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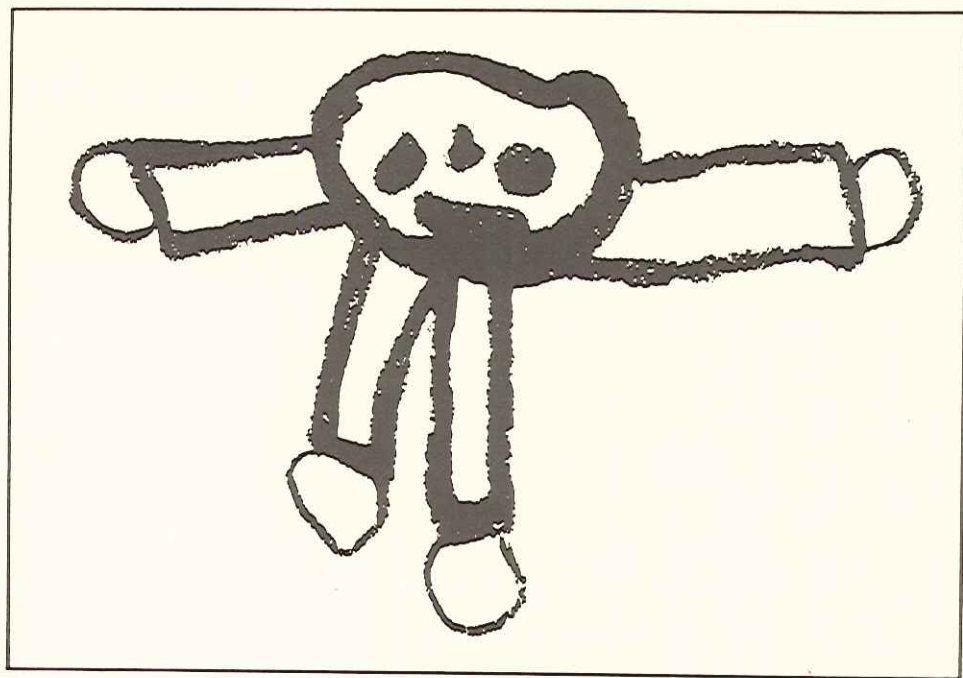
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**RESEARCHING EDUCATIONAL
PRACTICE**

In November 1972, educators from several parts of the United States met at the University of North Dakota to discuss some common concerns about the narrow accountability ethos that had begun to dominate schools and to share what many believed to be more sensible means of both documenting and assessing children's learning. Subsequent meetings, much sharing of evaluation information, and financial and moral support from the Rockefeller Brothers Fund have all contributed to keeping together what is now called the North Dakota Study Group on Evaluation. A major goal of the Study Group, beyond support for individual participants and programs, is to provide materials for teachers, parents, school administrators and governmental decision-makers (within State Education Agencies and the U.S. Office of Education) that might encourage re-examination of a range of evaluation issues and perspectives about schools and schooling.

Towards this end, the Study Group has initiated a continuing series of monographs, of which this paper is one. Over time, the series will include material on, among other things, children's thinking, children's language, teacher support systems, inservice training, the school's relationship to the larger community. The intent is that these papers be taken not as final statements--a new ideology, but as working papers, written by people who are acting on, not just thinking about, these problems, whose implications need an active and considered response.

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Contents

	Introduction	3
1	Science, Not Method	6
2	A Phenomenological Approach	19
3	Doing Phenomenological Research	36
4	Some Problems With Phenomenological Research	58
5	Why Educational Research?	68

Introduction

When I go to meetings of the American Education Research Association (AERA), I find very little on the program which interests me and a great deal which alienates me. At AERA meetings, the papers which are read suggest that techniques of collecting information are more important than what the collection is all about--that is, the thing one is trying to understand. There is too much talk about things which matter very little--numbers, methods, contexts stripped of their meaning in the name of research--and too little about the important events--the real stuff of life--which I would like to know more about.

A feeling of alienation comes over me not only at AERA meetings but also when the journals of that organization and of the American Psychological Association come to the house. Articles which ought to be interesting, which have interesting-sounding titles, often turn out not to be what I had hoped. These articles shed little light on human events. Instead, they dwell on methodological caution, measurement, and statistical analysis. Picking up and reading one of these articles is like being promised a fresh plum and getting instead a dried prune. The juice is gone from life in the name of caution and precision.

There was a time when I felt differently, when I was a dutiful experimental scientist--stripping contexts, manipulating numbers, and making predictions. As a graduate student, and indeed even earlier, I embraced the scientific world's belief that if you're not sure of your facts, then you'd better keep your mouth shut. While in graduate school and also in my early years of teaching, I made a point of being sure of those facts. I conducted studies with an emphasis on control, measurement, prediction, testing of outcomes, and appropriate use of statistical techniques. I served on dissertation committees and terrorized my share of doctoral students with questions about those same techniques.

But during this period, when I was still flowing more or less with the experimental mainstream, trying hard to value and practice objectivity, I grew less and less sure about what I was doing, to myself and to students. Since I still believed one should speak only when one was certain, and I was feeling increasingly uncertain, I found I had less and less to say. Often I

found myself in the uncomfortable position of *being sure* of something because the results of a study said I should be, and yet intuitively sure that the results were wrong. In other words I was publishing research results I didn't myself fully believe only because the results came out that way. That was one of the natural and unfortunate outcomes of my attempt to be objective. The malaise provoked a lot of reading, listening, thinking, but for a long time I remained too cautious, too hesitant to express unprovable views, to do much writing. Some of my caution was due to fear of criticism, but some of it was the result of my training in the conduct of scientific work: unless I was sure, I had an obligation to remain silent.

Sometimes during this period I thought the malaise might be a problem of my own making. Sometimes I wondered if perhaps I simply was not a good scientist, if I was too impatient with the slow dirty work that has to go on in everyday science between its glamorous revolutions. But since then, as I have read comments from other researchers who feel as alienated from the mainstream as I do, and as I have talked with people like those who have become my coauthors, I have come to know that the problem is not mine alone. Being among like-minded researchers has helped me come to grips with my sense of alienation, and I have come to accept my progress away from the mainstream as the only reasonable course I could have taken.

