CHAPTER 1

Human Science

Introduction

It may be useful to state at the outset what the intention of this book is and what interest a reader may have in it. On the one hand, this text describes a human science research approach, showing a semiotic employment of the methods of phenomenology and hermeneutics. And on the other hand, the text engages the reader in pedagogic reflection on how we live with children as parents, teachers, or educators.

So one may read this work primarily as a methodology, as a set of methodological suggestions for engaging in human science research and writing. But in the human sciences, as conceived in this text, one does not pursue research for the sake of research. It is presumed that one comes to the human sciences with a prior interest of, for example, a teacher, a nurse, or a psychologist. This book attempts to be relevant to researchers in nursing, psychology, and other such professions. But the fundamental orientation in here is pedagogic.

The various examples provided throughout this text will often involve an investigation of the meanings of teaching, parenting, and related pedagogic vocations—not assuming, of course, that teaching and parenting are identical phenomena. And so when we raise questions, gather data, describe a phenomenon, and construct textual interpretations, we do so as researchers who stand in the world in a pedagogic way.

One can distinguish a variety of approaches in the field of the human sciences. A research method is only a way of investigating certain kinds of questions. The questions themselves and the way one understands the questions are the important starting points, not the method as such.
But of course it is true as well that the way in which one articulates certain questions has something to do with the research method that one tends to identify with. So there exists a certain dialectic between question and method. Why then should one adopt one research approach over another? The choice should reflect more than mere whim, preference, taste, or fashion. Rather, the method one chooses ought to maintain a certain harmony with the deep interest that makes one an educator (a parent or teacher) in the first place.

The human science approach in this text is avowedly phenomenological, hermeneutic, and semiotic or language oriented, not just because that happens to be the particular interest or prejudice of the author but rather because pedagogy requires a phenomenological sensitivity to lived experience (children’s realities and lifeworlds). Pedagogy requires a hermeneutic ability to make interpretive sense of the phenomena of the lifeworld in order to see the pedagogic significance of situations and relations of living with children. And pedagogy requires a way with language in order to allow the research process of textual reflection to contribute to one’s pedagogic thoughtfulness and tact.

Pedagogy is the activity of teaching, parenting, educating, or generally living with children, that requires constant practical acting in concrete situations and relations. The knowledge forms generated by a human science methodology as described in this text are meant to serve the practical aims of pedagogy. The term “human science” is employed more narrowly in this text than it might be encountered elsewhere. Here, “human science” is often used interchangeably with the terms “phenomenology” or “hermeneutics.” This usage is not inconsistent with the hermeneutic phenomenological tradition as found in Germany (from about 1900 to 1965) and in the Netherlands (from about 1945 to 1970). The present text intends to be a modern extension of certain aspects of that tradition of “Human Science Pedagogy.”

To the extent that the European traditions are sources for this text, an attempt has been made to do a methodological reading of the work of German and Dutch authors. A distinguishing feature of the German Geisteswissenschaftliche Pädagogik and the Dutch Fenomenologische Pedagogiek has been that there was a marked unconcern with methods and epistemology. Students of outstanding scholars such as Nohl, Litt, Flitner, Bollnow, Langeveld, van den Berg, and Buystdijck were meant to learn the process by osmosis or apprenticeship, which the Germans
would sometimes call Bildung. Only the most talented succeeded. One said of Dutch scholars who worked in the phenomenological tradition that there was no mediocrity in their research: the work was either very
good or very bad. And, of course, only the good studies have survived—
which is one criterion of their quality.

In his book Truth and Method (1975) the philosopher Gadamer argues that the preoccupation with (objective) method or technique is
really antithetical to the spirit of human science scholarship. He shows
that the preoccupation of Dilthey or later Husserl to develop an objec-
tive human science led them to programs that are alienated from the
actual content of the concept of life. The irony in this argument is that
the reference to “method” in the title of Gadamer’s book, Truth and
Method, may have contributed to its immense popularity among scholars
in North America. At any rate, in this text I hope to show that there is
a way to deal with methodological concerns that is decidedly un-
methodological in a purely prescriptive or technocratic sense. The
fundamental thesis of this approach is that almost anyone who is seriously
interested in human science research can benefit from an examination
of its methodological dimensions. There is no guarantee, however, that
all students of the human sciences will be able to produce work that is
“very good.” One needs to be constantly on guard against the seductive
illusions of technique (Barrett, 1978).

