that his notion of private data or privacy is quite different than how psychological research views it. For Gendlin, the human body has, in a *felt sense*, the situation and language implicitly contained in it. In that sense, it is a mistake to locate feelings and thoughts inside, and leave situations outside, as if

both were separated or apart. A feeling, a *felt sense* , is subjective or within, as long as it is not explicated. Once explicated, people will find, retrospectively, that it refers to situational aspects and people. "So it is obvious that the subjective, bodily side is not private. No, the ... [meaning the "....."] is just as public and interactional as the language" (Gendlin, 1995, p. 553).

With regard to the validity or the truth content of a private statement, Gendlin's experiential psychotherapy approach says that when a verbal statement correctly symbolizes a *felt meaning*, there is a *felt shift* associated with a bodily felt relief of tension. That is an indication that the content of the statement has something to do with what the person is *experiencing*. It explicates aspects of the situation the person is in. If the statement is not right, there is no *felt shift*. In this context, since only very few statements or actions produce a *response*, it is possible to differentiate between a true statement, true in the sense it triggers a *felt shift* versus a false one that results in a lack of response. This is, for Gendlin, a long way from the arbitrariness of the person's subjective description of phenomena, where the assumption is that the formulation is equated with the experience.

In the 1960s, Gendlin tried to objectively validate whether a *felt shift* had really taken place following the correct symbolization. In a research context, he used physiological measures (galvanic skin response) to support testimonial clinical evidence of the easing of tension (biological tension-reduction) or *felt shift*, after the correct symbolization of a *direct referent* (Gendlin and Berlin, 1961). However, according to Jennings (1984), the results of the research were unsatisfying because the study suffers from numerous methodological flaws.

Nonetheless, Gendlin is aware that private *experiencing* exceeds what can be stated verbally, and in that sense, an effort should be made to increase the precision of theoretical statements with regard to that realm.

The third issue raised by Gendlin in the earlier quote refers to the use of subjectivity in the development of new concepts in research. It pertains here to the use, by a scientist, of *focusing*, as part of his scientific methodology. By this technique, the scientist can explore the *felt sense* of the phenomena under investigation before designing research procedures. The felt sense, which carries an implicit meaning of what is being investigated, can help develop new scientific formulation of the issue, or to further differentiate the phenomena being studyied. This utilization of *focusing* in research methods will be commented further on section 4.2.4.

Even in recent articles, Gendlin (1995) remains critical of the lack of integration of private, subjective data into the scientific process. He criticizes cognitive psychology for being responsible for the gap between the logical models of explanation of human thinking and the actual thinking itself. According to him, the gap is explainable because cognitive scientists do not refer directly to their own experienced thinking functions, nor do they apply their models to their own thinking processes in order to develop their explanation because this is deemed unscientific.

For Gendlin, inner experiencing is as much of a source of knowledge about the person as a source of knowledge about the world, a source that works in parallel with theoretical constructs and terms based on external observations.

4.2.3 Actual lack of concepts to completely account for conscious flow

The third area of limitation for science is its lack of concepts pertaining to the experiential dimension of human behaviour. Gendlin criticizes the use of concepts in science and in psychology and stresses the need for new concepts based on his formulation of *experiencing*. At a general level, Gendlin is interested in exploring and defining the relationship between the subject's concretely felt experience and how this experience is symbolized or conceptualized. For Gendlin, *experiencing* and conceptualization are two different things, but can occur together. This refers to the old philosophical problem of bridging the gap between the experience and the intellect, or how to articulate and verbalize meaningful experience, for example, and how we know that the latter is the exact fit of the former. Furthermore, Gendlin is critical of behavioural science's approach of fitting concepts, in particular the concepts of Logical positivism, or logical schemes, to observation, and notably to human subjective life experience, as supported by the existentialists. In this respect, Gendlin's view of the relationships between the kind of concepts used by philosophy and science, will be approached first. Then his views as to how scientific concepts distort human experience will be discussed.

4.2.3.1 Philosophy, science and the kind of concepts used

In the preface to his book, "Experiencing and the creation of meaning" (1962), Gendlin talks about the current conceptual problems in the behavioural sciences that are in need of philosophical clarification. For Gendlin, a philosophic discussion could help science clarify its use of concepts and method.

Gendlin's view of concepts stems from his philosophical background. According to him, philosophers discussions are one level more abstract than science. "Philosophical discussion moves on a level from which all or many of the sciences are affected

simultaneously" (Gendlin, 1978-1979, p. 46). He refers to philosophers (Gendlin, 1962, 1978-1979) as people who look very closely at the nature of concepts, the way they are employed, their origin and formation. Furthermore, they can develop new concepts or they can modify the basic sense of concepts to such an extent that the only way to understand it is by 'grasping it', since the new structure is so different from the older, familiar one. This is something he is doing with his concept of *experiencing* and *felt meaning*.

His criticism is that science or scientists "... do not usually think about what kind of concept they are using" (Gendlin, 1978-1979, p. 46). They use a "thing-like kind of concept" (Gendlin, 1978-1979, p. 47) without being aware of it, or they are not spending enough time to examine it. According to Gendlin this comes from the scientific establishments view of humans as containers of entities, a view that "... comes from physics, from Galilean science, from the absurd (but highly fruitful) assumption that nothing is real except mathematically behaving masses and energies (Gendlin, 1966, p. 230). Gendlin also called them Newtonian or content concepts, as opposed to process concepts.

In fact, the "thing language" comes from Rudolf Carnap (1891-1970), a Logical positivist and member of the Vienna Circle. It is also known as the physicalism's thesis, that is, that all scientific statements could be reduced to, or given in terms of observable "thing language". Science should be based on observable things rather than phenomenal experiences or sensations which is what Gendlin would prefer. In that respect, Carnap talked of a "physical language" or a "thing-language" containing physical terms together with logical and mathematical terms, terms like heavy, red, soluble, etc. According to Carnap, the use of these terms would permit the testing and verification of observable statements about the world, reducing the variability of intersubjective descriptions. In doing so, Carnap wanted to create a universal language capable of describing formal observations.

These "thing-like kind of concepts" have the following characteristics according to Gendlin (1962): (1) they refer to an entity that is static; (2) they are fully formed and defined; (3) they have a specific location in space; (4) they are contained 'in' something that does not affect them, meaning the container is neutral toward them; and (5) they attribute to the entity very specific traits, traits that are similar wherever the entity goes. Here are three examples of thing-like kinds of concepts presented by Gendlin:

> The Newtonian concept, for example in psychology, views the human individual as constituted of "things" — defined contents. Personality is a structure of such contents, between which dynamic theories posit force relationships. ... Experience and awareness are neutral containers; the contents are said to be "in" the individual or "in" his experience. The unconscious is another neutral container. Whether they are "in" awareness or "in" the unconscious, the contents are viewed as already defined, fully formed, and unaffected in their nature by "coming into awareness". (1962, p. 30)

> Our "thing language" tends to present whatever we discuss as if it were a separable object in space. In this way we artificially separate environment, body, feeling, meanings, other people, and self. (Gendlin, 1964, p. 134)

> A stone can be moved from one place to another without changing. It is still the same stone, now in a different spot. A thing like a stone may relate to other things, of course; for example, it may hit and break a porcelain pitcher. But these relations are external and additional to what the stone is. Whether it breaks a pitcher or not, even if it just sits in one spot, it is a stone. It would not be usual to say that a stone is pitcher-breaking, or window-smashing, or any such interaction. (1978-1979, p. 46)

Psychology also uses "thing language" to talk about concepts like defence mechanisms, ego, cognitions, perceptions, or when it views personality as made up of different concepts like experiences, needs, drives, motives, etc. It views people as constituted of "things" or

having defined contents. As Gendlin would say in 1966, while advocating that existentialism offers new types of constructs based on human modes of being, "Thus humans should not be conceived as containers with thing-like entities within (like a box full of individualized forces, energies, contents, experiences, ...)" (Gendlin, 1966, p. 231). Likewise, a defence mechanism is conceptualized, to a certain extent, like a thing inside a box called an ego, a perception is a "... stimulus-thing making a representation-thing inside a box" (Gendlin, 1978-1979, p. 47). Similarly people can only feel things inside the self, or the box. Feelings are formulated, as thing-like concepts that are separated from outside and well defined, like a thing.

For Gendlin, there are entirely different kinds of concepts other than the thing-like one of science. He advocated in 1966 that "... a more fruitful science of man must adopt more human-fitting types of constructs than that of the thing in the container (p. 231). He proposed at least two alternative types of concepts: process concepts in 1962 and, later alternative concepts, mainly constructs associated with existential philosophy, like *Befindlichkeit*. This concept will be addressed later in this section.

With regard to process concepts, Gendlin said in 1962 that a science of man should use something more appropriate than the Newtonian concept to describe behaviour. Content concepts are too limiting to describe the ongoing flow of experience. In the context of personality change, Gendlin mentions that he cannot understand how the present personality contents or theoretical constructs like anxiety or infantile fixation can refer or apply to the subjective *experiencing* of a specific person. From the point of view of the researcher, it is a construct, a general statement, that can be applied to all people who manifest certain specific symptoms, for example. However, if a client is anxious, it means to Gendlin that he has a specific directly *felt experiencing*, a *felt sense* of something implicit that when explicited will

carry forward the *experiencing*. In that sense, the construct of anxiety says nothing of the intimate meaning of the *experiencing* of that client. The implicit *experiencing* means a great deal more than the thing-like concept of anxiety imposed on it. In fact, as a client in psychotherapy pays attention to his *felt sense*, and verbalizes something associated with his *felt meaning*, if there is a good fit between the verbalized concepts and the *experiencing*, there is a movement, a *felt shift*, that leads to the creation of new conceptualizations that leads to further unpredictable differentiation and the emergence of new concepts. Here is an example presented by Gendlin of a client in psychotherapy who is trying to answer the question why do I have trouble getting to work?

> If you have trouble getting to work, for example, it is futile to ask yourself, "Am I just lazy?" "Do I have a wish to fail?" "Am I turning my basic hostility inward, on myself?" "Am I just avoiding responsibilities?" Such questions, spoken as it were in mid-air, are ineffective and, when experiencing is directly referred to, and differentiated, one always finds that the terms in these questions are much too gross and general to have any real bearing on anyone.
>
> *Only* by referring directly to his experiencing can the individual ever find (and later interpret) in himself that which — in our example — makes it difficult for him to get to work. Directly, in his experiencing, he can refer to that "draggy feeling" with which he "wrestles" when he tries to work. As he attends directly to it, he may find (differentiate) an apprehension of failure, a conviction that he will fail. Then he may find, further, that, no—it isn't that he will fail at his work. Rather, he feels a deep conviction that it is surely impossible to do what he really wants to do in his work. More exactly (as he differentiates further) he depends on his work to make him feel the sort of person he wishes he were. But, as it happens, he is sure this work, no matter how well done, won't give him that needed sense of himself. It is this "heavy sureness" (so it seems at this moment, now) that he has to "drag" to work, and that makes it so hard. In fact, he doesn't even let himself "interact directly" with his work (he now finds, as he differentiates further). The "heavy conviction" he has been referring to really gets "between" him and his work. How different would a fresh spontaneous process of work feel! He can just "taste it" (as

> we say). But, no. He must keep himself at it, in this "heavy" and ineffective mode (Gendlin, 1962, pp. 35-36).

As you can see in this quote, the client goes through a process of transformation of the way of conceptualizing the initial *felt meaning*. For Gendlin, this transformation comes from the relationship of concepts with an *experiencing*. This transformation process cannot be captured by science. The contents here are momentary, and they can be differentiated extensively by the verbal symbols applied to the *felt meaning*. In a sense, there is no predefined, static content in the person here, but a process that is complex and dynamic, a fluid sequence of events, an intricate maze of significance and meanings. In that context, Gendlin says that process categories are needed to help distinguish momentarily between different dimensions or content of the process. These categories will characterize the ongoing change in the person. Furthermore, some of these process concepts will have to refer to the experiencing. This is why Gendlin proposes new process concepts for science, that can directly refer to a *felt meaning* and that could make use of the seven different modes or kinds of relationships between *felt meaning*, and symbols from which meaning and concepts are created. These concepts are categories of the process. Gendlin refers here to concepts like *direct reference* and *implying*. "There is no concept of how something will later be seen to have been more than can be derived from how it is now patterned. Science needs concepts like *implying* ..." (Gendlin, 1991b, p.108).

Another alternative kind of concept is Heidegger's concept of *Befindlichkeit* that is very similar to Gendlin's concept of *felt experiencing*. It has to do with a new conception of feeling, or being in the mood. The *Befindlichkeit*'s concept is different than thing-like concepts for four reasons, according to Gendlin. First, it captures how we sense ourselves in situations. It takes into account how we are living-in a situation and how we are living-

with other beings in that situation. As a consequence, the mood must be thought of as being both something sensed and something that is in the world. It is not just internal. Secondly, *Befindlichkeit* is not just a reaction a mood that represents an understanding of our living, of how we act and have acted in previous situations. It carries an understanding of how we live. If the mood is consulted, something will emerge from it, there is a "*lifting out*" (Gendlin, 1978-1979, p. 52), where cognitions come to be related to the mood. It is as if the mood contains its own understanding of how one is living. Thirdly, the understanding is sensed or felt rather than thought. Its meaning is implicit. It contains much more than words can describe, something Gendlin calls a "wholistic complexity" (Gendlin, 1978-1979, p. 52). And finally, it carries its own spoken articulation, even if the person may not have the words to say what he lives. For Heidegger, speech is always involved in mood. Gendlin summarizes his understanding of the concept of *Befindlichkeit* by saying, "We sense ourselves living in situations with others, with an implicit understanding of what we are doing and with communication between us always already involved. A feeling is all that." (Gendlin, 1978-1979, p. 45). In Heidegger's conception of human being, called Dasein, the essential nature of human is not to be a thing but rather a being-in and a being-with, that is to be fundamentally open to events. This concept refers to the openness of the human being to the world.

With *Befindlichkeit*, Gendlin shows that this concept can eliminate or alter certain ways of making distinctions in any science -- psychology included -- like inside and outside, self and others, or affective and cognitive, in order to replace them with something else. For Heidegger, human living experience takes into account that the three basic parameters of existence — feeling, understanding and speech — are all enmeshed in action. That view could modify quite drastically the way of conceptualizing a research approach of human phenomena. As Gendlin says, "The structural parameters of this kind of concept ("Dasein",

"*Befindlichkeit*"), too, as I have already said, will importantly alter any science" (Gendlin, 1978-1979, p. 48). In addition, Heidegger's concept refers to "a being that is its relating" (Gendlin, 1978-1979, p. 47). By that he means that a human being is not conceived of as a substantial thing but rather as having an openness to living, something that can be affected, while a thing like a pencil is not affected in the same way. In science's thing-like kind of concept, things are sharply differentiated from their surroundings and it presupposes that the thing exists regardless of anything else, while human experience is something interactive, implicitly containing a wholistic complexity, which is the situation one lives in. For humans, every moment brings a different way of being affected, while, a thing remains essentially unchanged in its essential nature from one moment to the next. As can be seen, there is a difference here in the kind of concepts. There are no other concepts aside from Gendlin's concept of *felt sense* that carry as well Heidegger 's *Befindlichkeit* concept. The concepts of feeling, affect or emotion as applied in psychology do not evoke this feeling of sense complexity as *felt sense* does.

For Gendlin, other kinds of concepts have to be developed in psychology, as well as in science, in order to refer especially to new dimensions of human behaviour. "Actually, the new kind of concept Heidegger makes possible is needed in many instances in psychology" (Gendlin, 1978-1979, p. 51). In 1991, Gendlin (1991b) has presented a list of fourteen new concepts that apply to poetry as well as to psychotherapy, which includes terms like *crossing*, *pre-separated multiplicity*, *retroactive revision*, and *implying*, to name a few. Since 1962, Gendlin has been trying to introduce new concepts in behavioural science.

4.2.3.2 Science uses concepts that distort human experience

Gendlin indicates that a radical empiricist would take fully formed, already defined concepts and would use them logically in order to read the preconceptual experience and to give it a meaning. For example, psychology, in its role as an explanatory science, would use presupposed categories of valid knowledge and apply theoretical constructs like anxiety, depression, or field dependence to observation, or to the existential experience of a subject. Gendlin calls these constructs, "precut units of human experience" (Gendlin, 1978, p. 327), used in explaining. These constructs would be validated based on externally observable behaviours and instruments, like a psychological test of some sort, or a physiological measure. In that context, the theoretical construct ends up being quite remote from the initial direct experience. It becomes an object. This is why Gendlin states that scientific concepts based on explicit methodology and defined as theoretical constructs and/or externally observed behaviours tend to distort living experience or to turn it into dead objects of study or abstractions. Where some terms were initially expressions of inner experience, they became partly dissociated with their source. If a client says, I feel depressed, the clinician can use the concept as it refers to a theoretical construct associated with a large body of scientific literature and a system of categorization like the DSM-IV. He may also acknowledge that the client has a certain directly *felt experiencing*. In the latter use of the concept depressed, the official word doesn't say much about what is experienced. In the former use, the concept becomes alive as it is felt, and it carries for the client an implicit concrete content. As the client spends considerable time with the *felt sense*, it can perhaps be differentiated as sadness due to the death of a loved one, or as a manifestation of exhaustion, or something else. Following that statement, the client may realize there is another aspect of this *felt sense* that emerges. As he tries to verbalize it, he realizes something new. So, the initial content of depression has evolved into something else. As a consequence, Gendlin states that there is a fear that the integrity of human experience will be lost in the scientific

investigation of human behaviour. He says, " ... we must indeed fear that attempts at scientific concepts could rigidify, stereotype, and destroy the integrity of *experiencing*" (Gendlin, 1962, p. 18). According to him, we lose the richness inherent in the experienced feeling as it is formalized into a theory and further removed from the subject matter. "However, as currently used, the scientific method does away with the initial experiential referent. For example, 'anxiety' is currently used as a theoretical construct and has no reference to the experience of the feeling" (Gendlin, 1962, p. 50). As in physical science where the external observations refer directly to the object, he would like psychology to be able to use scientific terms that would refer directly to the subjective experienced feeling. His question is: "Can there be scientific terms that refer directly to the subjectivity that is the subject matter of much of psychology?" (Gendlin, 1962, p. 51). In response to that, Gendlin proposes to add ways to the psychological science methodology that take into account a *direct reference* to subjective personal experience. However, this does not exclude the use of other kinds of reference.