Watching graduate students struggle against the constraints imposed by "the scientific method"--of which they too often know only enough to be intimidated--has helped to loosen my pen. I have seen students with a real desire to learn more about human events and a burning interest in a research problem become stymied by the methodological demands they felt they must satisfy. As they struggled to meet those demands, the problems which had so engaged them became increasingly trivial and uninteresting, and the significance of their projected research--and their involvement in it--dried up, the plum transformed into the prune.

I firmly believe that among graduate students, and among established scholars and researchers as well, methods all too often dictate the choice of research problems. There is a widespread, misguided belief that the scientific method developed in the natural sciences must be applied to research with human beings. The significant differences between the objects that are the subject of research in the natural sciences and the people who are the subject of research in what we prefer to call the human sciences are disregarded. This need not be so.

The Plan

What follows in this monograph is divided into five

Three of us live and work in Holland, and one in the U.S.A. Barritt is Professor of Education at the University of Michigan; Beekman is Professor at the Pedagogical Institute at the University of Utrecht; Mulderij and Bleeker were students of Beekman's in Holland. We came together for the first time in 1973 when the American in our midst, Barritt, came to the University of Utrecht as a Fulbright lecturer. In the process of learning Dutch he also learned some phenomenology of the "Utrecht School," the phenomenology of such scholars as Langeveld, Buitendijk and Linschoten. In 1975 and 1976, Beekman went to Ann Arbor to give short courses about doing phenomenology. Also in 1976 Beekman and Mulderij wrote a Dutch handbook for doing phenomenology, called *Beleving en Ervaren* (Living Through Experience and Experiencing). In 1978, a grant from the Netherlands Organization for Pure Research enabled us to write an English version. This monograph is an edited version of that effort.

chapters. The first is a criticism of educational research in its present form. In this chapter we have tried to make clear how we disagree with current beliefs about the goals of scientific research, as they are practiced in education. Our primary interest is in children, so we will take most of our examples from research with children. We don't think our discussion is relevant only to people who work with children, however; on the contrary, we hope that everyone concerned for better understanding of human experience will see the relevance of the discussion to their work.

The second chapter is our introduction to phenomenology. In this chapter we have tried to explain the development of phenomenology and to use the teachings of phenomenology to free educational researchers from the constraints of method. Although we do not presume to be philosophers, what we say about the philosophical underpinnings of phenomenology is, to the best of our knowledge, accurate. We hope it is also clear and relevant.

Chapter three is the heart of this book. There we present several suggestions for doing research with examples drawn from material collected in Utrecht, Holland, and Ann Arbor, Michigan.

Chapter four is a discussion of some frequently-heard criticisms of phenomenology and our responses to them. We have argued among ourselves about the value of this chapter: it raises some important questions but omits others. Some of the questions we raise we don't answer; but we've decided to stand by the chapter anyway. Researchers new to phenomenology need to know the criticisms that are likely to be launched at them and how they might respond.

In chapter five we discuss a number of published phenomenological studies. Our goal in presenting these studies is to let you see what has been done in the field and to introduce you to some practitioners of the craft. Many of the most famous studies have been done abroad and have not been discussed in English before.

Limitations

This monograph is not another research recipe book: of research recipes we have had enough! Neither is it an introduction to phenomenological philosophy, existentialism, humanistic psychology, hermeneutics, or any of the other variants of the phenomenological themes that have developed in the last 50 years. Phenomenology has an important history that you will want to become better acquainted with if you go on in the directions suggested here. But this monograph will not take you very far into that history or the philosophy behind it. We have only addressed the issues that we thought we needed to discuss to make clear why we have opted for phenomenology and why you should feel free to do so as well.

Loren S. Barritt

Science, Not Method

"The only scientific thing is to *recognize what is*, instead of starting from what ought to be, or what could be" (Gadamer, 1975). This sentence sums up an important part of our argument. We think that human events must be studied as they are and not as we would have them be. But the widely held view, particularly among social scientists, is that only *certain procedures* qualify as scientific. In a well-known essay, Campbell and Stanley (1963) clearly articulate this bias:

This chapter is committed to the experiment as the only means for settling disputes regarding educational practice, as the only way of verifying educational improvements, and as the only way of establishing a cumulative tradition in which improvements can be introduced without the danger of fadish discard of old wisdom in favor of inferior novelties (p. 172).

One wonders where the old wisdom came from.

According to researchers of Campbell and Stanley's persuasion, if procedures are scientific the results are to be trusted; otherwise they are not worth bothering with. Such trust in experimental procedure probably has its roots in the ideas of the late 19th and early 20th century when the application of natural science to the social world took a strong hold. It isn't hard to imagine how this came about; all of us are creatures of our own time, and those times were distinguished by the rise of scientific and technical achievement.* In 1899, in his famous "Talk to Teachers," William James, who along with Edward Thorndike was a central figure during this period, said:

...we have been having something like a boom in psychology in this country. Laboratories and professorships have been founded, and reviews established. The air has been full of rumors. The editors of educational journals and the arrangers of conventions have had to show themselves enterprising and on a level with the novelties of the day. Some of the professors have been not unwilling to cooperate, and I am not sure that the publishers have been entirely inert. The new psychology has thus become a term to conjure up portentous ideas withal; and you teachers, docile and receptive and

*The idea of progress through science was destined to make its way into the social world. David Riesman (1954) has suggested that if journalism rather than natural science and technology had been ascendant in the late 19th century perhaps social science procedures would have developed differently. He further suggested that we might all be better off if it had happened that way. We tend to agree.

aspiring as many of you are, have been plunged in an atmosphere of vague talk about our science, which to a great extent has been more mystifying than enlightening (p. 2).

University departments of psychology and of education all over the world owe their existence to the idea that there is a science of behavior. Had there been no new science there probably would have been no departments, no faculty members, no national organizations, no journals, no identity. And this may help to explain the dogmatic insistence on methodological orthodoxy which still pervades the social sciences while the natural sciences have remained relatively free from such prejudice.

Among natural scientists what seems to count most is the ability to demonstrate the accuracy of one's visions; method is no more than a tool, a means of convincing others. For social scientists, on the other hand, method seems to be an end in itself. According to Campbell and Stanley, social scientists "must justify experimentation...not as panacea, but rather as the only available route to cumulative progress" (1963). Thus in the name of scientific progress, of open mindedness, we get orthodoxy, a prior certainty about how it all works. To those of us who are not convinced, this prejudice represents a considerable challenge, and demands a real commitment.