In North America, the field of the human sciences (which includes
symbolic interactionism, phenomenological sociology, ethnography,
ethnomethodology, critical theory, gender study, semiotics, etc.) con-
sists of approaches to research and theorizing that have certain roots in
continental sources while other developments are indigenous to North
America. The distinction of “Human” Science versus “Natural”
Science is often attributed to Wilhelm Dilthey. Dilthey developed the
contrast between the Naturwissenschaften (the natural or physical
sciences) and the Geisteswissenschaften into a methodological program
for the latter. For Dilthey the proper subject matter for the Geisteswis-
senschaften is the human world characterized by Geist—mind, thoughts,
consciousness, values, feelings, emotions, actions, and purposes, which
find their objectifications in languages, beliefs, arts, and institutions.
Thus, at the risk of oversimplification one might say that the difference
between natural science and human science resides in what it studies:
natural science studies “objects of nature,” “things,” “natural events,”
and “the way that objects behave.” Human science, in contrast, studies

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“persons,” or beings that have “consciousness” and that “act purposefully” in and on the world by creating objects of “meaning” that are “expressions” of how human beings exist in the world.

The preferred method for natural science, since Galileo, has been detached observation, controlled experiment, and mathematical or quantitative measurement. And when the natural science method has been applied to the behavioral social sciences, it has retained procedures of experimentation and quantitative analysis. In contrast, the preferred method for human science involves description, interpretation, and self-reflective or critical analysis. We explain nature, but human life we must understand, said Dilthey (1976). Whereas natural science tends to taxonomize natural phenomena (such as in biology) and causally or probabilistically explain the behavior of things (such as in physics), human science aims at explicating the meaning of human phenomena (such as in literary or historical studies of texts) and at understanding the lived structures of meanings (such as in phenomenological studies of the lifeworld).

The starting point of this text is the belief that human science research in education done by educators ought to be guided by pedagogical standards. The fundamental model of this approach is textual reflection on the lived experiences and practical actions of everyday life with the intent to increase one’s thoughtfulness and practical resourcefulness or tact. Phenomenology describes how one orients to lived experience, hermeneutics describes how one interprets the “texts” of life, and semiotics is used here to develop a practical writing or linguistic approach to the method of phenomenology and hermeneutics. What is novel to this text is that research and writing are seen to be closely related, and practically inseparable pedagogical activities. The type of reflection required in the act of hermeneutic phenomenological writing on the meanings and significances of phenomena of daily life is fundamental to pedagogic research. Thus, this text has pedagogic ambitions at two levels. It offers a research approach that is fundamental to the process of pedagogy, and it tries to practise what it preaches by orienting itself to questions of pedagogy in the discussion of method.

Why Do Human Science Research?

“Whoever is searching for the human being first must find the lantern,” Nietzsche said once (Buysendijk, 1947, p. 22). In this aphoris-
tic reference to the philosopher Diogenes, Nietzsche raised two questions: What does it mean to study the human being in his or her humanness? And, what methodology is required for this kind of study? Diogenes was a Greek philosopher living in the fourth century BC and now known to us as an unconventional thinker of a cutting wit and repartee who taught his fellow citizens largely by pantomimic gesture and example. One day Diogenes was reported to have gone about the city in clear daylight with a lit lantern looking about as if he had lost something. When people came up to ask what he was trying to find he answered: "Even with a lamp in broad daylight I cannot find a real human being," and when people pointed to themselves he chased them with a stick, shouting "it is real human beings I want." Of course, most people laughed at this demonstration. But the anecdote survived because it did bring some to reflect on the most original question contained in Diogenes' pantomimic exercise: What is the nature of human being? And what does it mean to ask this question? Diogenes' demonstration was meant as well to jar the moral consciousness of those who settle for easy answers—a human being is not just something you automatically are, it is also something you must try to be. And apparently Diogenes implied that he had great trouble finding some good examples. The bizarre prop of the lit lamp in bright daylight was his way of saying that he could not "see" any human beings. He felt the need to throw some light on the matter; or perhaps more appropriately, with his lamp Diogenes showed a commitment, not to fancy abstract philosophical discourse, but to practical reflection in the concreteness and fullness of lived life.

From a phenomenological point of view, to do research is always to question the way we experience the world, to want to know the world in which we live as human beings. And since to know the world is profoundly to be in the world in a certain way, the act of researching—questioning—theorizing is the intentional act of attaching ourselves to the world, to become more fully part of it, or better, to become the world. Phenomenology calls this inseparable connection to the world the principle of "intentionality." In doing research we question the world's very secrets and intimacies which are constitutive of the world, and which bring the world as world into being for us and in us. Then research is a caring act: we want to know that which is most essential to being. To care is to serve and to share our being with the one we love. We desire to truly know our loved one's very nature. And if our love is
strong enough, we not only will learn much about life, we also will come face to face with its mystery.