4.2.4 No room for creativity in the scientific process attempting to account for conscious flow

The fourth limitation comes from Gendlin's proposal in 1962, of a new methodology for behavioural science, one with new variables and new concepts. As such, he criticizes the fact that current research methodologies in psychology do not take into account the subjects directly referred-to *experiencing*, when in fact most of the clinically based theories in psychology have emerged from the personal experience of the researchers. Furthermore, he criticizes Carnap and the Logical positivism movement for their inability to come up with new ways of scientifically exploring human behaviour. "Carnap and other logical positivists leave novelty of scientific methods and principles entirely outside the scope of their concerns. They deal only with choice between finished products offered" (Gendlin, 1962,

p. 273). According to Gendlin, they are not interested in how discoveries and inventions are found; creativity and discovery processes are left outside the scientific endeavor. As he says, "However, neither the creation of novel differentiation nor the creation of novel logical forms is dealt with by current pragmatism and positivism except after the creation" (Gendlin, 1962, p. 274). Finally, for Gendlin, the investigation of the *experiencing* phenomenon as part of research on human behaviour presents a challenge to science. In 1962, he presented a list of difficulties faced by the behavioural sciences with regard to *experiencing*. This list appears partially in a quote in chapter 1, p. 4.

> 1. the phenomena are always *changing;* 2. it is so difficult to *generalize usefully*, and; 3. soon some *newly created* product or behavior occurs that does not fit; 4. behavior is so *complex* and finely determined; 5. a whole host of factors always *interpenetrate* so that each affects and limits the use of any of them; 6. no vocabulary of words or variables can even approach *the sensitivity* of a penetrating human observer; 7. it seems as if human phenomena are *individual and* unique and require the methods of *literature and the humanities;* 8. anything that bears the stamp of human experience can be endlessly *interpreted* and differentiated through more human experience; 9. the really *significant* areas of human life, love, and death are omitted by science; 10. explanation always *reduces* what it explains to a few units; 11. scientific statements themselves change culture and society so that *science changes what it studies;* 12. only *participant observers* can investigate and observe much of what must be studied, yet this provides neither a genuine participant nor an unbiased observer; 13. there are no defined *observable variables* and since one can isolate and define infinite numbers of variables in any observation, one cannot hit upon those which would be useful in formulating significant predictive hypotheses. (Gendlin, 1962, p. 22-23)

He concluded that because of these limitations, the scientific methods were not adequate to study *experiencing* and that a new methodology with new types of concepts was required. That is why, in 1962, he proposed that current scientific methods should be extended in order to make them more suitable for the study of human behaviour. He proposed a method

that would combine Logical positivism and Existentialism in order to further advance science.

In that respect, the new method would add two more steps to the current scientific method. The first one would take place prior to the ordinary first step of a scientific investigation and the second one after the conclusion of the investigation. What he proposed was to integrate into the scientific methodology of psychology terms that refer directly to the individual's experiencing and used these in parallel with terms referring to external observations and theoretical constructs. The result would be an improvement on current scientific methods and, in particular, to research in psychotherapy.

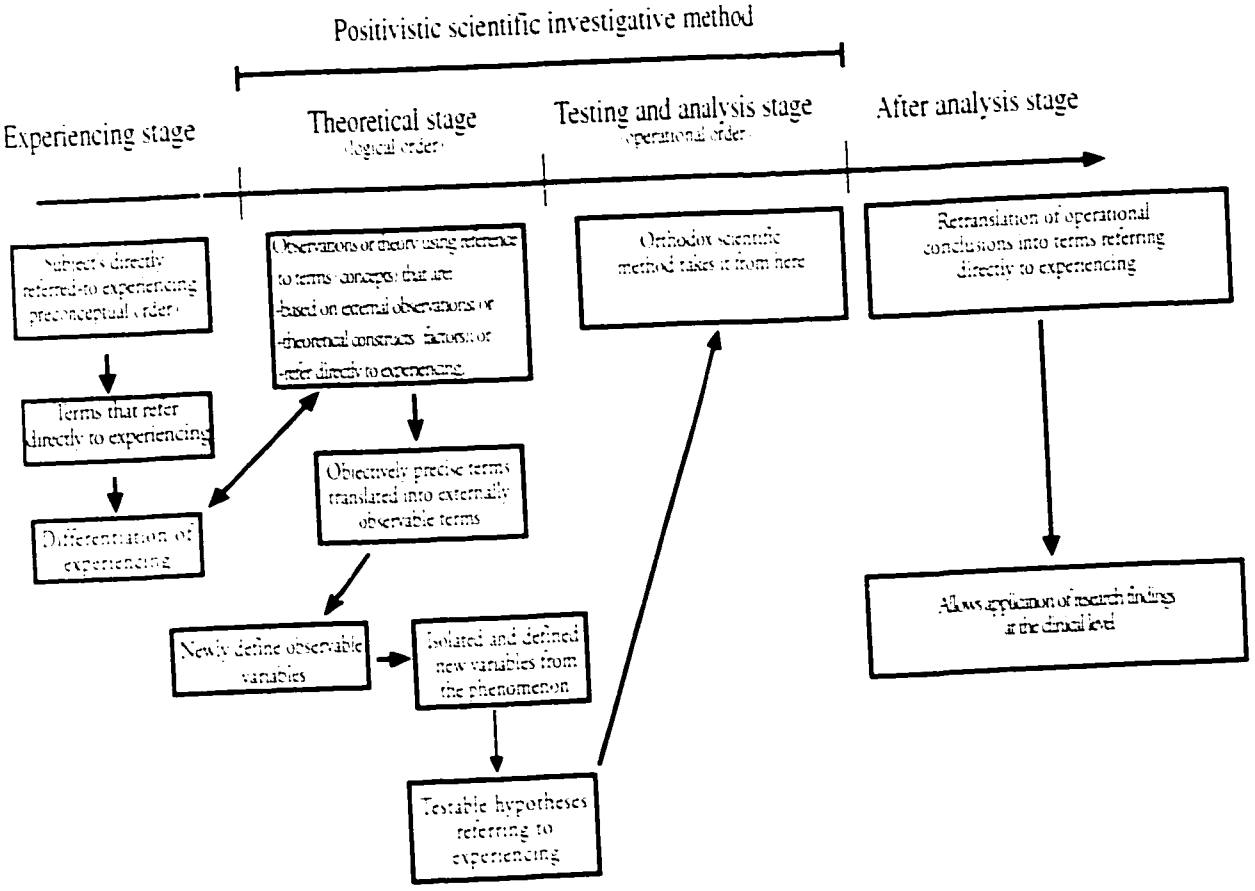

Figure 4. Adding steps to the orthodox scientific method of inquiry

In the case of the first step (see figure 4., Experiencing stage), Gendlin suggests that the researcher's internal process of referring to his own private experience in order to differentiate and clarify his *experiencing* before arriving at an hypothesis, should be an integral part of the systematic scientific process. This is the core of Gendlin's proposed method. He says that if we accept that the nature of being human or being here (Dasein) is, as Heidegger says, an openness, a capacity of being affected by the world, then, "A basic method results, in which inquiry articulates what is at first only sensed, found implicitly. ... The beginning is always how we sense ourselves, find ourselves already with ... whatever we study, in an implicit "understood" way, in our living" (Gendlin, 1978-1979, p. 48). From this initial step in the scientific investigation, new terms and new concepts could be distinguished and differentiated, with the consequence that more significant variables of a phenomenon could be found, isolated and defined before the testing and analysis stage of research. These terms and concepts, which later on would be part of the hypotheses, could be stated first in terms referring to *experiencing* and then translated into externally observable terms. The proposed process goes from *experiencing* to externally observable behaviour instead of the usual externally observable terms as the basis of operational statements. Gendlin sums up the first step in these words, "Whatever conceptions are developed, in any science, they need to be related back to the implicit lived understanding we already have of the topic, and need to be viewed as articulations of that" (Gendlin, 1978-1979, p. 48).

One advantage of this method is that it proposes a way to discover new postulates or principles, instead of leaving the process of discovery and creativity to intuition and chance. By using *experiencing*, it would be possible to create novel logical forms or to further

differentiate current concepts. Gendlin is referring here to the unpredictable and creative way an *experiencing* functions with symbols and the symbolization process in order to create new meanings. The emergence of a symbol from *experiencing* is not the result of a logical relationship.

In this context, Gendlin criticizes the fact that the referral to the researcher's own *experiencing* is not an integral part of the current scientific methodology as presented by the logical positistivist and operationalist view of research in psychology.

In the case of the second step (see figure 4, After analysis stage), which happens once the investigation is completed, Gendlin suggests a way to make the research findings more practical and instructive to the clinician by retranslating the operational conclusions into terms referring directly to *experiencing*. Rogers (Gendlin, 1962) complained about the difficulty of applying research findings to clinical practice. For Gendlin, this difficulty is due to the fact clients are trying to imitate behaviours based on research protocols. However, the researchers' externally described behaviours are presented in terms of theoretical constructs or external observations and do not take into account, when applied, of the subjective attitude of the client when he imitates that behaviour.

Gendlin is saying that the merging of his two added steps to the current scientific methodology would augment the positivistic research method in psychology.

Without the function of experiencing (both as studied, and as used in studying) one cannot create new meanings and new logical patterns and methods, nor can one account for their formation. Only after the creation of meanings and variables, can Logical positivism

and operationalism become relevant in the application of criteria by which already created meanings can be tested and analyzed.

4.2.5 Potential inability to completely cover conscious flow

The fifth limitation has to do with the use of theories, that is language, in reference to experience. Gendlin sees theories, and psychological ones in particular, like those of Freud and Jung, as systems of contents that serve to articulate, to explain, and to predict human events. But he questions the relationship of these theories with reality in light of what he sees in psychotherapy.

There are three problems with these theories in Gendlin's view, (1) their capacity to relate with the experience; (2) their limited ability to explain; and (3) the problem of inference.

In his view, the texture of living is so complex and intricate that it cannot be equated with any theory or language. Similarly, "The nature of human nature, of living and feeling, is therefore of a much finer texture than any theory or system of sharp cognition" (Gendlin, 1978-1979, p. 66). With regard to this, theories can only relate to living or human nature, not equate it. In Gendlin's view, no theory can completely reflect all of human experience.

Secondly, in relating to experience, each theory has its own level of effectiveness but none can completely and exclusively describe and explain a particular phenomenon. There are many psychological theories that can be applied to Example 1 to try to explain what is going on with the client, however each has a limited capacity to explain the phenomena.

The third problem with theories is the fact that their inferential capacity is of no use in predicting the next *experiential* step, since the *felt sense* has its own unpredictable direction. For Gendlin, the *felt sense* arises first, because it has its own direction. Any inference from a theory to predict a step is just a guess. If the guess is corroborated, all that could be said is that the theory has helped but nothing of benefit can be said of the process itself or the direction it will take at the next step. In Gendlin's view, each theory receives its own precise feedback from phenomena, but none is all encompassing. He concludes that theories can contradict each other; they can be mutually exclusive, but their findings cannot. The findings do not contradict each other. It is as if the findings are different from theories. "They have empirical characteristics that make them independent of the concepts that seem to define them" (Gendlin, 1997a).

Theories have two advantages: (1) they can explain retrospectively the *experiential* steps; and (2) the theoretical words and concepts used can trigger these steps. Theories work well retrospectively, once a chain of *experiential* steps has taken place. Looking back, it is possible to make sense or explicate the sequence of steps according to a theoretical model. The type and variety of theoretical concepts or words used in a theory can allow a client to make the specific statement that will enable a directly sensed phenomenal aspect to arise in the client. A theory comes into relation with an actuality. This is where its real capacity is shown. Its true power is in its capacity to lift something out of the client, to let things arise, but not to determine experience. This way a theory is put in direct contact with what it is supposed to be about.

Gendlin, in proposing a way to use theories differently, suggests that they should have a more direct relationship with living, that they should be taken phenomenologically. In that context, theories should be used like words in therapy. Finding the right theoretical concept

will trigger an appropriate response from experience, therefore showing the power of the theory. Based on that, the right theory, in direct contact with its matching object, will grow by further structuring and expliciting what it is applied to, by *carrying forward*. The power of theories, in Gendlin's view is in their capacity to lift out and further explicitate the felt complexity.

4.2.6 Distorting nature of scientific accounts of conscious flow

4.2.6.1 Science and patterning

Science needs, according to Gendlin, to conceive nature as a more intricate order. But the view that nature has its own order goes against the prevailing assumption in science that order can only be something imposed on experience. In the western perspective, the concept of a more intricate order, that vision of nature, has been lost. Before, the assumption was that concepts and distinctions were a part of a wider universe. Now, the perspective has been reversed and it is believed the universe only exists within patterns and has distinctions and differences.

> The assumption of imposed order concerns not just human nature, but also nature as a whole. Nature is said to be a mere "construction". Some philosophers say that if the scientists would only appreciate that they postulate and construct nature, then they would surely behave more responsibly. Science is understood as arbitrary, merely political, merely the result of postulation. (Gendlin, 1991b, p. 26)

> The commonsense view has been reversed: The nature we seem to live in is now the scientific, political and cultural "nature". There seems to be no nature or human nature more than that. All natural order is assumed to be an imposed order. (Gendlin , 1991b, p. 41).

This assumption of the imposed order comes from science's conclusion that nature and its order cannot be represented or approximated since there is no such single formed order of nature there, waiting for us to get it right.

For Gendlin, western science first imposed such forms when Galileo's used mathematical models to describe nature. "Before that time, naturalistic observations were catalogued, and many kinds of order and pattern were found" (Gendlin, 1987, p. 265). Descartes said that science was an hypothetical scheme of mathematical constructions, a logical mathematical order imposed on a "messy natural order" (Gendlin, 1991b, p. 42). From that time on, successful scientific methods substituted mathematical relations for factual observations. Nature was ignored. Science became an invented mathematical construction imposed on nature. This view, that we impose forms and distinctions on nature ignoring nature's organization was recognized by E. Kant. In trying to understand how science, with its hypothetical thought-grids, could make remarkable natural discoveries, Kant came to the conclusion that, as science imposes a grid on experience, our thought-forms also impose an order. He deduced from this that our experience of the world is in fact an expression of our thought-forms, which comes with an intrinsic order. "Experience consists of rational forms imposed on unordered bits of sensation. ... The complexity of experience is made derivative from the imposed ordering forms" (Gendlin, 1987, p. 266). This way, all things and situations happen within that order since they are a product of the human mind. After some time, the imposed order ignored what was imposed upon it leading to the neglect of the previous natural order conception and whether that kind of an order is found in nature. Everything was assumed as coming from the imposed order.

The consequences of this imposed form or heritage can be traced in the work of many philosophers and thinkers throughout history. Even Freud seems to follow this assumption

by presenting the 'id' as having no order, or, "consisting of unorganized drive-energies" (Gendlin, 1990, p. 208), and necessitating an externally imposed order — socialization — in order to function in society.

For Gendlin (1991b, p. 24), what is beyond this imposed order is a more intricate order, one that must be taken into account. Science must change its assumption that nature is nothing except whatever order we chose to impose upon it, to the concept that nature has an inherent, intricate order of its own. He writes:

> And this is not because nature is less organized, more vague, and more unpredictable than the old model [science] had thought, but because nature is more organized in more ways, and is an organization in change (compared to that now too simple model of organization, the rearrangement of conserved parts in one space-time system). (Gendlin, 1978, p. 335)

> ... nature reveals itself variously in response to varying hypothetical constructions and operations. But it responds to each approach very precisely, always just so, although differently to different approaches. So this way of responding shows an order too, though it is not a set of patterns. It plays many vital roles. These are quite noticeable, but they have hardly been studied. (Gendlin, 1991b, p. 24)

For Gendlin, the forms and rules are implicit in all our experience. However, the wider intricacy functions with, not without them. Nonetheless, he suggests that science with its current concepts and methods is limited when it addresses human behaviour, since it does not take into account the vast intricacy of experience, or the body's situational *implying*. For science, everything is studied in terms of patterns and formalized statements. It has to transform processes in terms of patterns. Furthermore, it assumes that "... only what is clear — i.e., patterned — can exist" (Gendlin, 1991b, p. 108), when, in fact, the patterning masks the presence of a wider order.

However, Gendlin (1991b) says that the scientific order is an imposed postulated order when science's findings are looked at on given year basis. When scientific development is examined over a number of years, it is possible to see that the non-logical progression of discoveries suggests the functions of the implicit intricacy. Because science progresses, it has to change its patterns and its postulates every year: new discoveries refute previous patterns, resolve past contradictions, or discover of new contradictions between theories and findings. All this suggests, for Gendlin, that in its progression, science follows a similar process as the one seen in therapy. Science, by trying to *explicate*, to make explicit what is implicit, is faced with a response, a *carrying forward* that moves the implicit forward in unpredictable directions. In that sense, science would gain if it accepted concepts like *carrying forward* and *implying* based on a view of a wider intricacy working within our action and thinking.