Science is a difficult word to define. It has accrued a residue of meanings from long use in many different circumstances. We are not going to struggle here with a comprehensive definition. We only argue that science is not method. We agree with Peter Medawar who, in the 1978 Cook Lecture at the University of Michigan, argued persuasively there is no such thing as a scientific method. If science is going to help us out it has to be able to respond differently to different circumstances. If science were merely a method, it wouldn't take a highly skilled scientist to do it and we would have long ago solved our problems.

In his excellent book *Psychology as a Human Science* (1970), Amadeo Giorgi argues that many of the difficulties in psychology derive from an incorrect appropriation of natural scientific methods to the human world. He is right: human ideas, meanings, and intentions are not like objective things, molecules, energy, matter. Nevertheless, we can learn much from our colleagues in the natural sciences. Their example is well worth following, if we pay attention to what they actually do.

Good natural scientists use different methods depending on the problems they are trying to solve. Their world is full with interesting, compelling problems that are attacked with all of the intellectual tools that can be brought to bear, including creativity and leaps of faith. Natural scientists seem ready to accept the

world as they find it and try to figure out how it works, creating methods that yield up solutions to their problems. That is precisely what should be going on in the study of human events. Too often it doesn't happen because of that methodological straight-jacket. Perhaps we can be free to choose different methods without losing our identity as scientists. However, we should add that it would be counterproductive to try to hang on to the label *scientist* if our freedom to learn more must be constricted by methodological prejudices. Koch (1976) has persuasively argued with respect to psychology that the idea of scientist should perhaps be given up. He thinks it is a barrier to understanding and communication between investigators, particularly those in the Humanities. He has a point:

Pursuit of imitation science, though a highly sophisticated skill, can only lead to the evasion and demeaning of subject matter and to a constriction of problematic interest. It is a deadly form of role playing if one acknowledges that the psychological universe has something to do with persons. This kind of spurious knowledge can result in a corrupt human technology and spew forth upon man a stream of ever more degrading images of himself (p. 494).

The situation is no less grave--we think more--in education, where children are involved.

There are innumerable ways to approach this methodologically-determined work in the social sciences that masquerades as research. We've chosen to discuss five of its important goals. First, research procedure requires that researchers be as dispassionate, as objective, as possible; second, at all costs, they must measure what they are studying; third, they must control the experimental conditions; fourth, they must carry out the procedures so that the results apply generally; and finally they should be able to predict what will happen the next time.

The Measurement Hypothesis

We start with the famous incantation of Thorndike's still used to justify current practices: *Whatever exists at all exists in some amount. To know it thoroughly involves knowing its quantity as well as its quality* (Joncich, 1962). This seems a puzzling assertion. Actually, Thorndike didn't intend it as an assertion; he wasn't asserting a tested reality; he was stating a belief. It is unfortunate that the statement of Thorndike's above is often quoted without this qualifying observation, which is also Thorndike's: *Have faith that whatever people now measure crudely by mere descriptive words...can be measured more precisely* (Joncich, 1962). When Thorndike stated the hypothesis

that has been interpreted as an assertion in 1918, it made sense, as a possibility; but now it doesn't and if that hypothesis is wrong then a lot of thinking about social science research has to be changed. This is not to say that one cannot create a test, an operational definition, for any spoken term. After 80 years of testing, no one should doubt the ability of psychologists and educators to make up a test for anything whatever--love, hate, sympathy, joy, you name it. Whether these are in fact tests of the things named, and how one would decide, is the critical issue. We believe Thorndike's hypothesis was wrong. It isn't possible to measure everything that exists. It isn't possible to measure the most important human feelings to which we can give names. And many of these qualities can't even be defined.

The decision about the measurability of a quality cannot be made by examining the validity or the reliability of a test. It can only be made by examining the meaning of language in relation to the test. Language has integrity which mainstream social scientists have chosen to ignore in order to create measures and *prove* Thorndike right in every case. The dictum of Thorndike has become its own self-fulfilling prophecy, a barrier to communication and to the social enterprise of science, because it has become a license for individual scientists to make up meanings. As a result there is little communication in the social sciences because of the *special* vocabulary that has been developed. There is almost no communication between researchers and teachers because the gulf there is even greater. The teacher and the ordinary citizen know language only as a part of social reality. Humanists live by their trust in the language. Dictionaries attempt to capture their meanings so that the uncertain can find out what others are trying to say. Among mainstream social scientists *precision*, through measurement, has been realized at the cost of meaning and communication.*

*Lest you think this argument a straw man consider the following statement from Broadbeck (1963), a philosopher writing for educational researchers: *The Scientist's concept is not that of common sense. His concept means only what he says it means. This meaning need not include all or even any of the meanings various people associate with the concept* (p. 62).

There seems to us little point in creating measures which do not measure what they say they measure, do not test what they say they test. What is wrong with using the ordinary meanings of the common sense world? We find them quite reliable and meaningful and they have the additional value that they can be used to communicate. Communication is not an insignificant goal for the conduct of scientific work. Testing and measuring which distort meaning and inhibit communication require too high a price be paid for scientific orthodoxy.

The basis for the tester's and measurer's view of human life is similar to the one which guides the natural scientist in his examination of matter. For the natural scientist ordinary events on the surface of life mask the *real* dynamics of molecular or atomic interaction. The human eye cannot see, the human ear cannot hear what is fundamentally going on so the researcher must resort to techniques outside common experience to

investigate the object of research. Among other things, he must use powerful instruments and control conditions. This all works rather well, up to a point, for the physicist or the chemist. But does it work as well where the subject matter is experience, where instruments are understood, named, taken, discussed, and written about by the *objects* on whom they are focused? We think not.

So long as there is a disagreement about what should be relevant evidence for proving or disproving the measurement hypothesis it will be difficult to resolve this dispute. Will there ever be any kind of *scientific* evidence that, for example, educational tests are unworkable and therefore that the educational tester's world view, the one which rests on an analogy between matter and consciousness, is wrong? We think not. If the framework for a decision is enlarged to the effects on human experience, asking about the quality of life which results from putting each view into practice, then a discussion can occur, but now it takes place in the world of ordinary experience and the evidence for a decision is no longer objective or free from value judgments. This is the ground on which we think the case for or against the measurement hypothesis should be decided.