The Austrian psychologist, Ludwig Binswanger (1963, p. 173), has shown that the reverse is true as well. We can only understand something or someone for whom we care. In this sense of how we come to know a human being, the words of Goethe are especially valid: "One learns to know only what one loves, and the deeper and fuller the knowledge is to be, the more powerful and vivid must be the love, indeed the passion" (1963, p. 83). I do not suggest that love or care itself is a way or method for knowing, but as Frederik Buytendijk said in his 1947 inaugural lecture, love is foundational for all knowing of human existence. That knowing is not a purely cognitive act is a principle to which we nod occasionally in educational research. Contemporary phenomenologists like the Frenchman Emmanuel Levinas (1981) have attempted to demonstrate the deep philosophical truth of this insight. Especially where I meet the other person in his or her weakness, vulnerability or innocence, I experience the undeniable presence of loving responsibility: a child who calls upon me may claim me in a way that leaves me no choice. Most parents have experienced this moral claim and many teachers and other educators who are involved in pedagogic relationships in a self-forgetful manner have experienced this effect of children in their lives. When I love a person (a child or adult) I want to know what contributes toward the good of that person. So the principle that guides my actions is a sense of the pedagogic Good (van Manen, 1982b); at the same time I remain sensitive to the uniqueness of the person in this particular situation.

Hermeneutic phenomenology is a human science which studies persons. In research terminology one often uses "subjects" or "individuals" to refer to the persons involved in one's study. But, as W. H. Auden once said, "individual" is primarily a biological term to classify a tree, a horse, a man, a woman; while the term "person" refers to the uniqueness of each human being. "As persons, we are incomparable, unclassifiable, uncountable, irreplaceable" (1967). One might make a partisan claim for the sphere in which hermeneutic phenomenological research is (or should be) conducted. In the sense that traditional, hypothesizing, or experimental research is largely interested in knowledge that is generalizable, true for one and all, it is not entirely wrong to say that there is a certain spirit inherent in such a research atmosphere. Actions and interventions, like exercises, are
seen as repeatable; while subjects and samples, like soldiers, are replaceable. In contrast, phenomenology is, in a broad sense, a philosophy or theory of the unique; it is interested in what is essentially not replaceable. We need to be reminded that in our desire to find out what is effective systematic intervention (from an experimental research point of view), we tend to forget that the change we aim for may have different significance for different persons.

What first of all characterizes phenomenological research is that it always begins in the lifeworld. This is the world of the natural attitude of everyday life which Husserl described as the original, pre-reflective, pre-theoretical attitude. In bringing to reflective awareness the nature of the events experienced in our natural attitude, we are able to transform or remake ourselves in the true sense of Bildung (education). Hermeneutic phenomenological research edifies the personal insight (Rorty, 1979), contributing to one’s thoughtfulness and one’s ability to act toward others, children or adults, with tact or tactfulness. In this sense, human science research is itself a kind of Bildung or paideia; it is the curriculum of being and becoming. We might say that hermeneutic phenomenology is a philosophy of the personal, the individual, which we pursue against the background of an understanding of the evasive character of the logos of other, the whole, the communal, or the social. Much of educational research tends to pulverize life into minute abstracted fragments and particles that are of little use to practitioners. So it is perhaps not surprising that a human science that tries to avoid this fragmentation would be gaining more attention. Its particular appeal is that it tries to understand the phenomena of education by maintaining a view of pedagogy as an expression of the whole, and a view of the experiential situation as the topos of real pedagogic acting.

The approach described in this text takes seriously a notion that is very self-evident and yet seldom acknowledged: hermeneutic phenomenological research is fundamentally a writing activity. Research and writing are aspects of one process. In a later chapter the pedagogical significance of the reflective nature of writing is explored and articulated. Hermeneutics and phenomenology are human science approaches which are rooted in philosophy; they are philosophies, reflective disciplines. Therefore, it is important for the human science researcher in education to know something of the philosophic traditions. This does not mean, however, that one must become a professional philosopher in an academic sense. It means that one should know
enough to be able to articulate the epistemological or theoretical implications of doing phenomenology and hermeneutics—not losing sight of the fact that one is interested in the pedagogic praxis of this research; more accurately, it means that human science research practised by an educator is a pedagogic human science.

The end of human science research for educators is a critical pedagogical competence: knowing how to act tactfully in pedagogic situations on the basis of a carefully edified thoughtfulness. To that end hermeneutic phenomenological research reintegrates part and whole, the contingent and the essential, value and desire. It encourages a certain attentive awareness to the details and seemingly trivial dimensions of our everyday educational lives. It makes us thoughtfully aware of the consequential in the inconsequential, the significant in the taken-for-granted. Phenomenological descriptions, if done well, are compelling and insightful. The eloquence of the texts may contrast sharply with the toil, messiness, and difficulties involved in the research/writing process. “And this took that long to write, you say?” “After seven drafts!”