4.2.6.2 Naive empiricism in need of change

According to Gendlin, in science, empiricism is naïve. He proposes an alternative view, a new sense of what is empirical (Gendlin, 1997a).

The impact of postmodernism on science has been that it is now perceived as invented and arbitrary (Gendlin, 1997a). The rejection of representational truth, that science does not recognize how much implicit assumptions, cultural influences, historical trends, organizing principles go into the perception of a single ordinary object and, as a consequence, to what extent it influences or determines scientific findings, has led to a certain level of relativism and feeling of arbitrariness in science. Different implicit assumptions determine the type of approaches to an issue and, as a consequence, led to different findings to the point that, "If

you do not like your findings, just change your hypotheses" (Gendlin, 1997a, p. 127). The problem comes from the error of imposing an order on nature, a top-down approach, versus working from the assumption that there is already an ordering process, the responsive order, that is prior to perception, prior to representation, and that manifests itself very precisely in the empirical response to different scientific procedures and methodologies. For Gendlin, this rejection of representational truth by postmodernism is good, because it forces researchers to look at an alternative to naive empiricism. His solution is to use the intricate order accessible through the bodily-situational *implying*.

In Gendlin's view, the problem of naive empiricism comes from its reliance on certain assumptions that are based on a conception of perception. That conception retains an old problem: empiricism requires a separate reality. Perception involves something that is perceived by somebody. It assumes that something exists for me, something that is physically in front of me, is presented to me, or is an event that happens to me. The something exists for somebody. In that conception, a gap, a screen, a percept, a division, is assumed to exist between the subject and the object of perception, between the body and the environment. You do not have direct access to the world. The external world, reality, is accessed only through our senses. The world is our senses, not the world itself. As a consequence, for the perceiver, things are presented to him: he perceives things. The scientific perspective of the universe is one where the perceiver observes what is presented to him. "The scientific construction of the universe consists of percepts and percept-like patterns presented before us. It renders humans and animals as something presented — in a space before us (or before someone)" (Gendlin, 1992a, p. 344). Empiricism is build around that assumption. For Gendlin, this is a false position, since we are an intrinsic part of that which is presented.

> But we are not the presented: we are the to-whom of the presented. The to-whom that is inherent in anything presented cannot be a presented datum. So we humans cannot find ourselves within the scientific picture, since it consists of presented" (Gendlin, 1992a, p. 344).

In Gendlin's view, the human life-process is prior to the world as represented by science. A living organism's perceptions come seconds after a direct bodily interaction with the environment, as seen in the concept of *felt sense* or *Befindlichkeit* . The living body interacts with the environment before perception occurs. It senses itself, and in that sensing there is the environment. As a consequence, the body is primarily a living-in situation. Perception has implicitly in it, the prior work of the body. Since the body moves in response to its interaction with the environment, it has intentionality. The body has an interactional intentionality. "The body senses the whole situation, and it urges, it implicitly shapes our next action. It senses itself living-in its whole context — the situation" (Gendlin, 1992a, p. 345). In that respect, each action or each response is guided from a bodily sense of the situation that is anterior to perception. A *responsive order* guides our actions. Human action and thinking are within that *responsive order*.

Gendlin proposes to establish a new empiricism based on the *responsive order*, to replace the previous naive one that is limited by represented order. This responsive order is based on the generalization that, whatever science studies with whatever procedure, there will be a response in return, or a finding. That response is specific to each scientific system of investigation or approach and independent of theories or concepts. Findings are empirical and as such difficult to discard. That response, the finding, is the new empiricism. It is a verifiable reality by its response. "Nature ..... can respond with surprising and precise details, but differently to different approaches" (Gendlin, 1997a, p. 388).

4.2.7 Changing nature of conscious flow

4.2.7.1 Change process cannot be studied by science

When Gendlin tries to explain how a client in psychotherapy goes through a change process, he comments that the process of change he observes is not amenable to science. In fact, he states that many of the more fundamental change processes in nature are not amenable to science (Gendlin, 1978). The old model of the imposed order is incapable of explaining how the change process takes place in a system. For Gendlin, the explication provided by science that explains the steps in Example 1, is too simple.

The science model says that science is still looking for causal patterning where an external observer makes the connection inside space and time. In Gendlin's way of presenting experimental methodology, there is a need for a clear time 1 and a clear time 2 within the space and time continuum, so that it is possible for an observer to explain time 2 by time 1. Gendlin is critical here of a number of things. The first is the way science explains changes. The second is that science does not take into account that at time point 1, the state of the thing that will change already implicitly contains its next state. The third is that everything is analyzed from the point of view of an external observer who relates the events together, when the events could in fact generate their own self-organizing process sequence.

With regard to point one, Gendlin says that the changes that science can identify are of the rearrangement type. In that type of change, the elements going into the change process are simply conserved and rearranged. Atoms, for example, are not lost in a chemical

reaction, which is just a rearrangement of unchanged parts inside a space and time system. "Science renders processes in terms of patterns. Further events are explained as rearrangements deducible from previous patterned units" (Gendlin, 1991b, p. 108). This is, for Gendlin, far too simple a model, incapable of explaining the complexity of human change. "This simple model comes from the handling of objects in ordinary space — such as rearrangeable bricks and stones. Looked at that way, it becomes obvious that there can be phenomena more complex than that" (Gendlin, 1978, p. 334-335).

In experiential psychotherapy, as seen in Example 1, the change process which the individual goes through cannot be explained by the rearrangement of fixed pieces. The process changes the pieces along the way, the pieces being blocked life processes. "The process in which the pieces themselves change (and not only their arrangement) is naturally not explainable by some rearrangement of unchanged pieces" (Gendlin, 1978, p. 335). He is referring to the phenomena where the whole problem of the individual can change following a *carrying forward*. There is a qualitative change in the way the client concretely lives or experiences himself.

This argument leads to point two. Referring to science, Gendlin says, "There is no concept of how something will later be seen to have been more than can be derived from how it is now patterned. Science needs concepts like 'implying' ... " (Gendlin, 1991b, p. 108). In that sense, Gendlin is critical of the way science links events together.

Point three refers to the absence in science of self-organizing processes. Gendlin wonders why science, in 1991, does not have in its categories the concept of self-organizing process. "Science needs a way to think how an event now newly organized (requires, needs, brings about ...) differently-patterned next events" (Gendlin, 1991b, p. 108). For

him. living bodies organize and imply their process as we saw in the change process. The body *implying* function refers to a process that provides its own continuity, each step modifying the previous one and preparing the next one. This problem is the result of science's perspective on things. It is always as if there was an idealized observer that associates or links events in space and time as "space-time points", something well located in an environment as well as independent of it. Science cannot explain how a newly organized event can organize differently the next events, how an event can generate its own connections in regard to subsequent events. According to Gendlin, no one mentions the fact that an organism could do that. Science has to think how something can, by itself, effect the next event.

4.2.7.2 Change process, logic and science

Gendlin has a special way of defining logic in his writing. For example, Gendlin refers to science as the logical scientific order in contrast to the responsive order (1997a). For him, the term has to do with formal logic, in the sense that in syllogistic demonstration, the logical implications of propositions are possible only because logic operates according to predetermined rules. In particular, some statements can include other statements or can be exclusive. There is an organization of forms, an order, imposed by their logical relationship. There are implications from these schemes or logical forms in the areas of deduction and prediction.

Gendlin talks of the logical relations of words (Gendlin, 1973). Science for Gendlin has to use logically defined concepts that are characterized by the fact that they mean the same thing whenever they occur (1962). That is the only way science is possible. Gendlin

categorizes these logically defined concepts as being part of the logical order. They can be used in a logical deductive way.

Similarly, science can only see a progression in a change process as a Laplacian sequence, meaning a progression that is consistent in its logical patterns. From that approach, science can only envision phenomena according to the assumption that all events are derived directly from the previous one. Another definition of Laplacian determinism is the following, "The structure of the world is such that any event can be rationally predicted, with any desired degree of precision, if we are given sufficient precise description of past events, together with all the laws of nature" (Popper, 1988, p. 2). However, during a step-process, Gendlin (1991b) concludes that the whole sequence of steps, as in Example 1, cannot be predicted from any one of the steps, since the progression follows a non-Laplacian sequence. Laplace said that if one event in physics were fully known, all others before and after it could be determined. In Laplace's mind, things can only be deduced logically from the source following a single determined sequence, one fixed possibility. For Gendlin, the whole process in Example 1 follows a non-Laplacian sequence, for the therapist as well as the client, because it cannot be predicted from any one of the steps. For him, "There is no logic with which one could have come from there to there" (Gendlin, 1978, p. 32), or, "... no theory could have predicted the next steps to which she [client] was led by directly bringing herself before her *felt sense*. .... In retrospect, it is always possible to construct a logical account for such steps of therapeutic process" (Gendlin, 1978-1979, p. 65). There is a process of creation that takes place during the step process in which the *experiencing meaning* takes a part, once the client directly refers to it. There is a creation of new meaning, and it is not determined by logical relationships, nor is it indeterminate. The client in Example 1, by directly referring to a *felt meaning*, participates in the creation of new meaning, living the emergence of new contents that translate into step processes during the

therapeutic session. This is why Gendlin talks of a process that uses more than the elements explicitly present and that also alter these elements.

Gendlin asks the question. What can science do with phenomena where the next movement of an organism cannot be derived from the current one? The problem with science is that it assumes, according to him, that "... every event must be derived directly from the form (structure, pattern.....) of the previous — because it is assumed that anything can happen only within a consistent pattern-system" (Gendlin, 1991b, p. 111).

Chapter 5

Critical rationalism's answers to Gendlin's contention with science

In this chapter, we will (1) focus on the concept of "science", (2) argue that Gendlin's views on science amount to a limited conception of Logical positivism, (3) present an overview of Critical rationalism, and (4) critically analyze Gendlin's position from a Critical rationalist perspective.

5.1 What is science?

The word science derives from the Latin *scientia*, which means knowledge. Science is presented in "The New Encyclopedia Britannica" (Gwinn, Norton, & Goetz, 1990) as knowledge of the world of nature, and as knowledge of natural processes. It is defined as "...knowledge of natural regularities that is subjected to some degree of skeptical rigour and explained by rational causes" (Gwinn, Norton, & Goetz, 1990, vol. 27, p. 32). In fact, there are many kinds of knowledge available to human beings (Marsonet, 1995). Science is one of six different approaches or methods of acquiring knowledge according to Helmstadter (1970). Knowledge is acquired by exposure or habits, by intuition, by authority, by reasoning, by experience and this is the scientific method. However, science is different from the other methods of acquiring knowledge because scientific knowledge conveys the belief that it is a proven knowledge. It has a critical method of carefully observing and studying nature with the aim of understanding it. The idea of scientific inquiry has its origins in classical Greek philosophy. From its method, the scientific inquiry generates beliefs that are superior to others because they are based on observations of phenomena and

are independent of opinions, bias and prejudice. This view of science and its methodology is clearly presented to the general public as well as to undergraduate students in this quote from a recent psychology textbook on experimental methodology (Christensen, 1994):

> The best method for acquiring knowledge is the scientific method, because the information it yields is based as much as possible on reality. Through the scientific method investigators attempt to acquire information that is devoid of personal beliefs, perceptions, biases, attitudes, and emotions. This is accomplished by empirically testing ideas and beliefs according to specific testing procedures that is open to public inspection. The knowledge attained is dependable because it is ultimately based on objectively observed evidence. (p. 11)

We can add to this description that as the number of scientific facts increase generalizations can be made that lead to suppositions about causes, laws and theories that are more and more general and universal. Scientific knowledge is made of these universal, general concepts. Science grows according to this inductive process also called inductive reasoning. From these sets of laws, it is possible through deduction to derive a statement that represents a particular combination of these laws, and then to test this statement through experimentation that will verify its truthfulness. This is called deductive reasoning.

According to David Oldroyd (1986), the shape of the process can look like an arch: the arch of knowledge (see figure 5). This process of scientific enquiry was initially identified by Aristotle (384 - 322 BC) and will be described in more detail later in this chapter. Science proceeds from the observation of a set of particular events perceived by the senses to general concepts (laws and theories) in an upward movement, then follows a downward deductive movement that leads to predictions that can be experimentally tested for confirmation or refutation. The upward movement, or the procedures used to formulate a theory from observations, is often referred as the context of discovery. It is referred by Norris (1997) as "... a 'complicated churning' of facts and theories, a process which may look decidedly

messy (mixed up with all sorts of extraneous private or social motivation) if treated from a viewpoint primarily focused on the original context of discovery" (p.1). This approach includes induction processes and wild guesses (hypothesis). The downward side of the arch, the context of justification, consists of the experimental procedures used to confirm the consequences. Beside this distinction, the discovery and the justification side have a close relationship. This distinction between the context of discovery and the context of justification was made by John Herschel (1792-1871), a philosopher of science (Losee, 1993), and remains an important contribution to our understanding of science. It was later reintroduced by one of the founders of logical empiricism, the philosopher Hans Reichenbach (1951).

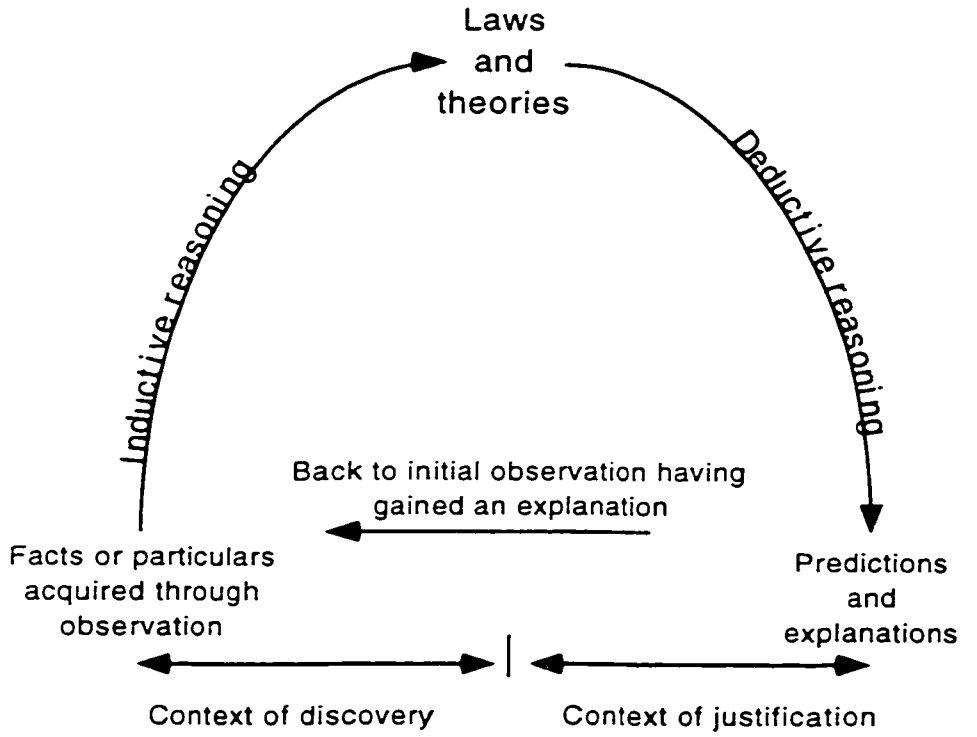

Figure 5: The arch of knowledge

This brief description represents the widely held common-sense view of science and scientific knowledge, the one presented to the general public or to undergraduate students in psychology to help them gain an understanding of the nature of the scientific method. This description suggests that there is a universal ahistorical understanding of what science and its methods are, that there is an unchanging essence behind the social, cultural and historical differences. This is what Gendlin seems to imply in his writing by his general use of the term 'science'. Some examples of his use of this term: "... so that an objective science can be related to and guided by experiencing (Gendlin , 1962, p. 4); "This was done through a philosophical analysis of the basic assumptions of knowledge or science" (Gendlin, 1973, p. 281); "The assumption that order is always something imposed began with Western science" (Gendlin ,1987, p. 265); "Science renders processes in terms of patterns. ... " (Gendlin, 1991, p. 108); or "... we discuss how the patterns of science change over the years" (Gendlin, 1997a, p. 126). However, is science such a universal, homogeneous category? If not, what is Gendlin implying by his use of the term 'science'?

According to many contemporary specialists, historians and philosophers of science interested in the nature of science, like Chalmers (1990) for instance, any attempt to justify a universal characterization of science and its methods faces serious difficulties. For example, Laudan (1996), a philosopher of science, writes that

> A science for which no rules could be given, a science without a methodology of inquiry and testing, would have seemed unthinkable to many of our forebears. But not so to many of our contemporaries [philosophers of science]. However plausible the identification of rules of assessment with scientific rationality may once have seemed (and, for some of us, still seems), several recent writers have criticized -- and in some cases thoroughly repudiated -- the enterprise of identifying and clarifying the methodological procedures or rules utilized in scientific assessment. ...
> Paul Feyerabend, for instance, preaches that scientific methodology is dead; that all methods of inquiry are flawed; that "anything goes". (p. 88)

In fact, science is in the middle of a major war; scientific objectivity is being attacked from all sides by thinkers coming from related fields of research like the sociology of science, the philosophy of science, etc. Aside from Feyerabend's extreme position, referred as epistemological anarchism, there are a large number of thinkers in philosophy, sociology, science studies and history that present different positions and arguments relative to the nature of scientific knowledge. There are postmodernist thinkers, like Jean-François Lyotard, who attack the scientific dream of an ideal truth at the end of enquiry. There are anti-realism and relativism movements, both attacking the standards of discourse of the natural sciences. Feminists are likewise criticizing the activity and production of the applied and the pure sciences; issues of culture and gender are being examined as to how they might bring certain biases that weaken scientific understanding. "The feminist critique has been applied to a growing number of disciplines, ... Why should we not examine all other disciplines in the same way, and in particular the disciplines of the pure and applied sciences?" (Mura, p. 4). Gendlin (1997a) is aware of this war through some postmodernist thinkers' criticisms of science. In that context, he writes, "Many physicists now say that science is invented and arbitrary, but this is not quite what they mean. They lack the terms to articulate the changed outlook" (Gendlin, 1997a, p. 385). Based on his interpretation of what physics needs, and in reaction to the social-constructivist and anti-realist thinking, he is offering his "new empiricism" view, which he calls "the responsive order", an extension of his philosophical model of nature (*experiencing*) which he hopes could move postmodernism out of its deadlocked relativism.