Control

Control is another major goal of scientific procedure--control of the overall situation under study, control of the variable manipulated, control of the nature and number of outcomes to be observed, and control of the subjects under study. This idea of control is also taken by analogy from the natural sciences and, as with the idea of measurement, is a goal to strive to attain rather than an actuality. A great deal has been written about scientific procedures in the conduct of research, based upon the assumption that control is always desirable and in some significant measure attainable. But what if it isn't attainable? Is it still desirable? This boils down to a question of human freedom.

The control of human beings in *scientific* research creates a situation in which it is no longer possible to choose. This is a convenience to the researcher but an impediment to understanding because choice is an important part of human experience. The *objective* natural science paradigm, which is problematic in the object world where there is always an observer, a human one, is even more problematic in the human world of experience where both observer and observed are alive and conscious. Trying to control the uncontrollable is not, we think, consistent with understanding the events under scrutiny.

Let us take a simple example. Imagine a study about reading conducted in a school. One class is chosen as the *experimental* group, the other as the *control*. (This language of the lab is pretentious and inaccurate, but we go along here to make our story more

telling.) The investigator uses all of the power at his or her command to see that everything proceeds in the same way in both classes save that the reading procedures are different in the two groups. Make no mistake, this is a considerable task and anyone attempting it is to be commended for the effort. Imagine now, the not too unimaginable; the tested scores at the end of the appropriate period are not *significantly* different from one another. (In the language of social science one would say that *error* overwhelms *true* variance.) Do we want to conclude that the treatment hasn't worked?

For our part we'd have to say we had no idea. Delivering oneself, as an investigator who also has the power to decide, into the hands of a preestablished set of controls and refusing to exercise one's own critical powers to describe, to tell what happened, is tragically mistaken. No human event, even a controlled research study, is without interest. A group of children with a teacher are, we are certain, doing much more on their own than it is ever possible to control. It is like that because children and teachers have the power to think, decide, and act on their own. If one wants to learn what occurred then these illusions, preserved (pickled) in the language of the experiment, must not be taken too seriously. The *treatments* need to be described and the reactions of the participants recorded.*

*We should note that this suggestion has not been overlooked even by those who believe with Campbell and Stanley that the controlled experiment is the only way. It has been suggested that descriptions be done of *treatment conditions*. But too often this is suggested not as a rich source of information but only as a way to keep track of the teachers, to make sure they don't deviate from what they were told to do.

We would expect teachers who are responsive to their students always to be changing *treatments* as the interests and needs of their students change moment by moment. We don't recommend description as a way of checking up. We believe description is useful in its own right. Researchers lose information because *experimenters* are afraid to become participant-observers in the situations they create. *Experimental design* teaches that one should avoid contamination of the *experiment* once it has begun, that conditions should be kept similar to preserve the purity of the controls. This anti-septic attitude is called also by the name *objectivity*, which is the mainstream social scientist's way of trying to be fair and honest.

Objectivity

Many social scientists would tell you a good research study must be objective; results and procedures should not reflect the biases of the investigator--that would be subjective and necessarily therefore unfair and dishonest. In current usage, the terms *objectivity* and *subjectivity* have become slogans used too often with little regard for their meaning. *Subjective* has come to connote bad, and *objective*, good. Hence, the mainstream social scientist believes the subjectivity of the personal must be overcome with the methods of science--procedures designed to create precision, control, certainty: in a word objectivity. This is an ironical

situation because it is impossible for a meaningful human science to be anything but subjective. Human beings live in an intersubjective world. If we doubt the trustworthiness of the subjective experience then we must interpret ordinary events as unreliable and idiosyncratic.

Two points about this: First, the ordinary personal experiences of life, the ones that we experience subjectively, are often quite trustworthy. We certainly go about our lives as though we trust others to see things, subjectively, the same as we see them. The meanings attached to a red light, an ambulance, an extended right hand, a smile, a "hello," a sunset, are similarly understood by people who share a culture. This is not to say that everyone understands in exactly the same way or that circumstances cannot change meanings, but only to point out that these events are usually understood in the same way by people from similar cultural backgrounds who find themselves together in similar circumstances. If subjective experience were really unreliable we would spend all our time trying to coordinate the complexities of every day life. In fact the *objectivity* of scientific procedures are only possible because subjective experiences are so trustworthy.

Second, if objectivity is taken to mean being without personal bias then objectivity is impossible to achieve no matter what procedures are used to filter out the *I*. All research is conducted by someone and represents that person's beliefs about such matters as the importance of this subject, the value of that procedure, the significance of this result, the importance of this way of saying rather than that one. Every study is necessarily done personally and subjectively; none more so than the precise, controlled, objective one, because that always involves more intrusion by the investigator than does observation of an ongoing event.

Trying to escape subjectivity, by pretending to objectivity, also results in the loss of information. When the observation of events and the analyses of them are controlled by objective procedures, what may be observed and how the information is reported are limited. The investigator's personal insights are replaced by procedures, and constraints are placed even on the reporting of insightful observations which may occur serendipitously in spite of the procedures. We wind up with that dry prune rather than the juicy plum.

Generalizability

One is taught in introductory statistics courses that the results of research are better if they are generalizable, that it isn't good scientific procedure to study a small group and learn only about it, that one should learn about a population by studying the sample. For this, sampling procedures are created.

This is another dogma which can cloud the understanding of human events. It removes a profound question which needs to be asked: Is this result of general significance? Usually, mainstream social scientists give the answer before the research is done. If they sample well and conduct the analysis according to statistical rules about probabilities then the results are presumed to be generalizable, to apply to the population, not to just the sample. But suppose human events are idiosyncratic, suppose they vary with time, with place, and with cultural circumstances. Suppose the rules of probability don't apply to people as they do to seeds. If any or all of these *supposes* are the case, then those elaborate procedures to achieve generality will not work. In fact, we all know that probability models do not give an accurate picture of human groups. It is only when the choices available are restricted that these models can be utilized, as in voting forecasts, and even then the results are sometimes wrong.