It all seems somewhat absurd until we begin to discern the silence in the writing—the cultivation of one’s being, from which the words begin to proliferate in haltingly issued groupings, then finally in a carefully written work, much less completed than interrupted, a blushing response to a call to say something worth saying, to actually say something, while being thoughtfully aware of the ease with which such speaking can reduce itself to academic chatter.

What Is a Hermeneutic Phenomenological Human Science?

What is hermeneutic phenomenology? There is a difference between comprehending the project of phenomenology intellectually and understanding it “from the inside.” We tend to get a certain satisfaction out of grasping at a conceptual or “theoretical” level the basic ideas of phenomenology, even though a real understanding of phenomenology can only be accomplished by “actively doing it.” As a first orientation, the philosophical idea of phenomenology will be sketched around a few introductory remarks, and then a fuller more active description of the nature of hermeneutic phenomenological research and writing will be attempted.
Phenomenological research is the study of lived experience.

To say the same thing differently: phenomenology is the study of the lifeworld—the world as we immediately experience it pre-reflectively rather than as we conceptualize, categorize, or reflect on it (Husserl, 1970b; Schutz and Luckmann, 1973). Phenomenology aims at gaining a deeper understanding of the nature or meaning of our everyday experiences. Phenomenology asks, "What is this or that kind of experience like?" It differs from almost every other science in that it attempts to gain insightful descriptions of the way we experience the world pre-reflectively, without taxonomizing, classifying, or abstracting it. So phenomenology does not offer us the possibility of effective theory with which we can now explain and/or control the world, but rather it offers us the possibility of plausible insights that bring us in more direct contact with the world. This project is both new and old. It is new in the sense that modern thinking and scholarship is so caught up in theoretical and technological thought that the program of a phenomenological human science may strike an individual as a break-through and a liberation. It is old in the sense that, over the ages, human beings have invented artistic, philosophic, communal, mimetic and poetic languages that have sought to (re)unite them with the ground of their lived experience.

Phenomenological research is the explication of phenomena as they present themselves to consciousness.

Anything that presents itself to consciousness is potentially of interest to phenomenology, whether the object is real or imagined, empirically measurable or subjectively felt. Consciousness is the only access human beings have to the world. Or rather, it is by virtue of being conscious that we are already related to the world. Thus all we can ever know must present itself to consciousness. Whatever falls outside of consciousness therefore falls outside the bounds of our possible lived experience. Consciousness is always transitive. To be conscious is to be aware, in some sense, of some aspect of the world. And thus phenomenology is keenly interested in the significant world of the human being. It is important to realize as well that consciousness itself cannot be described directly (such description would reduce human science to the study of consciousness or ideas, the fallacy of idealism). Similarly, the world itself, without reference to an experiencing person
or consciousness, cannot be described directly either (such approach would overlook that the real things of the world are always meaningfully constituted by conscious human beings, the fallacy of realism). So, in cases when consciousness itself is the object of consciousness (when I reflect on my own thinking process) then consciousness is not the same as the act in which it appears. This also demonstrates that true introspection is impossible. A person cannot reflect on lived experience while living through the experience. For example, if one tries to reflect on one’s anger while being angry, one finds that the anger has already changed or dissipated. Thus, phenomenological reflection is not introspective but retrospective. Reflection on lived experience is always recollective; it is reflection on experience that is already passed or lived through.

**Phenomenological research is the study of essences.**

Phenomenology asks for the very nature of a phenomenon, for that which makes a some-“thing” what it is—and without which it could not be what it is (Husserl, 1982; Merleau-Ponty, 1962). The essence of a phenomenon is a universal which can be described through a study of the structure that governs the instances or particular manifestations of the essence of that phenomenon. In other words, phenomenology is the systematic attempt to uncover and describe the structures, the internal meaning structures, of lived experience. A universal or essence may only be intuited or grasped through a study of the particulars or instances as they are encountered in lived experience. (By intuition we do not mean the kind of “problematic” intuition which becomes questionable when someone claims “intuitively” to have known that Mr. Jones was a crook.) From a phenomenological point of view, we are less interested in the factual status of particular instances: whether something actually happened, how often it tends to happen, or how the occurrence of an experience is related to the prevalence of other conditions or events. For example, phenomenology does not ask, “How do these children learn this particular material?” but it asks, “What is the nature or essence of the experience of learning (so that I can now better understand what this particular learning experience is like for these children)?” The essence or nature of an experience has been adequately described in language if the description reawakens or shows us the lived quality and significance of the experience in a fuller or deeper manner.
Phenomenological research is the description of the experiential meanings we live as we live them.