So the answer to the question "is science such a consensual, homogeneous category?" is no, and Gendlin's unqualified use of the term calls for clarification. Because science is divided into many areas of inquiry, it is not clear which one of these scientific areas he is

criticizing in his writings. In some articles, he refers briefly to specific dimensions of particular scientific disciplines,r example, behavioural sciences (1962), physics (1965), psychology (1978 / 1979), psychotherapy (1991b), social sciences (1995), cognitive science (1995), and empiricism (1997a) as well as Western sciences in general (i.e.: 1962, 1987, 1991b). However, his comments on specific disciplines remain rather short and unarticulated. Could his conception of science be more clearly articulated or identified to a known tradition? He briefly takes position with regard to Logical positivism and Operationalism in the 1960s, and he challenges postmodernist relativism in 1997. Between these years, he makes some reference to existentialist and phenomenological concepts, thinkers or schools, but mostly in order to promote his own views on experiential psychotherapy (1973), experiential phenomenology (1973) or experiential philosophy (1974). In that respect, he does not seem to subscribe to any clearly identified philosophical discourse or school of thought on science as such. In conclusion, he has his own idiosyncratic perspective on science that has phenomenological assumptions in it.

Within his comments on science, Gendlin is critical of a number of scientific ideas and concepts. For example, (1) the notion of complexity in behaviour ("There is no dispute, that living bodies respond with so far untraced complexity when environmental objects occur ..." (Gendlin, 1991b, p. 110)); (2) the role of the observer in physics ("In current science, the space and time connections depend on the observer: ...relative to an observer) (Gendlin, 1991b, p. 109)); (3) the notion of self-organizing systems ("Why is the concept of a self-organizing process lacking in current science?" (Gendlin, 1991b, p. 110-111)); or (4) that sciences can only approach dynamic systems in terms of Laplacian model ("But current science has no way to think a progression other than as Laplacian, that is to say as consistent in its logical patterns" (Gendlin, 1991b, p.111)). These examples of limitations to science according to Gendlin are taken from his 1991, "Thinking Beyond Patterns" publication

(1991b). However, the concepts he is referring to do exist in science and, more specifically, exist in psychology too.

His statements are not all accurate. Let us review what the scientific literature says about these statements.

In the first example, Gendlin talks about complexity and living bodies. With regard to science, the study of complexity is relatively recent. It emerged from studies originating in the areas of mathematics, physics, meteorology, and biology as well as in philosophy and social sciences. Since the 1960s a revolution in mathematics and physics has forced the development of a new attitude in the description of nature. The gap between simple systems and complex system is narrower than was previously thought. Before, mechanical systems like the movement of a pendulum or layers of fluid were considered fundamentally simple. Now, researchers realize that both can generate, under certain conditions, self-organizing phenomena that are a manifestation of complexity. It demonstrates "... that ordinary physico-chemical systems can show complex behaviour presenting many of the characteristics usually ascribed to life..." (Nicolis & Prigogine, 1989, p. 32). In psychology, and in particular in psychotherapy, Mahoney and Moes (1997) have written on the relevance of studying complexity within psychotherapy and its implications on our way of conceptualizing human experience. They talked about concepts like spontaneous self-organization, nonlinear dynamic systems, patterns, chaos, and so on. These authors write "In the first decades of the 20th century, complexity was acknowledged in a few post-Wundtian inquiries ... Social psychologists have considerable warrant for claiming that their pioneers were among the first in the profession to recognize that human experience is a complex phenomenon."(Mahoney and Moes, 1997, p. 183). The concept of complexity is part of science, acknowledging that even simple mechanical systems are complex.

Gendlin's second statement is associated with classical physics' 'idealized observer' concept and can be answered by saying that classical physics is over:

> In classical physics, the investigator is outside the system that he observes. He is the one who can make independent decisions, while the system itself is subject to deterministic laws. ...
> Today we are getting farther and farther away from such a dichotomy. Not only in human sciences, but in physics as well we know that we are both actors and spectators — to use a well-known expression by Niels Bohr. In the place of a construction in which the present implies the future, we have a world in which the future is open, in which time is a construction in which we may all participate." (Nicolis & Prigogine, 1989, p. 3)

The status of observation has changed enormously in science in the past hundred years. Statements like "science starts with observation", "observation yields a secure basis for knowledge" or "observations in science are made by a trained unprejudiced and unbiased observer" are considered naïve. Hanson (1958) has demonstrated, based on the later work of Wittgenstein (Oldroyd, 1986), that what an observer sees depends in part on the physical properties of his eyes and the scene observed, but also on his knowledge, expectations, inner state, cultural upbringing, and past experience. The subjective experience of seeing is not a one-to-one correspondence between the image on the retina and the inner experience of the subject. Philosophers of science refer to the theory-dependence of observation, that precedes observation. Observation statements, based on the perceptual experience of the observer, are made in the language of some theory in order to be formulated in a public language. The observer does not passively receive the information from a physical world that exists independently from the observer. Rather, he actively selects information according to a set of criteria and assumptions as defined by his theory. All observations are shaped by the theories held by the observer.

In the third statement, Gendlin says clearly in a 1991 publication that current science has no concept of a self-organizing process. It is false. Life sciences as well as natural science have been investigating self-organizing process for at least the last 20 years (Perna & Masterpasqua, 1997). In science, the notion of self-organization suggests that new levels of form, organization and complexity often arise out of the interchanges between organisms and their contexts. With respect to this notion, Perna and Masterpasqua (1977) write that "Patterns of self-organization involving periodicity, oscillatory, and chaotic behavior have been found in experimental models of ecological, epidemiological, disease, biochemical, metabolical, physiological, and neural systems" (p. 15). With regard to psychology and more specifically clinical psychology, some authors (Kossmann & Bullrich, 1997; Mahoney, & Moes, 1997; Perna, 1997) have addressed the issue of self-organizing systems and the process of change in human organisms within clinical psychology, as seen in family therapy and in therapist-client interactions. Therefore it is clear there are processes in science.

In the fourth statement, Gendlin says that current science cannot conceive of a progression other than as Laplacian. Laplace's statement, written in 1886, about the capacity to predict with certainty all future or past states of a system assuming he has all the initial conditions, parameters and forces acting on it are collected, was shattered by Heisenberg's demonstration of the indeterminacy principles in 1927. Here is what Perna & Masterpasqua (1997) have to say:

> However, in the last 20 years, observations of uncertainty and unpredictability have moved beyond the level of the atom to include physical systems previously believed to be completely explainable using Newtonian mechanics. Laplace, it turns out, really was mistaken. For many systems in the everyday world, no amount of information allows the prediction of the future with certainty. (p.5)

In "Exploring complexity", Nicolis and Prigogine (1989) talk at length of nonlinearity, and nonlinear dynamics as they apply to living organisms or other systems. These concepts suggest new ways of looking at psychotherapy where unpredictability and disorder are part of the evolving dynamics of a client. Laplace is nowhere to be seen.

It appears that Gendlin sees science as a monolithic entity. He presents no definition of science as such nor does he keep up with recent advance in science. Since the end of the 1960s, no empirical effort has been conducted to test any aspect of his speculations.

Gendlin offers no distinction when he talks of science between scientific nature, or what could be investigated as such and what is of a metaphysical nature. In his philosophy there is no demarcation principle to separate levels of discourse, except the contrast between the logical statements and nature (*experiencing*). His views on science are blurred and indistinct remaining only comments. Consequently, Gendlin is not commenting on science as an expert in the field showing a mastery of the issues at stake, nor as a philosopher of science but more as a philosopher - practitioner who has studied how *experiencing* and concepts interact and how, in the process, new meanings emerge. His speculations on *experiencing* have lead him to comment critically on different limitations of science based on his research experience during the 1960s. This will be further discussed in section 5.2

5.2 Logical positivism as the basis of Gendlin's views of science

Gendlin's interpretation of science was shaped in the 1960s by Logical positivism and behaviourism while he was doing psychotherapy research with Carl Rogers. In his 1962 book, he presents a psychological approach to the subjective in reaction to his dissatisfaction with the application of the scientific method in psychology, a method based on the Logical

positivism view of science. His criticisms are: (1) The requirements of Logical positivism for logical precision and objective empirical criteria limits researchers in their investigation of the subjective human experience during psychotherapy sessions. Logical positivism as applied to psychology excludes the directly experienced, the subjective; (2) The personal experience of the researcher is not taken into account in the elaboration of scientific theories; and finally, (3) the logical positivists, like Carnap, leave discovery and invention outside the research process and methodology. Our position will be that Gendlin's views of Logical positivism are too restricted and lack depth.

Before addressing these three main points of dissent on the part of Gendlin vis-à-vis Logical positivism, it might be interesting to note a number of similarities between Gendlin's views and Logical positivism's views. Both examine (1) direct experience or the necessity to stay as close as possible to the occurrence of the sense-experience, stay with the given; (2) the importance of language in philosophy; (3) the need for a new approach in philosophy; (4) the primary importance of the question "what is meaning?"; (5) the fundamental nature of the problem of the relationship between concepts and experience (i.e. there is something important in the relationship between language, reality and empirical testing); (6) the importance of logic and logical conceptual inference as dimensions of knowledge; (7) the need for a new empiricism. These few similarities suggest that Logical positivism might not be as distant from Gendlin's own views as he seems to have thought. It is possible that Gendlin's restricted views of Logical positivism were influenced by the attitudes of the pragmatist researchers of the time in psychology, like Edward C. Tolman, Clark L. Hull, or B. F. Skinner who imported some of their methodologies or concepts from Logical positivism (Smith, 1986).

With regard to the first criticism about direct experience and subjectivity, it is interesting to read Carnap, who in 1932, says science is "... a system of statements based on direct experience, and controlled by experimental verification" (Carnap, 1981, p. 152). For him, verification in science should be based on statements called "protocol statements" or "language of direct experience" or "phenomenal language". According to Carnap, these basic statements refer to the given, that they should describe the directly given experience or phenomena within the flux of sensory experience of the individual. He gives a psychological example of a person who refers to the content of his internal experience. This subject, S-1, is experiencing thirst. As he expands on this example, Carnap introduces an observer, S-2, from which he explores the limitations of communicability of the thirst sensation of S-1 to S-2. He discusses the intersubjectivity of the language. He also explores the relationship between the content of S-1's own experience, as described by his protocol statement, and the physical, environmental situation. In this example, we are, far from Gendlin's criticism concerning Logical positivism absence of concern for subjectivity.

The second criticism refers to the absence of the personal experience of the researcher in the elaboration of scientific theories. Logical positivists never denied that psychological processes do enter into scientific inquiry. Wolfgang Stegmuller reports that as Carnap was commenting on his own internal creative process, "... the intuition always came first, and precise refinement and formalization always constituted the last step" (Hintikka, 1975, p.LXVII). However, their position is that a statement is of value to science if it can be verified empirically. That only allows science to evolve.

The third criticism, that logical positivists like Carnap leave discovery and invention outside the research process and methodology is both true and false. In fact, logical positivists were aware that psychological activities were part of the scientific empirical

process. The results of science are based on discoveries that necessitate psychological operations like observation, which are based on the belief system of a scientist within a collective culture of scientists. However, many logicians of the beginning of the 1920s, like Gottlob Frege, rejected psychologism, the doctrine that says the laws of logic are in fact the laws of psychology. They wanted to separate psychological processes in science from the realm of logic and the validating process. Gendlin, on the other hand, wanted to show that beside the logical dimension and empirical dimension there was the experiential or psychological dimension. Only mathematics and logic were deemed acceptable by Logical positivists to serve as bases establish a solid epistemological foundation for science, hence the necessity of the separation. They separated them by downplaying the importance of psychological processes and by isolating it from logic. As a consequence of this separation, psychology, within the activity of science, appeared in the context of discovery, a distinction articulated by Reichenbach in 1938. According to Logical positivism, only the product of the context of justification can claim to be scientific knowledge since it is based on the objectivity and the universality of the logical and mathematical operations. Carnap wrote to this effect:

> It must be possible to give a rational foundation for each scientific thesis, but this does not mean that such a thesis must always be discovered rationally, that is, through an exercise of the understanding alone. After all, the basic orientation and the direction of interests are not the result of deliberation, but are determined by emotions, drives, dispositions, and general living conditions. This does not only hold for philosophy but also for the most rational of sciences, namely physics and mathematics. The decisive factor is, however, that for the justification of a thesis the physicist does not cite irrational factors, but gives a purely empirical-rational justification. (1969, p. xvii)

By the beginning of the 1930s, three decades before Gendlin's adoption of the downgraded version of Logical positivism documented above, this philosophical tradition

had been rendered obsolete and was replaced by a variety of perspectives, one which contained even more concern for what Gendlin considered missing in science: Critical rationalism. Despite these profound mutations within the philosophy of science and their progressive maturation throughout the passing decades, Gendlin stood fast with his restricted Logical positivism, and did not acknowledge the seeds of Critical rationalism that were in those roots of Logical positivism deeply set in the British empiricist tradition of rational debate.

> Carnap himself illustrated, in his own case, how constant critical debate and confrontation can lead to progress in philosophy. There were always many criticisms of his publications; and Carnap brought forth the sharpest and most decisive critical arguments against his own earlier work. (Hintikka, 1975, p. LXV)

5.3 Critical rationalism: From Anaximander to Popper

5.3.1 Critical rationalism

It was the early Greek thinkers, the Presocratics, who first proposed to supplant authority and tradition by using the two tools of epistemology: rationalism and empiricism. Epistemology is the study of the theories pertaining to the growth of our knowledge and the problems associated with the explanations received. It is concerned with the determination of the scope and limits of human knowledge and with the justification of our beliefs. Rationalism is the practice of employing reason as a legitimate source of knowledge. Empiricism is the practice of employing practical sense experience to justify belief. The empiricist says that nothing "... can be known to be real unless its existence is revealed in or inferable from information we gain directly in sense experience or in introspection of our subjective states, or later recall, ..." (Hunter, 1992, p.110). Critical rationalism is an epistemological position next to empiricism and rationalism that tries to incorporate both of

these positions into a third view by trying to answer the question "Do we know anything for certain" or put differently "How can we hope to detect and eliminate error? " (Popper, 1968, p. 26). Popper presents Critical rationalism in the following way:

> I now want to set forth and discuss a third positive solution to our problem [problem of knowledge]. It incorporates a large dose of scepticism. It also, being a positive solution, incorporates ingredients from both rationalism and empiricism. It is sometimes called 'mitigated scepticism', sometimes 'critical rationalism' (we could equally well have 'critical empiricism'), sometimes 'fallibilist realism', or for short 'fallibilism'? (Musgrave, 1993a,p. 274).

Critical rationalism, as an epistemological position, takes its roots in a tradition that dates back to the early Greek thinkers, the Presocratics, and in particular Anaximander (Popper, 1968). It is Anaximander who was the first presocratic to criticize the doctrine of his master Thales. According to Popper, this marks the beginning of the rationalist tradition that proposed to rationally discuss any beliefs, assertions and dogma from any school of thoughts including his own beliefs about the world. It gave rise to a tradition that encourages the critical examination and debate of arguments and theories with the purpose of expanding our knowledge and to establish the truth value of statements. This tradition encompasses thinkers like Socrates, Aristotle, Descartes, Kant, Hume, and Popper to name but a few. Its method basically consists of stating the problem clearly and then critically examining the various proposed solutions. In this tradition, perceptual beliefs are reasonable unless they fail to withstand criticism; other beliefs are reasonable because they succeed in withstanding criticism (Musgrave, 1993b).

With Critical rationalism, our critical attitude toward Gendlin's philosophy of science will feed on this epistemological perspective's attitude toward the fundamental problem of induction. According to Popper (1959), sciences depend on inductive inference in order to

go from singular statements about an observation to universal statements, the generalization of observations. The question of the truth value of these universal statements obtained from induction is at the heart of the problem of induction. Let us then explore the historical roots of the problem of induction and its consequences on science, before returning to Gendlin's position.

5.3.2 The problem of induction and its historical roots

Aristotle (384 - 322 BC) is considered by many as the first philosopher of science. In his Organon, divided into five books including the Prior and Posterior Analytics, he laid down the foundations of contemporary formal logic and discussed for the first time the fundamental aspects of the relationship between logic and science.