Not only sampling procedures but computations of ordinary statistics are designed to sum up individuals into conglomerates. The mean, the standard deviation, variance, these are all trying to be general statements. They too can be misleading. We can use the average as an example. It is the essence of simplicity to create an average from disparate individual scores by summing and dividing. Many would say the average tells us something about the group. But what do we know that applies to everyone in the group? Nothing. An average tells us about no one particularly and no one generally: it is only an average, the sum of scores divided by N . Often average scores conflict with common sense (e.g., the average American family has 2.35 children or some such number). They represent generality only in the mind of the statistician who understands the computational procedures, and they speak to no other reality. Groups of people are dynamic and disparate. Averages--or standard deviations or the variance, both averages of sorts themselves--are statistical artifacts and do not adequately describe the members of any group.

The desire to speak generally has led experimental investigators to a kind of truth so abstracted from reality that the disapprobation *ivory tower* clearly applies to it. Consider the many studies of learning designed to reach general laws. The subject matter learned and the difference between human individuals is left out in the desire to be general. The *laws* are derived from studies of pigeons pecking, or what is worse, children doing analogous tasks. Why? To get the laws in a pure, general form.

Interestingly, this simple fact seems to be better understood by novelists than by many scientists. In an effort to achieve a balanced view, novelists' descriptions are complex and also specific. When social scientists' descriptions are complex and specific, when researchers have gone to the people they're studying and

asked how it is, their research becomes both relevant and honest.

General statements justified by sampling procedures or summary statistics or bland laws are difficult to use because there is an inverse relation between applicability and generality. The more general the statement the less likely it is to apply to the individual in front of you at the moment. It is a great misfortune that decisions made about groups of people by distant administrators are based on general statements made by researchers. It is a misfortune because in relying on the general, individual differences are overlooked.

If generality is a guide in the conduct of research, educators will lose sight of other more important aims: to be relevant, to be honest, to be accurate, to be useful. But giving up the general as a goal would be difficult for researchers because there is something godlike in knowing broadly, and something ordinary in being unsure about the applicability of results. Trying to be godlike is an understandable goal because human life is beset with uncertainties that only the broadest overview could make sense of, a god's view. It isn't so much that researchers consciously want to be like God as that their procedures lead them toward that stance. It is a view designed to remove uncertainty, particularity, and give a clear view into the future.

Prediction

Predicting the future can be achieved, some believe, by the judicious use of measurement and control to achieve objectivity and generalizability. To foretell what will happen with another group of people under similar circumstances in the future is the clearest demonstration that science works. The desire to tell the future is not new. For many ages it has been the ability to foretell which has demonstrated the power of one conception over another. This has been true for individuals as well as for systems of thought. Whoever could tell what was going to occur, using whatever means, was recognized as a wise and powerful person.

It is no different in our time. Today however it is the scientist rather than the soothsayer or the spiritualist of earlier times who is recognized as the official teller of fortunes. He, or she, using the knowledge gained according to special formulas is supposed to be able to tell whether some disease can be cured and how; whether it will rain tomorrow; whether this or that curriculum will help more children to learn to read; whether this student is more likely to succeed than that student; whether we shall have a depression next year, etc., etc., etc. And in almost every case the prediction fails.

To achieve an accurate forecast social science researchers drastically reduce the actuality of the situations they study. Since for them there is too much that

is *idiosyncratic* in classrooms, homes and neighborhoods to make predictions feasible, methods are introduced to reduce complexity at the outset, so that the *real* underlying dynamics can be reliably recorded. These measures to achieve predictability once again place method foremost and reduce the significance of what is known.

Predicting the future course of new human situations is an unreasonable task. We denigrate ourselves and the children we are trying to help by continuing the pretense that we are soothsayers.

The Pretension of Social Scientism

Much of educational research that is imbued with social scientism is of little importance outside of the research community, yet receives inordinate amounts of attention in the journals. Researchers discuss the work that goes on in the *lab* as though they were chemists and as though some special place were necessary to do their research. The procedures and the language of the procedures become ever more complicated and difficult for mere human beings to understand. The distance between researcher and teacher has become virtually unbridgeable.

This bloated social scientism creates a mythology about its own value and importance that is difficult for the layman to deflate. Criticism is recognized only if it conforms to the rules. Ralph Nader criticized the use of educational tests before the American Psychological Association (APA) (Moore, 1976). One of his critics, in a letter to the *APA Monitor* (Page, 1976), challenged his right to speak on such matters before a scientific audience. Apparently critics must be ordained before they may speak. Furthermore, researchers who want to be admitted to the inner circle must first be approved by those who already belong. No one gets a grant, for example, without first being scrutinized by the established members of the science. No one gets a Ph.D. without first learning the ritual incantations of the professions: *Whatever exists at all exists in some amount. To know it thoroughly involves knowing its quantity as well as its quality.*

These pretensions could be dismissed with a smile if they had no consequences beyond the small audience of journal readers. Unfortunately they sometimes do have wider influence. Arthur Jensen's (1968) hypothesis that the lower I.Q. scores of blacks in comparison to whites is caused by genetic differences, which was derived from a *personal selection* of research and speculation, offers a striking example of how a belief in the supremacy of *objective* procedures has come to dominate common sense. The ensuing debate, which was conducted by Jensen's critics with high seriousness, is itself a pretentious charade giving the impression to teachers, parents and children (who are not immune from its influence) that these *scientists* have a grip on things like intelligence

and race and experience, that they know how to sort out each, and that they can measure their respective influences--in other words, that they know what they are talking about. In fact, none of this is established. The very procedures which yielded the figures upon which Jensen's hypothesis was based were themselves doubtful. What Jensen was really discussing was variance, not race or intelligence. His critics, well-intentioned though they may have been, in their rush to act like scientists--to be *objective* and conduct a scholarly debate, elevated Jensen's hypothesis, a damaging absurdity, to a possibility and, worse yet, to a scientifically established one. The effects on teaching and on black and white children cannot have been good.

The lay public, including elected officials and too many educators, believe the science is Science. These people expect psychological pronouncements to be just as trustworthy as those of biochemistry. They presume the comparability between a substance and consciousness to be an established fact. They tend to accept pronouncements from the scientific establishment without considering the differences between the subject matter of the natural and social sciences. Social scientists like to blame misunderstandings on media misinterpretation of their findings, misconstruing of the special meanings they intend. That mistaken business about words meaning only what the definer says they mean is responsible for much of the problem.