Phenomenological human science is the study of lived or existential meanings; it attempts to describe and interpret these meanings to a certain degree of depth and richness. In this focus upon meaning, phenomenology differs from some other social or human sciences which may focus not on meanings but on statistical relationships among variables, on the predominance of social opinions, or on the occurrence or frequency of certain behaviors, etc. And phenomenology differs from other disciplines in that it does not aim to explicate meanings specific to particular cultures (ethnography), to certain social groups (sociology), to historical periods (history), to mental types (psychology), or to an individual's personal life history (biography). Rather, phenomenology attempts to explicate the meanings as we live them in our everyday existence, our lifeworld.

Phenomenological research is the human scientific study of phenomena.

The term “science” derives from scientia which means to know. Phenomenology claims to be scientific in a broad sense, since it is a systematic, explicit, self-critical, and intersubjective study of its subject matter, our lived experience. It is systematic in that it uses specially practised modes of questioning, reflecting, focusing, intuiting, etc. Phenomenological human science research is explicit in that it attempts to articulate, through the content and form of text, the structures of meaning embedded in lived experience (rather than leaving the meanings implicit as for example in poetry or literary texts). Phenomenology is self-critical in the sense that it continually examines its own goals and methods in an attempt to come to terms with the strengths and shortcomings of its approach and achievements. It is intersubjective in that the human science researcher needs the other (for example, the reader) in order to develop a dialogic relation with the phenomenon, and thus validate the phenomenon as described. Phenomenology is a human science (rather than a natural science) since the subject matter of phenomenological research is always the structures of meaning of the lived human world (in contrast, natural objects do not have experiences which are consciously and meaningfully lived through by these objects).
Phenomenological research is the attentive practice of thoughtfulness.

Indeed, if there is one word that most aptly characterizes phenomenology itself, then this word is “thoughtfulness.” In the works of the great phenomenologists, thoughtfulness is described as a minding, a heeding, a caring attunement (Heidegger, 1962)—a heedful, mindful wondering about the project of life, of living, of what it means to live a life. For us this phenomenological interest of doing research materializes itself in our everyday practical concerns as parents, teachers, teacher educators, psychologists, child care specialists, or school administrators. As educators we must act responsibly and responsively in all our relations with children, with youth, or with those to whom we stand in a pedagogical relationship. So for us the theoretical practice of phenomenological research stands in the service of the mundane practice of pedagogy: it is a ministering of thoughtfulness. Phenomenological pedagogical research edifies the same attentive thoughtfulness that serves the practical tactfulness of pedagogy itself.

Phenomenological research is a search for what it means to be human.

As we research the possible meaning structures of our lived experiences, we come to a fuller grasp of what it means to be in the world as a man, a woman, a child, taking into account the sociocultural and the historical traditions that have given meaning to our ways of being in the world. For example, to understand what it means to be a woman in our present age is also to understand the pressures of the meaning structures that have come to restrict, widen, or question the nature and ground of womanhood. Hermeneutic phenomenological research is a search for the fullness of living, for the ways a woman possibly can experience the world as a woman, for what it is to be a woman. The same is true, of course, for men. In phenomenological research description carries a moral force. If to be a father means to take active responsibility for a child’s growth, then it is possible to say of actual cases that this or that is no way to be a father! So phenomenological research has, as its ultimate aim, the fulfillment of our human nature: to become more fully who we are.
Phenomenological research is a poetizing activity.

Thus, phenomenology is in some ways very unlike any other research. Most research we meet in education is of the type whereby results can be severed from the means by which the results are obtained. Phenomenological research is unlike other research in that the link with the results cannot be broken, as Marcel (1950) explained, without loss of all reality to the results. And that is why, when you listen to a presentation of a phenomenological nature, you will listen in vain for the punch-line, the latest information, or the big news. As in poetry, it is inappropriate to ask for a conclusion or a summary of a phenomenological study. To summarize a poem in order to present the result would destroy the result because the poem itself is the result. The poem is the thing. So phenomenology, not unlike poetry, is a poetizing project; it tries an incantative, evocative speaking, a primal telling, wherein we aim to involve the voice in an original singing of the world (Merleau-Ponty, 1973). But poetizing is not “merely” a type of poetry, a making of verses. Poetizing is thinking on original experience and is thus speaking in a more primal sense. Language that authentically speaks the world rather than abstractly speaking of it is a language that reverberates the world, as Merleau-Ponty says, a language that sings the world. We must engage language in a primal incantation or poetizing which hearkens back to the silence from which the words emanate. What we must do is discover what lies at the ontological core of our being. So that in the words, or perhaps better, in spite of the words, we find “memories” that paradoxically we never thought or felt before.

What Does it Mean to Be Rational?