> The Prior and Posterior Analytics, written probably between 350 and 344 B.C., represent one of the greatest achievements of the human intellect; they served for more than two thousand years as the controlling instrument of western thought in every department of knowledge, human and divine. It is probable that Aristotle discovered the syllogism -- and he did no less than that -- through his critical appraisal of Plato's recognition of chains of classes, in which each class is a specification of the one above it in the chain. If this is so, then, as Sir David Ross observes, 'Aristotle's translation of Plato's metaphysical doctrine into a doctrine from which the whole of formal logic was to develop is a most remarkable example of the fertilization of one brilliant mind over another. (Aristote,(Warrington, Trans.), 1964, pp. viii-ix)

Aristotle discribes human thinking as a cycle proceeding through induction, from some particular observations to general principles, and back again through deduction, from the general principles, to the initial observations, having gained on the way an "explanation" of the phenomena associated with the particular observations:

> Aristotle viewed scientific enquiry as a progression from observation to general principles and back to observations. He maintained that the scientist should induce explanatory principles from the phenomena to be explained, and then deduce statements about the phenomena from premisses which include these principles. ... Aristotle believed that scientific enquiry begins with knowledge that certain events occur, or that certain properties coexist. Scientific explanation is achieved only when statements about these events or properties are deduced from explanatory principles. Scientific explanation thus is a transition from knowledge of a fact ... to knowledge of the reasons for the fact ... . For instance, a scientist might apply the inductive-deductive procedure to a lunar eclipse in the following way. He begins with observation of the progressive darkening of the lunar surface. He then induces from this observation, and other observations, several general principles: that light travels in straight lines, that opaque bodies cast shadows, and that a particular configuration of two opaque bodies near a luminous body places an opaque body in the shadow of the other. From these general principles, and the condition that the earth and moon are opaque bodies, which in this instance, have the required geometrical relationship to the luminous sun, he then deduces a statement about the lunar eclipse. He has progressed from factual knowledge that the moon's surface has darkened to an understanding of why this took place. (Losee, 1980, p.6)

Aristotle's study of logic led him to analyze in great detail the various valid ways in which one can reach a conclusions from a set of premises, and this analysis yielded a set of precise laws of correct deductive thinking. His study also led him to search for the various valid ways in which one can induce a conclusion from some set of premises: he realized that there was something peculiar with induction, namely that for an inductive syllogism to be formally as convincing as a deductive syllogism, truth statements about all the particulars constitutive of the general principles to be induced were needed in the premises:

> Now induction, i.e. the syllogism arising from induction, consists of proving the major term of the middle term by means of the minor. Let A be 'long-lived', B 'gall-less', C the particular long-lived animals (e.g. man, the horse, the mule). Then all C is A (for every C is long-lived), and all C is B (gall-less), therefore if C is convertible

> with B, all B must be A. C, however, must be the sum of all the particular; for induction requires that.
>
> Such a syllogism establishes the unmediable premise; for where there is a middle term between two terms, syllogism connects them by means of the middle term; where there is not, it connects them by induction. Induction is in a way opposed to syllogism; the latter connects major with minor by means of the middle term, the former connects major with middle by means of the minor. Syllogism by way of the middle term is prior and more intelligible by nature, syllogism by induction is more obvious to us.
> (Aristotle, Prior Analytics, II, 23, 68 b 8-37)

In fact, Aristotle identified two types of induction: Induction by enumeration, and induction by intuition of the causes. Losee (1980) comments:

> Aristotle maintained that it is by induction that generalizations about forms are drawn from sense experience. He discussed two types of induction. The two types share the characteristic of proceeding from particular statements to general statements. The first type of induction is simple enumeration, in which statements about individual objects or events are taken as the basis for the generalization about a species of which they are members. Or, at a higher level, statements about individual species are taken as a basis for a generalization about a genus. The second type of induction is a direct intuition of those general principles which are exemplified in phenomena. Intuitive induction is a matter of insight. It is an ability to see that which is "essential" in the data of sense experience. (p.7)

Both types are required to carry the same "logical weight" as deduction and that all particulars involved in the general conclusion be known. This is easily understood for induction by enumeration, as exemplified in the first paragraph of the last quote from Aristotle above (where ALL "the particular long-lived animals" have to be listed). It might not be as obvious for induction by intuition of the causes: here is an example, from Aristotle's writings:

> Quick wit is a power of hitting upon the middle term instantaneously; e.g. (a) if one sees that the moon always has its bright side towards the sun, and quickly grasps the reason, viz, that it receives its light from the sun; or (b) recognizes that someone is talking to a rich man because he is borrowing money from him; or (c) why two men are friends, viz, because they have a common enemy. In each of these cases, on seeing the extremes, one has recognized the middle term. (Posterior Analytics, 34, 89 b 9-20)

It should be clear from this example that induction by intuition of the causes requires that ALL particulars be known in order for the universal conclusion to carry the same "logical weight" as deduction. For instance, for it to be "logically" true that the moon shines because "it receives its light from the sun", one needs to have access, in its premises, not only to the "fact" that in the past "the moon always had its bright side towards the sun", but also to the "fact" that in the future this will also always be the case, a "fact" which is certainly not available at the moment of Aristotle's statement. The full impact of this restriction on the logical validity of induction is nowhere as clear as in this excerpt from the Posterior Analytics, where Aristotle acknowledges that deduction must, at some point or other in its syllogistic sequences, hit non-deducible premises, which must therefore only be inducible: the first principles:

> Clearly then it is by induction that we come to know the first principles; for that is how perception, also, implants the universal in us. Now (a) of the thinking states whereby we lay hold of truth, some (science and intuitive reason) are always true, while others (e.g. opinion and calculation) admit of falsity, and no state is superior to science except intuitive reason; and (b) the first principles are more knowable than the conclusions drawn from them, and all science involves the drawing of conclusions. From (b) it follows that it is not science that grasps the first principles; and then from (a) it follows that it must be intuitive reason that does so. This follows also from the fact that demonstration cannot be the source of demonstration, and therefore science cannot be the source of science. If then intuitive reason is the only necessarily true

> state other than science, it must be the source of science. It apprehends the first principles, and science as a whole grasps the whole subject of study. (Aristotle, Posterior Analytics, II, 19, 100 b 3-17)

Two millennia would go by before Hume dealt with the major problem inherent in the logical status of induction.

> Problem of induction. First stated by Hume, this problem concerns the logical basis of inferences from observed matters of fact to unobserved matters of fact. ... Long before Hume the ancient Skeptics had recognized that such inferences cannot be made with certainty; they realized there can be no demonstrative (deductive) inference, say, from the past and present to the future. Hume, however, posed a more profound difficulty: Are we justified in placing any degree of confidence in the conclusions of such inferences? His question is whether there is any type of non-demonstrative or inductive inference in which we can be justified in placing any confidence at all. ... Hume concludes skeptically that there can be no rational or logical justification of inferences from the observed to the unobserved --i.e., inductive or non-demonstrative inference. ... Although Hume posed his problem in terms of homely examples, the issues he raises go to the heart of even the most sophisticated empirical sciences, for all of them involve inference from observed phenomena to unobserved facts. Although complex theories are often employed, Hume's problem still applies. Its force is by no means confined to induction by simple enumeration. (Salmon, 1995, pp. 651-652)

5.3.3 Popper's "solution" to the problem of induction

Sir Karl Popper is a British philosopher born in Vienna in 1902, the same city as Gendlin was born. However, he is 24 years older than Gendlin. Popper is well known for his contribution to the philosophy of science (Audi, 1995), and is considered to be the initiator of an epistemological revolution in that field by his falsificationist position (Andersson, 1994). Marsonet (1995) introduces him this way "Karl Popper, whose falsificationism, although from some aspects still close to neopositivism, nevertheless gave

rise to a true epistemological revolution" (p. 19). He is part of the "Living Philosophers" (Schlipp, 1974) because of the depth as well as the originality of his thinking and the ramifications of his conclusions.

Popper has presented an original solution to David Hume's formulation of the problem of induction which is considered one of his chief contribution to philosophy (Musgrave, 1993b). Popper's solution contributed to the rejection of the orthodox view of the scientific method as presented by the Logical positivism school and convinced the scientific community to accept that the general propositions of science are only hypothesis or conjectures. In that respect, we chose Popper's position because it is more encompassing than any other epistemological position. Furthermore, it is the only epistemology that seriously addresses the problem of induction in terms of what science is.

Basically, Hume stated that induction, which concerns the logical basis of inference from observed matters of facts to unobserved matters of facts, cannot be made with logical certainty, and as a consequence, we cannot with any degree of confidence conclude any such inference. According to Bertrand Russell, this means that "every attempt to arrive at general scientific laws from particular observations is fallacious, and Hume's scepticism is inescapable for an empiricist" (Popper, 1979, p. 5). Popper's achievement has been to offer an acceptable solution to Hume's problem of induction. Popper formulated Hume's logical problem of induction as follows:

> Can the claim that an explanatory universal theory is true be justified by 'empirical reasons'; that is, by assuming the truth of certain test statements or observation statements? My answer to the problem is the same as Hume's: No, it cannot; no number of true tests statements would justify the claim that an explanatory universal theory is true (Popper, 1979, p. 7).

This answer is interpreted by Popper "... as meaning that we must regard all laws or theories as hypothetical or conjectural; that is, as guesses" (Popper, 1979, p. 9). This statement goes against the position of the Logical positivism school and reinstates the conjectural or subjective nature of any theoretical position. The view of the positivist, based on the assumption that the accumulation of carefully controlled and meticulously measured observations of specific instances leads to the formulation of hypothesis and, once verified, to secure scientific laws, had to be reformulated or replaced. This has transformed the vision of natural science as objective and unmistakable to a vision where it is subjective and hypothetical.

Furthermore, according to Popper, if we modify the formulation of Hume's problem as it appears in the first citation, by replacing the words 'is true' with the words 'is true or that it is false', the answer to Hume's problem then becomes positive. "Yes, the assumption of the truth of test statements sometimes allows us to justify the claim that an explanatory universal theory is false" (Popper, 1979, p. 7). This simple statement is the acceptable solution to the problem of induction. It says that no number of observations allows us to derive a logical universal statement or scientific law. However, it takes one single observation to refute the universal statement. In that respect, "... empirical generalizations, though not verifiable, are falsifiable. This means that scientific laws are testable in spite of being unprovable: they can be tested by systematic attempts to refute them"(Magee, 1979, p. 18). This became Popper's solution. In that sense, scientists have to formulate their theories as unambiguously as possible, so they may be expose as clearly as possible to allow refutation. The enrichment of a problem through the refutation of false theories and the search for a new theory presents science as a constant process of approximating the truth.

The problem of induction, allegedly solved by Popper, allows the acknowledgment of the role of the subjective in the genesis of scientific knowledge. In that sense, it is closer to phenomenological positions. At the same time, Popper's position forces phenomenology to be more objective in order to make its general statements more refutable and come to terms with the accessibility to essence or the process of ideating abstraction, going from the particular to the general essence.

5.4 Critical rationalism and Gendlin's contentions with science

After (1) having set it, in chapter 2, in its detailed historical context, (2) having characterized at length, in chapter 3, the main conceptual concerns from which it kept growing, and (3) having brought, in chapter 4, the variety of critical statements lying at its very heart to seven apparently different types of dissents (see Table 1), Gendlin's career-long disagreement with science will now be brought to its simplest and most essential expression, and confronted to critical rationalism's basic tenets, allowing the formulation of our thesis.

1. Experiential nature of conscious flow (4.2.1)
2. Subjective nature of conscious flow (4.2.2)
3. Actual lack of concepts to completely account for conscious flow (4.2.3)
4. No room for creativity in the scientific process attempting to account for conscious flow (4.2.4)
5. Potential inability to completely cover conscious flow (4.2.5)
6. Distorting nature of scientific accounts of conscious flow (4.2.6)
7. Changing nature of conscious flow (4.2.7)

Table 1. Seven sources of Gendlin's dissatisfaction with science

All in all, Gendlin's source of dissatisfaction can be argued to rest mainly (1) on Gendlin's conviction that science belongs to what he calls "the logical order"; (2) on Gendlin's conviction that subjective experience belongs to the "experiencing order"; (3) on Gendlin's conviction that the "logical order" and the "experiencing order" are *different* orders and more specifically that the "logical order" cannot *contain* "the experiencing order", or do justice to its essential nature.

Indeed, all seven sources of dissatisfaction which, we argued, characterize Gendlin's discourse on what he calls science (see Table 1) can be seen to derive very naturally from these three convictions. The first, second, and last sources of dissatisfaction relate mainly to the second (and third) conviction while the third, fourth, fifth, and sixth sources of dissatisfaction relate mainly to the first (and third) conviction.

If we reframe those categorical distinctions from Critical rationalism's Perspective (see Table 2), we turn to the basic distinction that Popper uses to talk about the general issue of "The Aim of Science" (Popper, 1972/1991, Chapter 5) and which opposes the *explicandum* (i.e. what is to be explained) to the *explicans* (i.e. the explanation of what is to be explained): "I suggest that it is the aim of science to find *satisfactory explanations*, of whatever strikes us as being in need of explanation. By an explanation (or a causal explanation) is meant a set of statements by which one describes the state of affairs to be explained (the *explicandum*) while the others, the explanatory statements, form the 'explanation' in the narrower sense of the word (the *explicans* of the *explicandum*)" (Popper, 1972/1991, p. 191).

Explicandum
1. Experiential nature of conscious flow (4.2.1)
2. Subjective nature of conscious flow (4.2.2)
3. Changing nature of conscious flow (4.2.7)
Explicans
3. Actual lack of concepts to completely account for conscious flow (4.2.3).
4. No room for creativity in the scientific process attempting to account for conscious flow (4.2.4)
5. Potential inability to completely cover conscious flow (4.2.5)
6. Distorting nature of scientific accounts of conscious flow (4.2.6)

Table 2. Reframing of Gendlin's seven sources of dissatisfaction with science according to Critical rationalism

Surprisingly, for most of Gendlin's complaints, Popperian Critical rationalism (PCR) agrees with, while still accounting for the progress of the natural sciences throughout the ages.

First and above all, PCR agrees that the *explicans* can never be expected to do justice to all aspects of the *explicandum* and, a fortiori, the experience on which the later rests, which is also acknowledged as the ultimate referent in the scientific endeavour. To understand PCR's position on the matter, a few more words on the way the "Empirical Basis" is conceived of is necessary:

> In the epistemologies of the sensationalism and positivism it is taken for granted that empirical scientific statements 'speak of our experiences'. For how could we ever reach any knowledge of facts if not through sense-perception? Merely by taking thought a man cannot add an iota to his knowledge of the world of facts. Thus perceptual experience must be the sole 'source of knowledge' of all the empirical sciences. All we know about the world of facts must therefore be expressible in the form of statements *about our experience*. Whether this table is red or blue can be found out only by consulting our sense-experience. By the immediate feeling of conviction which it conveys, we can distinguish the true statement, the one whose terms agree with experience, from the false statement, whose terms do not agree with it. Science is merely an attempt to classify and describe this perceptual knowledge, these immediate experiences whose truth we cannot doubt; it *is the systematic presentation of our immediate convictions*.
>
> This doctrine founders in my opinion on the problem of induction and of universals. For we can utter no scientific statement that does not go far beyond what can be known with certainty 'on the basis of immediate experience'. (This fact may be referred to as the transcendence inherent in any description'.) Every description uses *universal* names (or symbols, or ideas); every statement has the character of a theory, of a hypothesis. The statement, 'Here is a glass of water' cannot be verified by any observational experience. The reason is that the *universals* which appear in it cannot be correlated with any specific sense-experience. (An 'immediate experience' is only once 'immediately given'; it is unique.) By the word 'glass', for example, we denote physical bodies which exhibit a certain *law-like behaviour*, and the same holds for the word 'water'. Universals cannot be reduced to classes of experiences; they cannot be 'constituted'. (Popper, 1961, p. 94-95)

It should be quite clear from this quote that PCR is in no way naive as to the intimacy or privacy and the subjectivity of experiencing, which is nonetheless discussed in terms of what can be done in order to create satisfactory explanations (*explicans*). That satisfactory explanation can never, for PCR, hope to reach the stage of complete explanation, can be further consolidated by the following quote:

> The empirical basis of objective science has thus nothing 'absolute' about it. Science does not rest upon rock-bottom. The bold structures of its theories rises, as it were, above a swamp. It is like a building erected on piles. The piles are driven down from above into the swamp, but not down to any natural or 'given' base; and when we cease our attempts to drive our pile into a deeper layer, it is not because we have reach firm ground. We simply stop when we are satisfied that they are firm enough to carry the structure, at least for the time being. (Popper, 1961, p. 111)

If PCR's critical rebuttal of what it calls sensationalism and the positivism is taken much deeper into *Logical positivism* in the pages immediately following the last quote, we need not examine the argument any further. There is enough evidence already to argue convincingly (1) that six out of Gendlin's seven sources of dissatisfaction were acknowledged by PCR long before Gendlin even became interested in the issue, (2) that these six sources of dissatisfaction have been related to a problem which Gendlin has completely overlooked, and which allowed the proposal of a highly parsimonious solution, which Gendlin also completely overlooked, and (3) that the seventh source of dissatisfaction, that of the exclusion of the creative process in the scientific process, has been recognized by PCR as an intrinsic part of the process.

The argumentative plan sketched above can be implemented rapidly by bringing into the argument the logical foundations of PCR, as defined in the previous section (and as repeated in a more succinct form in the penultimate quote above), where the non-logical nature of the

inductive process upon which our access to the universal statements that any science must rely on is acknowledged. These foundations, set deeply into Aristotelian thought, make it quite clear that no product of induction can have any claim to necessary truth, which brings PCR to propose, as very first attitude shift regarding the validity of scientific knowledge, to acknowledge its necessary hypothetical, or conjectural, nature. In this context, Gendlin's dissatisfaction with science's "potential inability to completely account for the conscious flow" is fully acknowledged (since any "accounting" must rely on induced universals (already at the level of the linguistic formulation of the experience, upon which the explanatory effort adds its even more involved, and more "estranging", universalizing effect). Consequently, Gendlin's dissatisfaction with science's "*actua*l inability to completely account for the conscious flow" (i.e. science's "lack of concepts for accounting for aspects of lived experience") is also fully acknowledged (if science is not *potentially* able to fully account for particulars, it cannot be *actually* able to fully account for them). And finally, if the induced universals on which science relies in its attempts to accounts for a particular phenomena extend beyond what is considered true for the particulars, it can certainly be argued that they are, to an undetermined extent, "imposed patterns" on the particulars (i.e. nature), and that in this sense they might well have a "distorting" effect on truth. This completes the coverage of one side of Gendlin's dissatisfaction "coin", the explicans side of the coin, that focuses on how universals betray particulars. The other side of Gendlin's "coin", the explicandum side of the coin, is explained in the same manner, except, this time, the focus is on how particulars suffer from attempts at universalization. All three sources of dissatisfaction, namely the experiential, the subjective and the changing natures of lived experiences, are obviously brought to the fore by Gendlin as absolutely particular and irreducible aspects of the humans' contents of consciousness, particular aspects which can in no way be captured integrally by any speech, or even thought! Of

course, as mentioned before, PCR agrees entirely with this limitation, which is the complement of the acknowledged problem with induced universals.