Natural scientists are in the public's eye powerful people; they make more corn grow in the same plot of ground, they create lasers, and they send rockets to the moon. Natural scientists are modern miracle workers who can even see into the future, sometimes, although we aren't always impressed with the accuracy of the weather forecast. Mainstream social scientists can do very little of this miracle work, although they make much use of the trappings. They are reduced to probability statements, carefully couched assessments, and variance estimates. They inflate their importance with procedures that look like those of the natural scientists. They assume that if the procedures are scientific then the results must be valuable, and whoever conducts the study must be a modern miracle worker, a *real* scientist.

In education, graduate students who begin graduate study wanting to know more about teaching and learning are told that in order to join the profession they must learn *the* rules of procedure for achieving understanding. Dissertations must follow the established roles of *scientific* procedure or else they will not be recognized as dissertations. Moreover, research studies, to be published, must conform to the conventional statistical models. This elaborate concern for method, more than for the significance of the subject matter, is pretentious.

Pretentious also is the belief that the rules of scientific procedure--control with variation and observation of outcome--are the special province of a highly

*See Inhelder and Piaget, 1955.

trained cadre of experts. These rules are no different than the rules developed naturally by children as they grow up.* The formal thought of the adolescent has already grasped the concept, *all other things being equal*, which is the fundamental rule of experimental studies. This principle of fairness in argument which governs a good experiment is known by normal adults.

Pretensions interfere with communication. The style of writing called *scientific* is a barrier to the transmission of ideas. Because of the belief in the importance of objectivity, the individual who writes is considered unessential and therefore must disappear behind the prose. *I* is taboo according to some. Science writers who must refer to themselves say, *the researcher*; that is more neutral, more objective, more scientific--and more pretentious. By this logic, the best study is one done in a fashion to make it indistinguishable from all of the others. As Dr. Shulamit Reinharz of the University of Michigan's Psychology Department has pointed out to us, rather than recognition and acceptance of the power of an individual's thoughts, we have a ruse to escape them. This kind of inadvertent dishonesty is, it seems to us, antithetical to the spirit of scientific study.

An example of the tortuous wrenching to which the language is subjected to make it conform to the canons of social scientism is scientism's use of the word *significant*. The word is understood to have this meaning: *the probability, according to one or another statistical test, that a measured difference is likely to occur only five or fewer times in every hundred observations if the samples are in fact random selections from the same population*. As many have pointed out, statistical significance has nothing at all to do with the *real* significance of an observation. The English language has simply been plundered to serve the needs of Science and another barrier has been put in the way of the use and discussion of results.

There is much to be gained by recognizing our own finitude as researchers of the human condition, by trying to remain a part of the human community rather than trying to get out of it. Recognizing our connections with those we study, recognizing that we share this world with them and that they are the ones with whom we must communicate, can lift a burden from all of our shoulders. If the writings of researchers are recognized for what they are, the personal convictions of other human beings, and given no more importance than their message deserves, then there is freedom to talk to one another and to speculate. Currently, the fear of an *unscientific* statement makes speculation taboo. If science is pursuit of truth, as honestly and forthrightly as possible, then reducing the pretension and enhancing dialogue should help. A humble science can be a much discussed science; a much discussed science can be a useful one.

So long as the study of human events remains divided into academic camps there will be barriers in communication and the development of new ideas. Perhaps the search for understanding about human experience could better occur under one umbrella, called the *human sciences*. There all concerned for better understanding of the human condition could proceed without methodological restraints. Giorgi argues that the human sciences lie between art and the natural sciences. Perhaps they do. We would want, however, to allow all who study the human condition to enter in; we would include among us artists of all sorts whose studies are also significant for understanding.

At the moment, the two academic camps suffer from a too rigid separation of information. According to mainstream social scientists, there is scientific evidence, which is reliable and trustworthy, and then there is humanistic opinion which isn't either. Further, opinion is subjective; worse, it is anecdotal. This categorization is in part the result of the way the history of science has been portrayed to us. Through this portrayal, the scientist appears as an innovative tradition breaker, a believer in the power of human intellect to demonstrate a new vision opposed to traditional views. In a word he is a hero and his information is good. The tradition the scientist has broken is identified with the church. The story teaches that people who do not follow the scientist are opposed to progress, and, interestingly, as Kerlinger (1964) has observed, can't be trusted to make sensible choices; they "tend to accept explanations that are in accord with...preconceptions and biases" (p. 5).

Although textbooks that tell this story abound, the story is no more than a fairy tale, a modern parable which supports scientific evidence and denigrates the rest. The real story is in fact more complex--as it must be since it is a human story. Actually, much that is not scientific, even anecdotes, has informed a great deal of scientific work. We would do well to eradicate prejudice against nonscientific information and too ready acceptance of the rest. If information can be helpful, we should use it. In this way a wide variety of art forms can be tapped, and can begin to inform *the literature*.

The existence in the social sciences of two antagonistic camps has fostered a distinction between applied and basic research, the latter being largely esoteric, methodologically serious, and apparently useless; the former focused on a single practical issue, less controlled, and its outcomes often uncertain. We find these distinctions also unfortunate. They too are stumbling blocks to the flow of information between those who are concerned with similar problems. Since we are educators we want to see these distinctions abolished, blurred, or ignored by all those who want to learn more about people--about children, learning, schools, teachers and their worlds, education in its broadest outlines.

A Phenomenological Approach

Phenomenology was not founded: it grew. H. Spiegelberg.

*See Misiak and Sexton, 1973, for an historical introduction.

In this chapter we will try to set forth clearly and accurately what phenomenology is. The movement known as phenomenology has historical roots in the early 20th century philosophy of Edmund Husserl and his follower Martin Heidegger, and of Kierkegaard in Scandinavia, and Jean-Paul Sartre and Maurice Merleau-Ponty in France.* As a philosophy it is complicated, wordy; to many tastes, unnecessarily so. It is the kind of philosophy which makes Anglo-American readers nervous because it discusses in esoteric language ephemeral ideas like the *transcendental subject*, *epoche*, *being*, and all apparently paradoxically, in the name of grounding philosophy in reality. Philosophical traditions in Germany and France are less positivistic than in England and America. There are therefore cultural predilections to be overcome to understand this *continental* point of view. We believe the effort is worthwhile, but we want you to be aware that this is different territory, and one of its characteristics is complicated, often turgid prose. We will try our best here, however, to avoid unnecessary complications; complexity can come later if you choose to go directly to Husserl, Heidegger, Sartre, and Merleau-Ponty (see References).