The label “human science” derives from a translation of the German Geisteswissenschaften. This term has three components: Geist/wissen/schaffen. The word Geist is translated into English often as “mind” or “spirit.” But this is not a satisfactory translation since the term Geist refers to an aspect of our humanness that includes a quality of inwardness, of spiritual refinement. The English term “mind” in contrast has cognitive overtones and more pragmatic connotations. The word Geist has complex and rich meanings which can be gleaned from expressions such as Zeitgeist which means the “spirit of the age”; der Heilige Geist which translates as the “Holy Spirit”; geistig which means witty in a refined or more intellectual sort of way; and geistig can also refer to the
emotional or moral atmosphere that may reign in a home, in a school, or in such a lived space. Bollnow (1974) pointed out that in the human sciences knowledge is not a matter of the formal intellect alone. But knowledge as understanding is geistig—a matter of the depth of the soul, spirit, embodied knowing and being. Thus, the term Geisteswissenschaften is usually translated as “human sciences” in order to avoid a narrow cognitive interpretation of the word Geist.

There is an objective aspect to the term Geist that becomes self-evident when we consider how the meaningful experience of the world has a shared and historical character. Human beings express their experience of the world through art, science, law, medicine, architecture, etc., and especially through language. But in this language they also discover a world already meaningfully constituted. We should not think of “objective Geist” as some absolute notion or quality (in a Hegelian sense), rather objective Geist is itself a dynamic human life phenomenon: it tells us who we are but it is also ongoingly formed by us in a self-forming process. So what is meant and implied by the term Geist in the context of a human science approach to pedagogy as pursued in this text? It means that the human being is seen and studied as a “person,” in the full sense of that word, a person who is a flesh and blood sense-maker. The human being is a person who signifies—gives and derives meaning to and from the “things” of the world. In other words the “things” of the world are meaningfully experienced, and on that basis these “things” are then approached and dealt with.

The next semantic elements of the phrase Geisteswissenschaften are wissen which means “knowing or knowledge,” and schaffen which means “creating, producing, working.” Wissenschaft is usually translated as “science.” Here again there is a problem of straightforward translation. When a German person says “Wissenschaften” then he or she does not have the same image, the same activity in mind, that a North American person would who says “science.” In Germany Wissenschaft is usually more broadly understood to include the arts and the humanities. So, the German word Wissenschaft cannot properly be translated into English, since in North America the word “science” immediately is associated with the attitude of the methodology of the natural (physical and behavioral) sciences. Thus, to speak of the “human sciences” is actually a misnomer if one is not aware of the broadened set of connotations that the word “sciences” should evoke in this coupling.
A distinguishing feature of a human science approach to pedagogy is how the notions of theory and research are to be related to the practice of living. In contrast to the more positivistic and behavioral empirical sciences, human science does not see theory as something that stands before practice in order to "inform" it. Rather theory enlightens practice. Practice (or life) always comes first and theory comes later as a result of reflection. "The integrity of praxis does not depend on theory," said Schleiermacher, "but praxis can become more aware of itself by means of theory" (1964, p. 40). And he points out, "In and of itself theory does not control praxis, the theory of any science of education comes always later. Theory can only make room for itself once praxis has settled" (p. 41). If it is phenomenologically plausible that in practical situations theory always arrives late, too late to inform praxis in a technical or instrumental way, then in the daily practice of living we are forever at a loss for theory. Yet in another less technical sense we usually are not really so helpless because theory has already prepared our bodies or being to act, so to speak. This preparation was referred to above as a process of Bildung.

Does that mean that the human sciences are less rational or less rigorous than the behavioral or experimental sciences? The answer depends on the criteria of rationality that one applies to the human sciences. If the criteria are the same as those that govern the natural sciences then the human sciences may seem rather undisciplined. But those criteria do not have the same meaning, of course, otherwise there would be no essential difference between the human and the natural sciences. The point is that the constraints of meaning on the criteria or standards of science define the horizons and pose the limits on what we can study and how we can rationalize the research as being scientific. The meaning of human science notions such as "truth, method, understanding, objectivity, subjectivity, valid discourse," and the meaning of "description, analysis, interpretation, writing, text," etc., are always to be understood within a certain rational perspective. The notion of "understanding" (Verstehen) tends to be interpreted much more narrowly in the behavioral sciences than in the human sciences—an issue which is sometimes debated in terms of the difference between rational understanding and empathic understanding (e.g., Wilson, 1970). Human science philosophers have argued that notions of "truth and understanding" in the human sciences require a broadening of the notion of rationality (e.g., Gadamer, 1975; Ricoeur, 1981). Against this
argument, the critics of the human sciences in education have suggested that the discourse of human science is often just too fuzzy, too ambiguous, inadequately based on observational and measurable data, not replicable, poorly generalizable to definite populations, irrational, unscientific, subjectivistic, and so on.