Arguing that for the most part Gendlin's dissatisfaction with science is but a late echo of the tenets of PCR, might seem disappointing. After all, is it not satisfaction which we are seeking?

What is new however, and this is what we want to insist on, is that the heart of the problem is not the issue of human phenomena, as Gendlin insists on, but rather with facing induction and universals.

If our point was only that PCR voiced Gendlin's dissatisfaction some decades before Gendlin's time, there would not be much interest, other than historical, to bring PCR to the fore. Our point is in fact much deeper, and rests essentially not so much on the fact that Gendlin's views on the limitations of science is but a late echo of PCR's own original views on the limitations of science, but rather on THE REASONS invoked by PCR to account for these limitations, which, this time, depart considerably from those invoked by Gendlin to account for the same limitations. According to PCR, the reasons accounting for the limitations discussed are to be found in the INDUCED nature of the UNIVERSALS of which scientific knowledge essentially consists of, whereas according to Gendlin's views, the reasons accounting for the limitations essentially have to do with the HUMAN nature of the object of the psychological science. It is our thesis that the point of view adopted by Gendlin did not and cannot lead to any consistent solution in terms of a unified view of science, whereas the point of view adopted, more than a century ago, by PCR does lead to a consistent solution, at least logically, and this solution is Popper's proposal to adopt refutability as criterion of legitimacy for scientific knowledge. Finally, it is this same

realization of the necessarily induced nature of scientific knowledge that allows PCR to wave Gendlin's dissatisfaction with the lack of room for creativity in the scientific process as irrelevant: From PCR's perspective the eminently scientific process of recovering from a refutation by engaging in the inductive process leading to a new, more encompassing and bolder conjecture does not only allow for some creativity, it is altogether purely and completely creative!

What is truly astounding is that in all his enquiries into the philosophy of science, nowhere does Gendlin mention, let alone PCR, the problem of induction. He does not even argue against it, nor does he disparage it. How can one talk of "the logical order" which characterizes "science" and not address the problem of induction, the one secular major obstacle to the
interfacing of logic and science. The only answer that comes to mind at this point is that Gendlin never questioned the legitimacy of Logical positivism as an account of "the ways" of science, although it became philosophically obsolete many decades ago, and that there were alternatives to which the natural sciences themselves turned to. He did not seem to realize that "what science is" is as hypothetical and hard to conjecture about as lived experience, and that Logical positivism was but one (failed) attempt at capturing it!

We therefore propose that the study of the *felt sense* phenomenon can and should be reframed within the epistemological perspective of Popperian Critical rationalism, as one amongst a myriad of interesting phenomena which the Natural Sciences have as a mandate to explicate.

Chapter 6

Conclusion

Our argument so places a clear emphasis on how the adoption of a Critical rationalist epistemological perspective could prevent some of the major limitations held by Gendlin to characterize his pseudo logical positivistic view of science, and has stopped short of addressing the issue of the limitations of Critical rationalism itself. Now whatever the advantages of viewing traditional Science as Critical rationalism over viewing traditional Science as some (reduced) form of Logical positivism, the very nature of Critical rationalism makes it inconsistent not to push epistemological questioning into reflexive application, i.e. self-criticism. This is what this concluding section will be devoted to.

First, from all that has been said so far in this thesis it should be clear that no criteria are available, which would allow deciding that *all* limitations of an epistemological approach were identified. The following limitations, argued to characterize Critical rationalism, should therefore be considered to constitute our current approximation of the limitations of this epistemological perspective. Two levels of limitations characterize this current approximation. The first level, presented and discussed in Sub-section 6.1 (Internal limitations: The pragmatics of Critical rationalism's science), is that of those limitations that have to do with the applicability of the principles of Critical rationalism in a practical scientific methodology. We called these limitations "internal", because they apply to aspects of Critical rationalism that remain within the boundaries of the domain of psychological experience which this epistemological perspective places within the scope of Science. With the second level of limitations, presented and discussed in Sub-section 6.2 (External limitations: Consciousness and qualia), self-criticism is extended beyond the intended reach of Critical rationalism's science, into the wider domain that includes aspects of human

experiencing that escape this intended reach, hence we call the limitations encountered at this level "external".

6.1 Internal limitations: The pragmatics of Critical rationalist science

> En somme, le falsificationnisme poppérien ne peut être opérant qu'à la condition de faire intervenir l'entente intersubjective à plusieurs niveaux du processus d'évaluation des théories scientifiques.
>
> S. Robert

If the critical rationalist corner-stone principle of the logical validity of "negative" or "refutatory" induction can be argued, as Popper does, to break the Humian deadlock over the problem of induction, it remains a purely logical result which, in itself, contains no guarantee of applicability in a practical methodology of Science. As it turns out, close analysis shows that if one attempts to push popperian Critical rationalism as far as the detailed sequence of practical steps a researcher takes in the actual practice of Science, one is rapidly faced with a succession of forced fundamental compromises undermining the argued objectivity of the exercise[1]. For instance, Robert (1993) argues:

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[1] A remarkably clear hint at the fact that Popper was far from naïve vis-à-vis those issues is the extremely cautious way in which he spells out the reformulation of Hume's question which he uses to introduce his falsificationist solution to the problem of induction: "Can the claim that an explanatory universal theory is true be justified by 'empirical reasons'; that is, by assuming the truth of certain test statements or observation statements?" (Popper, 1979, p.7). Note how he equates "empirical reasons" with "***assuming*** the truth of ...observation statements". If he had thought that the truth of observation statements can be logically established, would he have so weakened the formulation of one of the most crucial foundational elements of his whole epistemology?

> L'anti-inductivisme poppérien compromet en effet l'objectivité de la falsifiabilité. D'abord, en tant que chargés de théorie, les énoncés de base permettant la falsification n'ont de contenu empirique que par la reconnaissance intersubjective de l'évidence de l'existence de ce contenu ... . Ensuite, pour faire d'une occurrence un événement falsificateur, il faut à nouveau recourir à l'accord intersubjectif pour reconnaître la répétabilité qui en fait un événement ... . Enfin et surtout, il y a l'énorme problème des hypothèses *ad hoc*, que l'on peut toujours formuler pour contrer la falsification. On a vu que Popper reconnaît cette possibilité de fait et qu'il la condamne au nom d'un principe moral d'honnêteté intrellectuelle ... . Une des stratégies d'immunisation contre les falsificateurs que Popper identifie comme étant toujours efficace est la modification des significations, et là encore, pour éviter cette stratégie et sauver le falsificationnisme, il ne peut que faire appel au consensus intersubjectif pour fixer les significations et refuser de les modifier ... . En somme, le falsificationnisme poppérien ne peut être opérant qu'à la condition de faire intervenir l'entente intersubjective à plusieurs niveaux du processus d'évaluation des théories scientifiques. Le falsificationnisme n'aboutit donc pas au type de connaissance objective que recherche Popper et la confrontation des théories scientifiques à l'expérience se fait par quelque chose de plus faible que la falsification poppérienne. (pp. 171-172)

It is interesting to note how these limitations to the proposed objectivity of popperian science, recaptured by Robert (1993) as acknowledged features of a new (neo-popperian?) perspective on Natural Science, which he calls "Interactionist Rationalism", offer Gendlin an even more compelling refutation of his narrow pseudo-logical-positivistic absolutization of the ways of Natural Science, bringing them even closer to what he claims they are not, i.e. representative of the inescapable human subjectivity. It is also interesting to note that this

extended acknowledged subjectivity of the Natural Sciences by contemporary Philosophy of Science was achieved in the absence of a concern whether "human experience" is part of the possible "objects" of scientific inquiry!

6.2 External limitations: Consciousness and qualia

Whether one stresses Popperian Critical rationalism's self-acknowledged inability to reach beyond a hypothetical or speculative grasp of "Reality", or whether one stresses Popperian Critical rationalism's self-denied inability to achieve "objective" empirical confrontation of its hypotheses or speculations about "Reality", one remains within the confines of what is deemed accessible to Critical rationalism's Science. Does Critical rationalism's science claim access to all aspects of human experience, or does it stop just short of such exhaustiveness? If Gendlin's "program" addresses "human experience" in its widest, most encompassing sense, answering this question in a manner that would imply there are indeed facets of human experience that lie outside the reach of Critical rationalism's science could be of crucial importance.

It has long been argued that some facets of human experience do lie outside the reach of rationality, and *a fortiori* outside the reach of Critical rationalism. Let Koch (1983) speak to it:

> Some years ago, while visiting a small liberal arts college, I was asked to have lunch with the resident philosophers. In the formal discussion session that followed the meal, my first questioner was a young faculty member. The tone of his question suggested his expectation of rapid-and final-edification. "Dr. Koch," he said, "what is your solution to the mind-body problem?" I think I mumbled that despite my Hungarian aura of omniscience, my mind was still open on the issue, and that though I considered it an important and meaningful one, I suspected it was undecidable in principle.

Later, it occurred to me that had the question been put to me some thirty years earlier, I would certainly have been able to untuck from my head a confident and final response. I would have said that because the question was asked in ontological form (i.e., in what Carnap would then have called "the material mode of speech"), it was undecidable in principle and therefore meaningless. However, if the intent of this pseudoquestion could be extricated from its ontological housing and translated into "the formal mode of speech," then it would become the utterly manageable, psychology and physiology. Of course, part of me -- even then -- was surely apprised that both of these languages were woefully asystematic, mixed, and programmatic and, moreover, that each of the languages was not a single language but rather a congeries of languages, each member of which was shared in the typical instance by one person. But that particular part of me did not speak to the rest of me.

Nor did Immanuel Kant speak to me in an especially persuasive way in those days. In the course of his majestic construction of the critical philosophy, he had perceived that humankind is boxed in a curious way. He had discerned that there is a class of questions which human reason must necessarily confront but which are rationally undecidable. These, as every schoolchild knows, are the antinomies of pure reason -issues such that a thesis and its contradictory antithesis can both be proved. The four particular antinomies Kant considers bear, in the usefully brief words of one commentator (Weldon, 1958, p. 81), on "the infinite extent and divisibility of space and time and also the existence of God and the freedom of the will." Post-Kantian sophisticates are fond of noting that the proofs are not formally unassailable, but the impeccability of the specific proofs has nothing to do with Kant's more general insight that there is a class of questions, intensely meaningful to all human beings — questions over which many experience great anguish — which "transcend the competence of human reason". The questions are meaningful but rationally undecidable in principle.

I suggest that the class of such undecidable yet meaningful propositions is far broader than the four antinomies that Kant thought it necessary to develop in pursuit of his systematic objective-which, in the immediate context of the antinomies, was to demonstrate the inadequacy of dogmatic metaphysics and theology. Moreover, if

metaphorical extension of the notion be permitted, it rapidly becomes evident that a very broad range of human concerns, and even processes, exhibit, as it were, an "antinomal texture." I should like to identify certain consequences of this widespread "antinomality" for human knowledge and also for some characteristics of psychological inquiry in this century. (To emphasize that I am metaphorically building upon the strict logical sense of the term antinomy -- and also for purposes of euphony -- I have substituted these neologisms for the literally correct constructions "antinomial" and "antinomiality.")

First, I shall call upon Bertrand Russell as witness. The quotation from him may seem a bit long, but it will repay attention in better coin than I can mint. In one of his more inspiring moments, he gave the following definition of philosophy:

> Philosophy ... is something intermediate between theology and science. Like theology, it consists of speculations on matters as to which definite knowledge has, so far, been unascertainable; but like science, it appeals to human reason rather than to authority .... Almost all the questions of most interest to speculative minds are such as science cannot answer, and the confident answers of theologians no longer seem so convincing as they did in former centuries. Is the world divided into mind and matter, and, if so, what is mind and what is matter? Is mind subject to matter, or is it possessed of independent powers? Has the universe any unity or purpose? Is it evolving towards some goal? Are there really laws of nature, or do we believe in them only because of our innate love of order? Is man what he seems to the astronomer, a tiny lump of impure carbon and water impotently crawling on a small and unimportant planet? Or is he what he appears to Hamlet? Is he perhaps both at once? Is there a way of living that is noble and another that is base, or are all ways of living merely futile? If there is a way of living that is noble, in what does it consist, and how shall we achieve it? Must the good be eternal in order to deserve to be valued, or is it worth seeking even if the universe is inexorably moving towards death? ... To such questions no answer can be found in the laboratory.... The studying of these questions, if not the answering of them, is the business of philosophy.

> Why, then, you may ask, waste time on such insoluble problems? To this one may answer as a historian, or *as an individual facing the terror of cosmic loneliness.*

We will skip the historian's answer and continue with Russell's "more personal" answer:

> Science tells us what we can know, but what we can know is little, and if we forget how much we cannot know we become insensitive to many things of very great importance.... Uncertainty, in the presence of vivid hopes and fears, is painful, but must be endured if we wish to live without the support of comforting fairy tales. *It is not good either to forget the questions that philosophy asks, or to persuade ourselves that we have found indubitable answers to them. To teach how to live without certainty, and yet without being paralyzed by hesitation, is perhaps the chief thing that philosophy, in our age, can still do for those who study it.* (Russell, 1945, pp. xiii-xiv, italics added).

I invite you, in passing, to contrast these attitudes with the following statement by Schlick in the initial paper of the first issue of Erkenntnis (1930-1931), the international journal of the Vienna Circle:

> I am convinced that we are in the middle of an altogether final turn in philosophy. I am justified, on good grounds, in regarding the sterile conflict of systems as settled. Our time, so I claim, possesses already the methods by which any conflict of this kind is rendered superfluous; what matters is only to apply these methods resolutely. (translated and quoted in Frank, 1950, p.41).

Schlick's statement is far more characteristic of the dominant tone of philosophy in this century than is Russell's. (Koch, 1985, pp. 82-84)

Now what questions would the typical critical rationalist classify as "intensely meaningful questions which escape the competence of human reason", if such a class exists at all for him?

Clearly, any question which asks for the (empirically testable) explanation of an aspect of human experience for which this request makes no sense would constitute a "reasonable" candidate for membership into such a class. For the purpose of the present discussion, we will limit ourselves to those formulations of such questions encountered in current Cognitive and Neuro Sciences, as the latest and most relevant developments in the evolution of scientific Psychology.

The first question which meets our criterion is clearly, and overwhelmingly consensually, that of how to explain consciousness. As Chalmers said (1996):

> Consciousness is the biggest mystery. It may be the largest outstanding obstacle in our quest for a scientific understanding of the universe. The science of physics is not yet complete but it is well understood; the science of biology has removed many ancient mysteries surrounding the nature of life. There are gaps in our understanding of these fields, but they do not seem intractable. We have a sense of what a solution to these problems might look like; we just need to get the details right.
>
> Even in the science of the mind, much progress has been made. Recent work in cognitive science and neuroscience is leading us to a better understanding of human behavior and of the processes that drive it. We do not have many detailed theories of cognition, to be sure, but the details cannot be too far off. Consciousness, however, is as perplexing as it ever was. It still seems utterly mysterious that the causation of behavior should be accompanied by a subjective inner life. (p. xi)

But has "consciousness" been defined as clearly and overwhelmingly consensually as concern for it has? Obviously not: defining consciousness seems almost as hard as explaining it. Chalmers (1996) says:

> Conscious experience is at once the most familiar thing in the world and the most mysterious. There is nothing we know about more directly than consciousness, but it is far from clear how to reconcile it with everything else we know. Why does it exist? What does it do? How could it possibly arise from lumpy gray matter? We

> know consciousness far more intimately than we know the rest of the world, but we understand the rest of the world far better than we understand consciousness. Consciousness can be startlingly intense. It is the most vivid of phenomena; nothing is more real to us. But it can be frustratingly diaphanous: in talking about conscious experience, it is notoriously difficult to pin down the subject matter. (p. 3)

The International Dictionary of Psychology does not even try to give a straightforward characterization:

> *Consciousness*: The having of perceptions, thoughts, and feelings; awareness. The term is impossible to define except in terms that are unintelligible without a grasp of what consciousness means. Many fall into the trap of confusing consciousness with self-consciousness -to be conscious it is only necessary to be aware of the external world. Consciousness is a fascinating but elusive phenomenon: it is impossible to specify what it is, what it does or why it evolved. Nothing worth reading has been written about it. (Sutherland, 1989)

Next to the concept of "consciousness", in fact almost overlapping it according to some authors, lies the concept of "qualia", or "qualities of phenomenal experience", with the most popular example bieng the "redness" of the "Red", a concept that all seem to be able to understand, and give profound meaning to, but which resists a consensual convincing definition almost as much as consciousness does:

> The subject matter is perhaps best characterized as 'the subjective quality of experience'. ... Conscious experiences range from vivid color sensations to experiences of the faintest background aromas; from hard-edged pains to the elusive experience of thoughts on the tip of one's tongue; from mundane sounds and smells to the encompassing grandeur of musical experience; from the triviality of a nagging itch to the weight of a deep existential angst; from the specificity of the taste of peppermint to the generality of one's experience of selfhood. All these have a distinct experienced quality. ...
>
> ... These qualitative feels are also known as phenomenal qualities, or *qualia* for short. (Chalmers, 1996, p. 4)

Now one might ask what is left, once consciousness and qualia are put aside, for rational thought to grasp among the various aspects of "human experiencing". From the standpoint of contemporary Cognitive and Neuro Sciences, this "rationalizable" portion of human experiencing might be said to amount to its "categorical" content. By "categorical", one should understand "computational". Indeed, both Cognitive and Neuro Sciences can be argued to assume the computational nature of their object of study, be it the brain or the mind. So in as much as human experiencing can be explained in computational terms, i.e. in terms of "effective decision procedures", it can be grasped scientifically.