Phenomena are experiences; thus phenomenology means the study of experience. Philosophers have made a distinction between things as they exist in the world--trees, houses, dogs, bushes, etc.--called noumena, and our experiences of those things, called phenomena.

The philosopher Edmund Husserl (1859-1938), a mathematician and logician interested in explaining the origins of logic and math, used these terms to deal with a difficult epistemological problem: how human beings come to understand logic and mathematics, two systems that are full of certainty in which experience, which is often uncertain, does not seem to matter. In math and logic a result is true undoubtedly and always. *One plus one equals two* is true not often but forever. Math and logic seem to lie beyond experience, to transcend it, and to some people they are therefore superior forms of knowing.

Husserl was convinced that these *privileged* systems, so useful for the development of knowledge in the natural sciences, could only be understood by finding the origin of these ideas in everyday experience. If philosophy

would turn away from abstract systems and turn to phenomena, things as they were constituted in consciousness, then, he believed, philosophy would be able to encompass science, comprehend it and become the basis for it; in fact, become the basis for all knowledge.

To attain this goal Husserl believed philosophy should begin by putting aside its preconceptions, its theories about knowing--that, for example, there are *a priori* categories of knowing, or that all knowledge comes through association, or whatever the particular theory happened to be. He counseled, "go to the things themselves, in this case experiences as they appeared in consciousness, and examine them. His plan for doing this was not, strangely enough, an *empirical* one. He didn't suggest talking to a lot of people and trying to tie down similarities and differences in understanding. One had only to examine one's own experiences correctly. For Husserl the goal was essence, not generality. He believed in the use of intuition to reach the essence. All one had to do was examine one's own experience critically by *bracketing out* preconceived ideas, the eventual goal being to illuminate *pure* consciousness, e.g., consciousness separate from any of its contexts. Husserl knew this could not be done directly by studying consciousness alone because consciousness was not in fact separable from its context; consciousness was always *consciousness of*. Nevertheless, he believed, one could distill pure consciousness from a careful study of the particulars, beginning without predisposition, trying to find the essential characteristics of each phenomenon studied. So, for example, if you were to examine the perceiving of a form against a background you might ask yourself how it could be different if conditions were altered. Or, if you wanted to study fear you might try to imagine *being afraid* with one or another of its characteristics absent, asking always whether it could still be called fear. In this way, Husserl believed one might reduce essence from experience, reach a transcendental level of understanding, and ground science firmly in philosophical understanding.

Husserl believed philosophy should begin with the *natural attitude*, which meant taking the ordinary and the everyday world seriously. Philosophy must, he felt, begin with the ordinary if it were ever to understand itself, because it was far from ordinary sense that extraordinary scientific sense came.

To sum up then, Husserl believed phenomenological philosophy was a way to ground scientific understanding. He proposed the study of experience using intuition and imagination to get to the roots, the essence of consciousness. He hoped in this way to attain an understanding of understanding, pure, without the adulteration of particular contexts. He realized, however, that this goal could only be reached by treating consciousness as a process, not as an object. Consciousness existed in its

intercourse with things; it was always *consciousness of* something.

Although Husserl's contribution was significant, few today would subscribe to the transcendental goal or to all of the methods Husserl proposed. Phenomenology has changed in the hands of those who have come after.

Existential Phenomenology

The philosophy popularly called existentialism could more properly be labeled existential phenomenology. It developed from ideas of Husserl and others. Two of its major proponents in France were Jean Paul Sartre (1905-1980) and Maurice Merleau-Ponty (1908-1961). For the existentialists, existence was more fundamental than essence. They believed Husserl was correct to ground philosophy in ordinary experience, to recognize that consciousness was a process and hence had to be studied whole, and that prior theories had to be put out of mind to do this. They did not agree that the goal was an understanding of transcendental subjectivity. For them the goal was to illumine the everyday world of experience with its meanings intact.

By taking seriously Husserl's admonition to go to the experiences themselves, existentialists brought to light aspects of consciousness which had not been emphasized before. First, they stressed the inseparability of the physical self and consciousness. According to them, experience, besides involving an active consciousness, one which is always reaching out to the world to grasp it, necessarily also includes embodiment. We are all physical bodies as well as minds. Seeing, hearing, feeling, smelling, touching--all involving the body--are part of the ordinary world of our experience and hence a part of consciousness. Thus, the body became central to existential phenomenological study of consciousness. In addition, the existentialists also emphasized the importance of other people, of the social world, to experience. They pointed out that self-definition, ego, was always, in part, the creation of other people; that human experience takes place in an elaborate web of social interrelations which are inescapable.

A vivid example of how a consciousness of other people and of one's own bodily awareness play an important role in experience appears in Sartre's book, *Being and Nothingness* (1966). Here, Sartre describes what happens to a man peeking through a key hole, alone and apparently unobserved, who then suddenly realizes that someone is watching from the shadows behind. The man is transformed. He instantaneously feels shamed and becomes aware of his own bodily existence; his own presence leaps into recognition as the look of the other is felt. To existential phenomenologists, the fact we overlook, ignore, pass by, pay no attention to, experiences like Sartre's character's was no demonstration that

experiences like his were insignificant; on the contrary, it was the taken-for-granted, background character of ordinary experiences that made them important.

Perhaps the most comprehensive statement of the existential phenomenological position is Maurice Merleau-Ponty's, *The Phenomenology of Perception* (1962), an investigation of the way understanding happens in experience. In his book, Merleau-Ponty examines how perception becomes understanding. According to Merleau-Ponty, when we see something we not only perceive it as an object but simultaneously understand it as a meaningful object. An ashtray is not first perceived as a plastic, block, circular object and then next named *ashtray*; it is apprehended *in total* as part of our ordinary life--just an ashtray. In our experience of a thing, the thing and the meaning of the thing are one. Meaning resides unanalyzed in experience and is directly accessible. For Merleau-Ponty, language is of central importance in understanding how the world appears to us directly. Language doesn't mediate experience: it is whole with experience. Thus meaning is part of the *primordial*, the first order. We do not doubt meaning, and it is this undoubted meaning which is at the heart of, or is the essence of, existence.