Without doubt there is a certain body of so-called phenomenological, hermeneutic, or ethnographic human science work in education that may not pass any test of rational standards—they fail not only the standards of the natural science research perspective but also the standards set by the human sciences. There are also practitioners of human science research in education who disdainfully disclaim any need for criteria or standards; they claim that theirs is not a “rational” science, that to be rationalistic is to be intellectualistic, positivistic, scientific, and insensitive to intuitive and more experiential dimensions of truth and understanding. What the latter do not tend to see, however, is that to reject the standard of rationality would mean that one assumes that there is no basis upon which human beings can come to common understandings; it tends to assume as well that there is no standard in the human sciences to which one needs to orient oneself in a self-reflec-
tive and disciplined manner.

In this text I will not deny the need for a rational foundation, but I will work towards a broadened notion of rationality. Consequently, our human science orientation to education redefines the meaning of concepts such as “objectivity” and “subjectivity,” and it does not make unbridgeable distinctions between fact and value, the empirical and the normative.

Human science is rationalistic in that it operates on the assumption that human life may be made intelligible, accessible to human logos or reason, in a broad or full embodied sense. To be a rationalist is to believe in the power of thinking, insight and dialogue. It is to believe in the possibility of understanding the world by maintaining a thoughtful and conversational relation with the world. Rationality expresses a faith that we can share this world, that we can make things understandable to each other, that experience can be made intelligible. But a human science perspective also assumes that lived human experience is always more complex than the result of any singular description, and that there is always an element of the ineffable to life. However, to recognize that life is fundamentally or ultimately mysterious does not need to make one a scholarly mystic.
So, to believe in the power of thinking is also to acknowledge that it is the complexity and mystery of life that calls for thinking in the first place. Human life needs knowledge, reflection, and thought to make itself knowable to itself, including its complex and ultimately mysterious nature. It is a naive rationalism that believes that the phenomena of life can be made intellectually crystal clear or theoretically perfectly transparent. That is why a human science that tries to do justice to the full range of human experience cannot operate with a concept of rationality that is restricted to a formal intellectualist interpretation of human reason. Likewise, the language of thinking cannot be censured to permit only a form of discourse that tries to capture human experience in deadening abstract concepts, and in logical systems that flatten rather than deepen our understanding of human life. Much of social science produces forms of knowledge which fixate life by riveting it to the terms and grammar of forms of scientific theorizing that congeal the living meaning out of human living—until life itself has become unrecognizable to itself. It is important to make this point, precisely because human science is often accused of yielding texts that are vague, imprecise, inexact, nonrigorous, or ambiguous. When scholars such as Merleau-Ponty, Heidegger, Levinas, or Derrida employ seemingly evasive or even poetic writing styles and ways of saying things that seem elusive, it may be that such styles and means of expression are the concomitants of a more richly embodied notion of human rationality. On the downside, however, there is a danger as well: the danger that an individual of insufficient talent and inadequate scholarly experience may try to hide his or her lack of insight behind an obfuscating, flowery, or self-indulgent discourse.

Furthermore, we should acknowledge that human science operates with its own criteria for precision, exactness, and rigor. In the quantitative sciences precision and exactness are usually seen to be indications of refinement of measurement and perfection of research design. In contrast, human science strives for precision and exactness by aiming for interpretive descriptions that exact fullness and completeness of detail, and that explore to a degree of perfection the fundamental nature of the notion being addressed in the text. The term "rigor" originally meant "stiffness," "hardness." Rigorous scientific research is often seen to be methodologically hard-nosed, strict, and uncompromised by "subjective" and qualitative distinctions. "Hard data" refers to knowledge that is captured best in quantitative units or observ-
able measures. In contrast, human science research is rigorous when it is "strong" or "hard" in a moral and spirited sense. A strong and rigorous human science text distinguishes itself by its courage and resolve to stand up for the uniqueness and significance of the notion to which it has dedicated itself. And what does it mean to stand up for something if one is not prepared to stand out? This means also that a rigorous human science is prepared to be "soft," "soulful," "subtle," and "sensitive" in its effort to bring the range of meanings of life's phenomena to our reflective awareness.

The basic things about our lifeworld (such as the experience of lived time, lived space, lived body, and lived human relation) are preverbal and therefore hard to describe. For this, subtlety and sensitivity are needed: "It is as painstaking as the works of Balzac, Proust, Valéry or Cézanne—by reason of the same kind of attentiveness and wonder, the same demand for awareness, the same will to seize the meaning of the world or of history as that meaning comes into being" (Merleau-Ponty, 1962, p. xxi). This gives phenomenological human science its fundamental fascination. To do hermeneutic phenomenology is to attempt to accomplish the impossible: to construct a full interpretive description of some aspect of the lifeworld, and yet to remain aware that lived life is always more complex than any explication of meaning can reveal. The phenomenological reduction teaches us that complete reduction is impossible, that full or final descriptions are unattainable. But rather than therefore giving up on human science altogether, we need to pursue its project with extra vigour.