The question of which physical categories are involved in causing the psychological category "Red", for instance, can be addressed by psychophysics through an experimental paradigm that involves presenting a human subject with various combinations of light waves of various frequencies and amplitudes, and asking the subject to press a button when he experiences the light as being "Red". Discussion of the results of such an experiment might allow researchers to assess the legitimacy of theorizing that the psychological category "Red" is evoked as a result of the execution of an effective decision procedure applying some specified set of criteria regarding the presence of specific combinations of light waves at specific frequencies and amplitudes.

If you generalize this scenario over the full range of perceptual, cognitive, and emotional realms of human experience, you have just established the scope of the scientific intent that underpins what is known as Cognitive Sciences. What is crucial here is that as "knowledge" grows about how the "categories" of experience interpenetrate one another in causal chains, "knowledge" about how "qualia" and "consciousness" come to be stands absolutely still. Indeed, however categorically consistent button pressing might turn out to be

vis-à-vis some stimulation scenarios or other, the "qualiative texture" of the conscious experience of the "category" at stake in no way transpires in the data, and remains absolutely mysterious. "Redness" could be "qualiatively" experienced as auditory timber for instance: the behaviour would not change!

In this context, the flow of living experience becomes a tightly interwoven texture comprised of qualiative texture and categorical networks, with the latter as sole hope for Critical rationalism's explanatory dreams.

Where Gendlin stands in terms of this qualiative/categorical distinction remains undecidable.

Bibliography

Andersson, G.(1994). ***Criticism and the history of science: Kuhn's, Lakatos's and Feyerabend's criticisms of Critical rationalism*** (Translation). Leiden, The Netherlands: E._J. Brill. (Originally published in 1988)

Aristotle (1964). ***Prior and Posterior Analytics*** (Edited, translated, with an introduction by John Warrington). London: Dent.

Audi, R. (1995). ***The Cambridge dictionary of philosophy***. Cambridge, NY: Cambridge University Press.

Benjafield, J. G. (1994). ***Thinking critically about research methods.*** Needham Heights, Massachusetts: Allyn and Bacon.

Bergin A. E. (1970). Psychology as a science of inner experience. In J. T. Hart, & T. M. Tomlinson (Eds.), ***New directions in client-centered therapy*** (chap 4, pp. 61-69). Boston, Mass.: Houghton Mifflin Company.

Berkson, W., & Wettersten, J. (1984). ***Learning from error: Karl Popper's psychology of learning.*** La Salle, Illinois: Open Court publishing Company.

Boyer, A. (1994). ***Introduction à la lecture de Karl Popper.*** Paris, France: Presses de l'École normale supérieure.

Carnap, R. (1959). The elimination of metaphysics through the logical analysis of language. In A. J. Ayer (Ed.), ***Logical positivism*** (pp. 60-81). New York, NY: The Free Press. (Original work published 1932)

Carnap, R. (1969). ***The logical structure of the world.*** (Rolf A. George, trans.). Berkely, CA: University of California Press.

Carnap, R. (1981). Protocol statements and the formal mode of speech. In O. Hanfling (Ed), ***Essential readings in Logical positivism*** (pp. 150-160). Oxford, England: Basil Blackwell Publisher Limited.

Chalmers, A. (1982). ***What is this thing called science?*** (Second edition). Buckingham, GB.: Open University Press.

Chalmers, A. (1990). ***Science and its fabrication.*** Minneapolis, MN: University of Minneapolis Press.

Chalmers, D. J. (1996). ***The conscious mind.*** Oxford: Oxford University Press.

Christensen, L. B. (1994). ***Experimental methodology (6th ed.).*** Needham Heights, MA: Simon Schuster, Inc.

Cloonan, T. F. (1995). The early history of phenomenological psychological research in America. ***Journal of Phenomenological Psychology, 26*** (1), 46-126.

Corvi, R. (1997). ***An introduction to the thought of K. Popper.*** (P. Camiller. Trans.). New York, NY: Routledge. (Original work published 1993)

Cromer, A. (1997). ***Connected knowledge: Science, philosophy, and education.*** New York, NY: Oxford University Press.

Cushman, P. (1992). Psychotherapy to 1992: A historically situated interpretation. In Donald K. Freedheim (Ed.). ***History of psychotherapy: A century of change*** (pp. 21-64). Washington, DC: American Psychological Association.

DeCarvalho, R. J. (1991). ***The founders of Humanistic psychology.*** New York, NY: Praeger Publishers.

Depestele, F. (1997). Primary bibliography of Eugene T. Gendlin. ***The Folio, 15*** (2), 65-81.

Dewsbury, D. A. (1997). On the evolution of divisions. ***American Psychologist, 52***(7), 733-741.

Durak, G. M., Bernstein, R., & Gendlin, E. T. (1997). Effects on focusing training on therapy process and outcome. ***The folio, 15*** (2), 7-14.

Embree, L. (Ed.) (1979). ***Phenomenology and the theory of science.*** (First printing, 1974). Evanston, U.S.: Nortwestern University Press.

Fishman, D. B., & Franks, C. M. (1992). Evolution and differentiation within behavior therapy: A theoretical and epistemological review. In Donald K. Freedheim (Ed.). ***History of psychotherapy: A century of change*** (pp. 159-196). Washington, DC: American Psychological Association.

Gendlin, E. T. (1958). ***The function of experiencing in symbolization***. Unpublished doctoral dissertation, University of Chicago, Department of Philosophy, Chicago.

Gendlin, E. T. (1961). Experiencing: A variable in the process of therapeutic change. ***American journal of psychotherapy, 15*** (2), 233-245.

Gendlin, E. T. (1962). ***Experiencing and the creation of meaning***. Toronto, Ontario: The Free Press of Glencoe.

Gendlin, E. T. (1964). A theory of personality change. In P. Worchel & D. Byrne (Eds.), ***Personality change*** (pp. 102-148). New York, NY: Wiley and Sons.

Gendlin, E. T. (1965). Expressive meanings. In J. M. Edie (Ed.), ***An invitation to phenomenology. Studies in the philosophy of experience*** (pp. 240-251). Chicago, USA: Quadrangle Books.

Gendlin, E. T. (1965-1966/1969). Experiential explication of truth. ***Journal of existentialism, 6,*** 131-146. Reprinted in F.R. Molina (Ed.), (1969). ***The sources of existantialism as philosophy*** (pp. 196-216). Englewood Cliffs, NJ: Prentice Hall.

Gendlin, E. T. (1966/1973). Existentialism and experiential psychotherapy. In C. Moustakas (Ed.), ***Existential child therapy*** (pp. 206-246). New York, NY: Basic Books. Reprinted in C. Moustakas (Ed.) (1973). ***The child's discovery of himself*** (p. 206-247). New York, NY: Jason Aronson, Inc.

Gendlin, E. T. (1968). The experiential response. In E. F. Hammer (Ed.), ***Use of interpretation in treatment: Technique and art*** (pp. 208-227). New York, NY: Grune & Stratton.

Gendlin, E. T. (1969). Focusing. ***Psychotherapy: Theory, research, and practice, 6*** (1), 4-15.

Gendlin, E. T. (1973). Experiential phenomenology. In Maurice Natanson (Ed.), ***Phenomenology and the social sciences*** (Volume 1, pp. 281-319). Evanston, Ill.: Northwestern University Press.

Gendlin, E. T. (1974). Client-centered and experiential psychotherapy. In D. A. Wexler & L. N. Rice (Eds.), Innovations in client-centered therapy (pp. 211-246). New York, NY: John Wiley & Sons.

Gendlin, E. T. (1977). Phenomenological concepts versus phenomenological method: A critique of Medard Boss on dreams. ***Soundings*, 40**, 285-300.

Gendlin, E. T. (1978). The body's releasing steps in experiential process. In J. L. Fosshage, & P. Olsen, ***Healing: Implications for psychotherapy*** (pp. 323-348). New York, NY: Human Sciences Press.

Gendlin, E. T. (1978/1979). Befindlichkeit: Heidegger and the philosophy of psychology. ***Review of existential psychology and psychiatry, 16,*** 43-71.

Gendlin, E. T. (1979). Experiential Psychotherapy. In Raymond .J Corsini (Ed.), ***Current Psychotherapies*** (pp. 340-373). Itasca, Illinois: F.E. Peacock Publishers, Inc.

Gendlin, E. T. (1980). Imagery is more powerful with focusing: Theory and practice. In Joseph E. Sorr, Gail E. Sobel, Pennee Robin & Jack A. Connella (Eds), ***Imagery - Its many dimensions and applications*** (pp. 65-73). New York, NY: Plenum Press.

Gendlin, E. T. (1981a). ***A process model.*** Unpublished manuscript. (In eight parts, 422 pages).

Gendlin, E. T. (1981b). ***Focusing*** (Second edition). New York: Bantam Books.

Gendlin, E. T. (1982). Two phenomenologists do not disagree. In R. Bruzina & B. Wilshire (Eds.), ***Phenomenology: Dialogues and bridges*** (pp. 321-335). Albany, NY: State University of New York Press.

Gendlin, E. T. (1983). Dwelling. In R. C. Scharff (Ed.), ***Heidegger conference proceedings*** (pp. 133-153). Durham: The University of New Hampshire.

Gendlin, E. T. (1986). What comes after traditional psychotherapy research? ***American Psychologist, 41*** (2), 131-136.

Gendlin, E. T. (1987). A philosophical critique of the concept of narcissism: The signification of the awareness movement. In David Michael Levin (Ed), ***Pathologies of the modern self*** (pp. 251-304). New York, NY: New York University Press.

Gendlin, E. T. (1989a). Phenomenology as non-logical steps. In E. F. Kaelin & C. O. Schrag (Eds.), ***Analecta Husserliana. Vol XXVI. American phenomenology. Origins and developments*** (pp. 404-410). Dordrecht: Kluwer.

Gendlin, E. T. (1989b). Psychotherapy research: Toward a bodily human nature. ***Discours social/Social Discourse, Vol II,*** (1-2) Spring-Summer, pp. 201-212.

Gendlin, E. T. (1990). The small steps of the therapy process: How they come and how to help them come. In G, Lietar, J. Rombauts, and R. VanBalen (Eds.), ***Client-centered and experiential psychotherapy in the nineties*** (pp. 205-224). Leuven, Belgium: Leuven University Press.

Gendlin, E. T. (1991a). On emotion in therapy. In J. D. Safran & L. S. Greenberg (Eds.), ***Emotion, psychotherapy and change*** (pp. 255-279). New York & London: Guilford.

Gendlin, E. T. (1991b). Thinking beyond patterns: Body, language, and situations. In B. denOuden and M. Moen (Eds.), ***The presence of feeling in thought*** (pp. 21-151). New York, NY: Peter Lange.

Gendlin, E. T. (1992a). The primacy of the body, not the primacy of perception. ***Man and world, 25*** (3-4), 341-353.

Gendlin, E. T. (1992b). The wider role of bodily sense in thought and language. In Maxine Sheets-Johnstone (Ed.), ***Giving the body its due*** (pp. 192-207). Albany, NY: State University of New York Press.

Gendlin, E. T. (1995). Crossing and dipping: Some terms for approaching the interface between natural understanding and logical formulation. ***Minds and machines, 5,*** 547-560. (Initial publication in 1991)

Gendlin, E. T. (1996). ***Focusing-oriented psychotherapy.*** New York, NY: The Guilford Press.

Gendlin, E. T. (1997a). The responsive order: A new empiricism. ***Man and world, 30*** (3), 383-411.

Gendlin E. T. (1997b). The use of focusing in therapy. In J. K. Zeig (Ed.), ***The evolution of psychotherapy: The third conference*** (pp. 197-212). New York, NY: Brunner/Mazel, Inc.

Gendlin, E. T., Beebe, J., Cassens, J., Klein, M., & Oberlander, M. (1968). Focusing ability in psychotherapy, personality and creativity. In J. M. Shlien (Ed.), ***Research in psychotherapy*** (Vol. 3, pp. 217-241). Washington, D.C.: American Psychological Association. (Original paper presented to third A.P.A. Conference on research in psychotherapy, Chicago, 1966)

Gendlin, E. T., & Berlin, J. I. (1961). Galvanic skin response correlates of different modes of experiencing. ***Journal of clinical psychology, 17*** (1), 73-77.

Gendlin, E. T., Jenney, R. H., & Shlien, J. M. (1960). Counselor ratings of process and outcome in client-centered therapy. ***Journal of clinical psychology, 16,*** 210-213. (Originally A.P.A. paper presentation, 1956)

Gendlin, E.T. & Lietaer, G. (1983). On client-centered and experiential psychotherapy: An interview with Eugene Gendlin. In W. R. Minsel & W. Herff (Eds.), ***Research on psychotherapeutic approaches. Proceedings of the 1st European conference on psychotherapy research*** (Trier, 1981, Vol. 2, pp. 77-104). Frankfurt am Main/Bern: Peter Lang.

Gendlin, E. T., & Rogers, C. R. (1976). The conceptual context. In Carl R. Rogers (Ed.), ***The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics*** (pp. 3-21). Westport, Connecticut: Greenwood Press, Publishers. (Originally published in 1967)

Gendlin, E. T., & Rogers, C. R. (1976). The design of the research. In Carl R. Rogers (Ed.), ***The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics*** (pp. 23-38). Westport, Connecticut: Greenwood Press, Publishers. (Originally published in 1967)

Gendlin, E. T., & Shlien, J. M. (1961). Immediacy in time attitudes before and after time-limited psychotherapy. ***Journal of clinical psychology, 17*** (1), 69-72.

Gendlin, E. T., & Tomlinson, T. M. (1960). ***Experiencing scale manual.*** Unpublished manuscript.

Gendlin, E. T., & Tomlinson, T. M. (1976). The process conception and its measurement. In Carl R. Rogers (Ed.), ***The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics*** pp. 109-131. Westport, Connecticut: Greenwood Press, Publishers. (Originally published in 1967)

Gendlin, E. T., & Zimring, F. (1955). The qualities or dimensions of experiencing and their change. ***Counseling Center Discussion Papers, 1*** (3). University of Chicago Library.

Gilgen, A. R. (1982). ***American psychology since world war II: A profile of the discipline.*** Westport, Connecticut: Greenwood Press.

Giorgi, A. (1970). ***Psychology as a human science.*** New York, NY: Harper and Row.

Giorgi, A. (1971a). Phenomenology and experimental psychology: I. In A. Giorgi, W. F. Fischer, and R. Von Eckartsberg (Eds.), ***Duquesne studies in phenomenological psychology: Volume 1,*** p. 6-16. Pittsburgh, Pa.: Duquesne University Press.

Giorgi, A. (1971b). Phenomenology and experimental psychology: II. In A. Giorgi, W. F. Fischer, and R. Von Eckartsberg (Eds.), ***Duquesne studies in phenomenological psychology: Volume 1,*** p. 17-29. Pittsburgh, Pa: Duquesne University Press.

Giorgi, A. (1975). An application of the phenomenological method in psychology. In A. Giorgi, C. Fischer, and E. Murray (Eds.), ***Duquesne studies in phenomenological psychology: Volume 2,*** p. 6-16. Pittsburgh, Pa: Duquesne University Press.

Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. ***Journal of phenomenological psychology, 28*** (2), 235-260.

Goldfried, M. R., & Wolfe, B. E. (1996). Psychotherapy practice and research: Repairing a strained alliance. ***American Psychologist, 51*** (10), 1007-1016.

Gwinn, R. P., Norton, P. B., & Goetz, P. W. (Ed.). (1990). ***The New Encyclopaedia Britannica*** (15th ed., vol. 27). Chicago: Encyclopaedia Britannica, Inc.

Embree, L. (Ed.) (1979). ***Phenomenology and the theory of science*** (writings of Aron Gurwitsch) (First printing 1974). Evanston: Northwestern University Press.

Hacking, I. (1993). ***Representing and intervening: Introductory topics in the philosophy of natural science.*** (8Th ed.). Cambridge: Cambridge University Press.

Hanfling, O. (1981). ***Essential readings in Logical positivism.*** Oxford, England: Basil Blackwell Publisher Limited.

Hanson, N. R. (1958). ***Patterns of discovery.*** Cambridge: Cambridge University Press.

Heidegger, M. (1962). ***Being and time.*** (J. Macquarrie & E. Robinson, trans.). New York, NY: Harper and Row. (Original work published in 1927)

Helmstadter, G. C. (1970). ***Research concepts in human behavior.*** New York, NY: Appleton-Century-Crofts.

Hunter, B. (1992) Empiricism. In Jonathan Dancy and Ernest Sosa (Eds.), ***A companion to epistemology*** (pp.110-114). Cambridge, Mass.: Blackwell companions to philosophy.

Jacobson, M. (1993). ***Foundations of neuroscience***. New York, N.Y.: Plenum Press.

Jennings, J. L. (1984). ***Experiential psychotherapy: Its theory, research, clinical practice, and historical development***. Unpublished doctoral dissertation, University of New Hampshire, New Hampshire.