Hermeneutic phenomenological human science is interested in the human world as we find it in all its variegated aspects. Unlike research approaches in other social sciences which may make use of experimental or artificially created test situations, human science wishes to meet human beings—men, women, children—there where they are naturally engaged in their worlds. In other words, phenomenological research finds its point of departure in the situation, which for purpose of analysis, description, and interpretation functions as an exemplary nodal point of meanings that are embedded in this situation. Sometimes a researcher or theorist is likened to a traveller from mythical times who sails off to strange and exotic places to eventually return to the common people in order to tell them fascinating stories about the way the world "really" is (Jager, 1975). For this reason there is the sense of awe associated with the white-coated natural scientist who travels in
mysterious worlds of micro-physics, macro-physics, astro-physics or the astonishing world of computer technology, etc. In contrast, the human scientist does not go anywhere. He or she stays right there in the world we share with our fellow-human beings. And yet it would be wrong to say that the human scientist has no compelling "stories" to tell. Aren't the most captivating stories exactly those which help us to understand better what is most common, most taken-for-granted, and what concerns us most ordinarily and directly?

Phenomenology appeals to our immediate common experience in order to conduct a structural analysis of what is most common, most familiar, most self-evident to us. The aim is to construct an animating, evocative description (text) of human actions, behaviors, intentions, and experiences as we meet them in the lifeworld. To this purpose the human scientist likes to make use of the works of poets, authors, artists, cinematographers—because it is in this material that the human being can be found as situated person, and it is in this work that the variety and possibility of human experience may be found in condensed and transcended form. The Dutch phenomenological psychologist Buysendijk (1962) remarks that one can perhaps gain greater psychological insights from a great novelist such as Dostoevsky than from the typical scholarly theories reported in psychological social science books and journals. The author, the poet, the artist transforms (fictionalizes, poetizes, re-shapes) ordinary human experience in infinite variety. But this does not mean that human science is to be confused with poetry, story, or art; or that poetry, story, or art could be seen as forms of human science. Although literary narrative and human science narrative both find their fascination in situated life, in the situated human being, they locate their narratives in different starting points; they aspire to different epistemological ends. One difference is that phenomenology aims at making explicit and seeking universal meaning where poetry and literature remain implicit and particular. This may be the reason why many poets, authors, or artists do not want to have anything to do with those commentators who try to draw universal lessons from a certain poem, book, or painting. At any rate, the difference is partly that phenomenology operates with a different sense of directness. Linschoten (1953) pinpoints the geographical location of phenomenological human science when he says, "human science starts there where poetry has reached its end point."
Phenomenological research and writing is a project in which the normal scientific requirements or standards of objectivity and subjectivity need to be re-conceived. In the human sciences, objectivity and subjectivity are not mutually exclusive categories. Both find their meaning and significance in the oriented (i.e., personal) relation that the researcher establishes with the "object" of his or her inquiry (Bollnow, 1974). Thus, "objectivity" means that the researcher is oriented to the object, that which stands in front of him or her. Objectivity means that the researcher remains true to the object. The researcher becomes in a sense a guardian and a defender of the true nature of the object. He or she wants to show it, describe it, interpret it while remaining faithful to it—aware that one is easily misled, side-tracked, or enchanted by extraneous elements. "Subjectivity" means that one needs to be as perceptive, insightful, and discerning as one can be in order to show or disclose the object in its full richness and in its greatest depth. Subjectivity means that we are strong in our orientation to the object of study in a unique and personal way—while avoiding the danger of becoming arbitrary, self-indulgent, or of getting captivated and carried away by our unreflected preconceptions. Those entering the field of human science research may need to realize that the very meanings of "knowledge," "science," "theory," and "research" are based upon different assumptions. In this text we do not maintain the view held by traditional experimental or behavioral science where research is that inductive investigative process that produces empirical generalizations which are then formulated or built into theories. Neither is theorizing equated with a process of deductive or speculative reasoning done by philosophers or theoretical scientists. Rather, research and theorizing are often seen to be interchangeable concepts for that process of reflecting on lived experience that is involved in the various human science activities. Sometimes the emphasis would be on doing research when, for example, we are involved in the so-called data gathering practices of interviewing or hermeneutic analysis of texts; on other occasions we speak more pointedly of theorizing when the main aim is to bring to speech (by talking or writing) our reflective understanding of something.

In the natural or physical sciences we have a sense how new and improved theories often allow for more sophisticated technological advances. Computer technology is a good example of a triumph of theoretical progress. In the social or behavioral sciences similar expec-