Kim, J. & Sosa, E. (Eds.). (1995). ***A companion to metaphysics***. Cambridge, Mass.: Blackwell companions of philosophy.

Kirschenbaum, H. (1980). ***On becoming Carl Rogers***. New York, NY: Delta Book.

Klein, H. M., Mathieu-Coughlan, P., & Kiesler, D. J. (1986). The experiencing scale. In Leslie S. Greenberg, & William M. Pinsof (Eds.). ***The psychotherapeutic process: A research handbook*** (pp. 21-71). New York, NY: The Guilford Press.

Klein, P., & Westcott, M. R. (1994). The changing character of phenomenological psychology. ***Canadian psychology/Psychologie canadienne, 35***(2), 133-157.

Koch, S. (1985). The nature and limits of psychological knowledge. In Sigmund Koch and David E. Leary (Eds), ***A century of psychology as science***. New York, NY: McGraw-Hill, Inc.

Kockelmans, J. J. (1971). Phenomenological psychology in the United States: A critical analysis of the actual situation. ***Journal of phenomenological psychology, 1*** (2), 139-172.

Kossmann, M. R., & Bullrich, S. (1997). Systematic chaos: Self-organizing systems and the process of change. In F. Masterpasqua & P. A. Perna (Eds.), ***The psychological meaning of chaos*** (pp. 199-224). Washington, DC: American Psychological Association.

Lamontagne, C., Bénard, M., & Delage, J.-P. (1998). ***Vers un design cognitif universel***. Unpublished manuscript, School of psychology, University of Ottawa.

Lamontagne, C., Delage, J. P., Bénard, M. (1997). Towards an object-oriented learning environment for cognitive information management: Pedagogical foundations and universal cognitive shell. ***Proceedings of the 15th Annual International Conference of the Association of Management*** (pp. 195-200). Chesapeake, Virginia: Maximilian Press.

Laudan, L. (1996). ***Beyond positivism and relativism***. Boulder, Colorado: Westview Press Inc.

Liebert, R. M. (1995). ***Science and behavior: An introduction to methods of psychological research*** (4rd ed.). Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Levin, D. M. (1994). Making sense: The work of Eugene Gendlin. ***Human Studies, 17*** (3), 343-353.

Levin, D. M. (Eds.). (1997). ***Language beyond postmodernism: Saying and thinking in Gendlin's philosophy***. Evanston, Illinois: Northwestern University Press.

Lietar, G., Rombauts, J. & VanBalen, R. (Eds.). ***Client-centered and experiential psychotherapy in the nineties***. Leuven, Belgium: Leuven University Press.

Losee, J. (1980). ***A historical introduction to the philosophy of science***. (Second Edition). Oxford, NY: Oxford University Press.

Losee, J. (1993). ***A historical introduction to the philosophy of science***. (Third Edition). Oxford, NY: Oxford University press.

Magee, B. (1979). ***Philosophy and the real world: An introduction to Karl Popper***. La Salle, Illinois: Open Court.

Mahoney, M. J., & Moes, A. J. (1997). Complexity and psychotherapy: Promising dialogues and practical issues. In F. Masterpasqua & P. A. Perna (Eds.), ***The psychological meaning of chaos*** (pp. 177-198). Washington, DC: American Psychological Association.

Mainzer, K. (1994). ***Thinking in complexity: The complex dynamics of matter, mind and mankind.*** Berlin,Germany: Springer-Verlag.

Makkreel, R. A., & Rodi, F. (Eds). (1985). ***Introduction to the human sciences*** (Wilhelm Dilthey; Vol I). Princeton, New Jersey: Princeton University Press.

Marsonet, M. (1995). ***Science, reality, and language***. Albany, NY: State University of New York Press.

Masterpasqua, F., & Perna, P. A. (1997). ***The psychological meaning of chaos***. Washington, DC: American Psychological Association.

McGuigan, F. J. (1997). ***Experimental psychology: Methods of research (7^{th} ed.)***. New Jersey, US: Prentice Hall.

Merleau-Ponty, M. (1983). ***Phénoménologie de la perception***. Saint-Amand, France: Gallimard. (Original work published 1945)

Moustakas, C. (1994). ***Phenomenological research methods***. Thousand Oaks, California: Sage Publications, Inc.

Morowitz, H. J., & Singer, L. (Eds.). (1995). ***The mind, the brain and complex adaptive systems.*** Reading, MA: Addison-Wesley Publishing Company.

Mura, R. (1991). Searching for subjectivity in the world of the sciences: Feminist viewpoint. ***The CRIAW papers – Les documents de l'ICREF***., No 25. Ottawa, Ontario: CRIAW/ICREF.

Musgrave, A. (1993a). ***Common sense, science and scepticism: A historical introduction to the theory of knowledge***. Cambridge, New York: Cambridge University Press.

Musgrave, A. (1993b). Popper on induction. ***Philosophy of the social sciences, 23*** (4), 516-527.

Nicolis, G., & Prigogine, I. (1989). ***Exploring complexity***. New York, NY: W. H. Freeman and Company.

Norris, C. (1997). ***Against relativism: Philosophy of science, deconstruction, and critical theory***. Malden, Mass.:Blackwell Publishers Inc.

Oldroyd, D. (1986). ***The arch of knowledge***. New York, NY: Methuen & Co.

Osborne, J. W. (1994). Some similarities and differences among phenomenological and other methods of psychological qualitative research. ***Canadian psychology/Psychologie canadienne, 35*** (2), 167-189.

Perna P.A. (1997). Reflections on the therapeutic system as seen from the science of chaos and complexity. In F. Masterpasqua & P. A. Perna (Eds.), ***The psychological meaning of chaos***. pp. 253-272. Washington, DC: American Psychological Association.

Perna P.A., & Masterpasqua, F. (1997). Introduction: The history, meaning, and implications of chaos and complexity. In F. Masterpasqua & P. A. Perna (Eds.), ***The psychological meaning of chaos*** (pp. 1-19). Washington, DC: American Psychological Association.

Polkinghorne, D. (1983). ***Methodology for the human sciences: Systems of inquiry***. Albany, NY: State University of New York Press.

Popper, K. R. (1959/1992). ***The logic of scientific discovery.*** London, England: Routledge. (Original book published in German in 1934, reprinted in 1992)

Popper, K. R. (1968). ***Conjectures and refutations: The growth of scientific knowledge***. New York, NY: Harper & Row, Publishers, incorporated. (Originally published in 1962 by Basic Books)

Popper, K. R. (1972). ***Objective knowledge: An evolutionary approach*** - revised edition (first published in 1972, sixth impression 1991). Oxford: Clarendon Press.

Popper, K. R. (1982). ***Unended quest: An intellectual autobiography*** (Revised edition). La Salle, Illinois: Open Court Publishing Co.

Popper, K. R. (1983). ***Realism and the aim of science: From the postscript to the Logic of scientific discovery***. Totowa, New Jersey: Rowman and Littlefield.

Popper, K. R. (1988). ***The open universe: Arguments for indeterminism. Postcript to the logic of scientific discovery, Vol.2***. London, UK: Routledge.

Popper, K. R. (1994). ***The myth of the framework: In defense of science and rationality***. London, Eng.: Routledge.

Popper, K. R., Lindahl, B. I. B., & Arhem, P. (1993). A discussion of the mind-brain problem. ***Theoretical medicine, 14***, 167-180.

Reichenbach, H. (1949). The philosophical significance of relativity theory. In Paul Arthur Schilpp (Ed.), ***Albert Einstein: Philosopher-scientists***. Evanston: The library of living philosophers, Inc.

Reichenbach , H. (1951). ***The rise of scientific philosophy***. Berkeley, California: University of California Press.

Rice, L. N., & Greenberg, L. S. (1992). Humanistic approach to psychotherapy. In Donald K. Freedheim (Ed.), ***History of psychotherapy: A century of change*** (pp. 197-224). Washington, DC: American Psychological Association.

Robert, S. (1993). ***Les mécanismes de la découverte scientifique***. Ottawa, Canada: Les Presses de l'Université d'Ottawa.

Rogers, C. R. A. (1951). A theory of personality and behavior. In C. Rogers, ***Client-centered therapy***. Boston, Mass.: Houghton Mifflin.

Rogers, C. R. A. (1951). ***Client-centered therapy***. Boston, Mass.: Houghton Mifflin.

Rogers, C. R. A. (1958). A process conception of psychotherapy. ***American psychologist, 13***, 142-149.

Rogers, C. R. A. (1976). The relationship of the research program to psychological science. In Rogers, C. R. (Ed.), ***The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics*** (pp. 543-547). Westport, Connecticut: Greenwood Press, Publishers. (Originally published in 1967)

Rogers, C. R. A., Gendlin, E. T., Kiesler, D. V., & Truax, C. (Eds.). (1976). ***The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics***. Westport, Connecticut: Greenwood Press, Publishers. (Originally published in 1967)

Salmon, W. C. (1995). ***The problem of induction***. In R. Audi (Ed.), The Cambridge Dictonary of Philosophy (pp. 651-652). Cambridge, NY: Cambridge University Press.

Scharff, R. C. (1997). After Dilthey and Heidegger. In David Michael Levin (Ed.), ***Language beyond postmodernism; Saying and thinking in Gendlin's philosophy*** (pp. 190-233). Evanston, Illinois: Northwestern University Press.

Schilpp, P. A. (1974). ***The philosophy of Karl Popper***. The library of living philosophers, **Vol XIV**, Book 1. La sallle, Illinois: Open Court Publishing Co.

Schlagel, R. H. (1995). ***From myth to modern mind: A study of the origins and growth of scientific thought*** (Volume 1). New York: Peter Lang Publishing Inc.

Schneider, K. J. (1998). Toward a science of the heart. ***American Psychologist, 53*** (3), 277-289.

Seeman, J. (1997). Level of experiencing and psychotherapy outcome: A brief review. ***The Folio. 15*** (2), 15-17.

Shapiro, K. J. (1985). ***Bodily reflective modes***. Durham, US: Duke University Press.

Skinner, B. F. (1971). ***Beyond freedom and dignity***. New York: Bantam Books.

Smith, L. D. (1986). ***Behaviorism and Logical positivism***. Stanford, CA: Stanford University Press.

Spiegelberg, H. (1972). ***Phenomenology in psychology and psychiatry: A historical introduction.*** Evanston, Illinois: Northwestern University Press.

Spiegelberg, H. (1982). ***The phenomenological movement: A historical introduction.*** The Hague, Holland: Martinus Nijhoff Publishers.

Spinelli, E, (1989). ***The interpreted world: An introduction to phenomenological psychology.*** London, England: SAGE Publications Ltd.

Stricker, G. (1997). Are science and practice comensurable? ***American psychologist, 52*** (4), 442-448.

Strupp, H. H. & Howard, K. L. (1992). A brief history of psychotherapy research. In Donald K. Freedheim (Ed.), ***History of psychotherapy: A century of change*** (pp. 309-334). Washington, DC: American Psychological Association.

Tageson, C. W. (1982). ***Humanistic psychology: A synthesis***. Homewood, Illinois: The Dorsey Press.

Thinès, G. (1977). ***Phenomenology and the science of behaviour: A historical and epistemological approach***. London: George Allen & Unwin Publishers Ltd.

Tymieniecka, A.-T. (1989). The theme: The history of american phenomenology-in-process. In E. F. Kaelin & C.O. Schrag (Eds.), ***Analecta Husserliana. Vol. XXVI, American phenomenology: Origins and developments***, (pp. ix-xxix). Dordrecht, The Netherlands: Kluwer Academic Publishers.

Valle, R. S. & King, M. (1978). ***Existential-phenomenological alternatives for psychology***. New York, NY: Oxford University Press.

Van Kaam, A. (1969). ***Existential foundations of psychology***. Garden City, NY: Doubleday.

VandenBos, G. R. (1996). Outcome assessment of psychotherapy. ***American Psychologist, 51*** (10), 1005-1006.

Von Eckartsberg, R. (1986). ***Life-world experience***. Lanhma, MD: University Press of America, Inc.

Watson, J. B. (1913). Psychology as the behaviorist views it. ***Psychological Review, 20***, 158-177.

Wettersten, J. R. (1992). ***The roots of Critical rationalism***. Amsterdam, Atlanta, GA: Rodopi.

Zimring, F.M., & Raskin, N. J. (1992). Carl Rogers and client/person centered therapy. In Donald K. Freedheim (Ed.), ***History of psychotherapy: A century of change*** (pp. 629-656). Washington, DC: American Psychological Association.

Appendix
Focusing steps

Focusing steps

The **first step** (see table 3) in focusing has to do with *clearing a space*, a procedure that prepares the client for focusing. During this step, the person makes themself comfortable physically and then takes a few minutes to sort out all the issues and problems that prevent them from feeling contented. Then, these problems are pushed outside of the client immediate awareness to clear a space so focus can be given to the immediate experiencing. During that period of time, the person is asked to stay quiet and to let what ever wants to emerge to come out.

The **second step** is called *having a felt sense of the problem*. It is the hardest step because it requires the client to sense something vague in the body that as yet, has no meaning. With all the problems put aside, the person can begin to consider which problem hurt the most or which are the most pressing at the moment, or to let something emerge from his present life situation. A question could be: "what does this whole problem or situation feel like?" Instead of answering in words, the person is asked to feel the whole problem by focusing attention on the body, in particular in the middle of the body, around the stomach or chest area. The person should try to sense what bodily quality is there as they search for a single feeling that will encompass all there is about the problem. As the person waits in silence, attending to what is happening inside the body, something will emerge. Time must be allowed to let the *felt sense* arrive in its own way. The person has to be ready for anything. The *felt sense* can manifest itself as an unclear sense, as a large, vague, formless aura or, as Gendlin says, "The fuzzy, murky, unsatisfyingly vague sense that comes might seem like nothing at all"(1996b, p. 73). Once identified, it can be felt through-the-body concretely as a "there it is". This is how the body senses a problem. Notice that the person

identifies something without recourse to words or labels. During this step, the person can be asked to describe to the therapist the different aspects of their present body sensing.

Getting a handle on it is the **third step**. Gradually or spontaneously something will take shape and the person will try to put a handle on it, to find a symbol. When a symbol is right, it is called a handle. What is the quality of the *felt sense* ? could be one helpful question in order to find the right handle at this point. Words should not be forced onto the *felt sense;* words, phrases, music, images or other symbols must be permitted to flow out of the *felt sense*. The person is searching for the precise symbol that will capture the quality of the *felt sense* or that will have the best fit with the implicit meaning of the *felt sense*.

When there is a fit between the symbol and the *felt sense* the person will feel a physical sense of relief, a characteristic easing of tension, called a felt shift. It constitutes the **fourth step,** *resonating the handle* or checking back with the feeling. With this step, the person takes the symbol that has arisen from the *felt sense*, and matches it against the feeling. With a good fit, the *felt sense* content open; one aspect of the implicit felt meaningfulness has been explicated or conceptualized. If the labeling is inaccurate, there will be little or no bodily-felt effect. If the label fits well, other symbols can flow from the *felt sense*. This is called the carrying forward of the *felt sense*.

The **fifth step** or the *asking* is not necessary if the explicit meaning is clear, understandable and the person has lived a felt shift. However, if the person has difficulty matching the *felt sense* with the symbols then the therapist can help the person find the right symbols or better sense the *felt sense* by asking questions. If nothing moves, the therapist continues to ask questions while the person tries to sense if there is any internal effect associated with the questions

The *receiving* (or **the sixth step**) is a time to welcome the content of the symbolized meaning, to integrate its meaning with the elements of the present life situation and to act on it. It is important to allow some time to let the individual sense the impact of what is revealed through the *felt sense*.

In subsequent therapy sessions, another round of focusing steps can take place or the process can be considered complete. The number of rounds necessary before a problem feels resolved depends on the severity of the problem. A small problem may be resolved within one round, while a more serious problem may require many such rounds over an extended period of time. In focusing, resolving a problem means an individual experiences a physical shift in how one's feels.

->0 Preparation	->1 Clearing a space	->2 Felt sense of the problem	->3 Finding a handle	->4 Resonating handle and felt sense	->5 Asking	->6 Receiving
-Try to find a sense of general comfort, if not total well-being -Settle back and mentally relax.	1- Stay quiet 2- Ask yourself: .How do I feel ? .What is bugging me on this particular day ? 3- Listen, let what comes come 4- Don't get snagged on any one problem- just list the problems mentally - stack them in front of you - step back and survey from a distance 5- any small increase in well-being ?	Establishing contact with the felt sense of a problem 0- A felt sense is a feeling that gives you a sense of all of that. It is holistic, unclear sense of the whole thing. It could be murky, fuzzy, vague 1- Which problem feels the worst right now or just choose one problem 2- What does this whole problem feel like ? but don't answer in words - feel the problem whole, the sense of all that 3- Pay attention to, let your mind be receptive to certain things happening inside.	1- Let words or pictures come from the feeling 2- What is the core of the felt sense - What is the quality of the felt sense - the crux of all that ? 3- Avoid forcing words into the felt sense. Let it come to you with its own essence 4- When a word or picture is right, it is call a "handle" - it fits 5- Pay attention, your problem may be changing - it may begin to feel different from earlier.	1- Take the word or image you got from the third movement and check it against the felt sense 2- Ask: is that right ? - look for a confirming sensation 3- After a perfect match, spend a minute to sense the rightness of the fit 4- Try to sense more accurately - wait again and let more exact words come from the feeling 5- You may sense a body shift with a bodily release	1- Spending some time staying with the felt sense or returning to it 2- or ask open questions 3- Differentiate between the merely mental answers and those from the felt sense 4- What does the felt sense need?	1- Welcome what ever comes 2- You are not in it you are next to it; you have it you are not it

Table 3. Eugene T. Gendlin's Focusing technique - six Focusing steps