Hermeneutic Phenomenology: The Interpretive Tradition

Hermeneutics means interpretation. The term *hermeneutics* was originally used to refer to the interpretations of written Biblical texts by theologians, to the uncovering of the manifold meanings of Holy Scripture. These interpretations were believed necessary because the language of Scripture was understood to be rich in hidden meaning and one had to study to get to the deeper symbolic and mystical meanings. During the Renaissance the interpretive tradition changed. To understand the meaning of a text, it was now thought necessary to understand the intentions of the writer, and the nature of his world. It was necessary to place the writer and his language back into their original context, into the social and linguistic world from which they came. More recently, the interpretive tradition has been applied to the empirical world by likening the world to a text which must be read. In *reading* the world, as in reading a text, the intention, the situation, the desires, the needs, and the social world of the authors are important to understanding. To comprehend a text or an experience, interpreters must place themselves in a position similar to the author's. This then is the counsel of the hermeneutic phenomenologist. Place yourself in the context you wish to understand. Recognize that you, like the people and situations you are trying to comprehend, are also an interpreter, or if you like, a *hermeneut*. We are all hermeneuts. We find significance and meaning in the world everywhere.

Martin Heidegger, a pupil of Edmund Husserl's, and Heidegger's pupil Hans George Gadamer are two prominent spokesmen for the hermeneutic viewpoint in philosophy. Hermeneutics has also had an impact on empirical research through the influence of anthropologists like Clifford Geertz and Paul Rabinow and sociologists like Kurt Wolff and Robert Bellah.

The Phenomenological Tradition

These transcendental, existential, and hermeneutic branches belong to the same tree. Each emphasizes a different aspect of the study of experience. But all are agreed that it is experience itself to which we need to turn to understand human life. Experience is found in the taken-for-granted world of everyday and therefore we must study it there. To do this we should try, as much as we can, to forget preconceived ideas about what we are likely to find and look with fresh eyes at what occurs. We are looking for the meanings resident in the world of human beings, our informants. To find meanings we must recognize that our informants are part of social worlds, that they are caught in webs of meanings which are part of their language, and if we are to explain their lives we must try to understand how this world looks to them, from their point of view. Doing phenomenology is like coming to a movie in the middle. To understand the movie, we need to ask questions like this: What is this story about? Where did it begin? What are the significant parts and what the insignificant? To answer these questions at a movie we only need to go back to the beginning. With life it is a little more difficult.

We turn now to central concepts from these phenomenological traditions that can be useful in the conduct of descriptive research which tries to understand the meanings of experience for those living through it.

To The Things Themselves

The phrase, *to the things themselves*, expresses perhaps the most basic rule of phenomenological research from which many other ideas flow: Start your study with the things that you want to know about, not with something else. That injunction seems simple and self-evident, yet it is all too easy to stray from studying the experience itself to studying some diminished variant of it. Here are three simple examples of studies gone astray:

(1) You want to know more about how children learn to read. A very important and interesting question. So you study the ability of children to discriminate letter shapes T, I, L, X, and correlate their scores with tested reading level. (2) You want to know more about the characteristics of good teachers. You study the behavior of a group of teachers who made high scores on a teacher

attitude inventory, using a 10 item check list to guide observation. (3) You want to know about the relationship between a child's interests and his or her school performance. You study the correlation between test scores, an interest inventory, and achievement tests. In all three examples, the *thing itself* is diminished before it is studied.

Husserl's maxim, *to the things themselves*, in all its apparent self-evidence, does make a difference. If reading, teaching, or the relationship between interest and achievement interests us, then we must study these things themselves, not test scores, check lists, or correlations. Similarly it is important in a phenomenological study that the meaning of the experience be studied in its completeness. Phenomenological studies are therefore necessarily context bound: studies of situations rather than of a set of preselected variables.

Worlds of Meaningful Experience

The study of reading can take place in many different situations; some strange, like a *laboratory*, or some more usual, like a classroom. But it should be clear that if the goal is to understand reading, then it is unavoidable that at some point reading must be studied as it presents itself in the normal everyday world. But then why make such a fuss about the normal everyday world, since it is something everyone already knows a good deal about?

Yes, it is true we know a lot about the normal everyday world we live in. It is full of certainties for us. We can rely on trains to run on train tracks and cars to stay on the road and people to walk on the sidewalk, etc., etc. Human life is built upon a shared expectancy and a certainty we take for granted. Science, art, indeed everything is only possible because we know so much about this everyday world. And yet we know so little.

The photographer Brassai (1976) expresses the point well as he explains why he took photographs of the usual ordinary things that went on in Paris during the 1930s:

I loved the whole side of Paris at night--it was part of the reality of the city. I never went after subjects just because they were extraordinary. What interested me was their reality--even in a way their banality. That's why I never fully agreed with the Surrealists, who adored everything exotic and strange. I've always loved the ordinary, the everyday--because I think that if you really look at them, they are so often the most astonishing things of all.

It is an important paradox that our normal lives, what we do most often, what we take for granted, are what we examine least. Brassai is quite right that the ordinary is full of the extraordinary which we never see until we

look. Phenomenology expresses its commitment to understanding by taking experience itself seriously, in the ordinary life world.

Not all experiences are usual, and if you are interested in unusual experiences then you must study them where you find them, in the exceptional events of life. A human science can profit from such study as a useful contrast to the study of normal experiences. But we must also understand the everyday usual world of the child or adult.

Phenomenology uses the concept of lived or experienced worlds to show that there are very different, apparently disjunctive, spheres of experience. For example, the world of your dreams is not the same as the wide-awake world. Both worlds are important and full of meanings. Things happen in the one that never occur in the other. Thus worlds are related but they are also different. All of the experienced worlds are important and worthy of study. For our part and with our concern for education, we want to stress the enormous importance of the ordinary world of school, of home, and of playground, places where most children have their *educational* experiences.

Wonder and Ordinary Experience

The minute you turn to the ordinary and examine it, it becomes something else--as Brassai says, extraordinary. This is the inevitable result of research. What was background to the *important* movement of our lives becomes on second look, on re-search to be quite wonderful. Having a sense of wonder about the ordinary events of life is a natural consequence of taking them seriously, of examining them. The usual, which is everywhere, suddenly disappears as the uniqueness of the event, whatever it might be, comes forward.

One of the differences between the novelist and the mainstream social scientist can be seen here. The novelist takes the particular case and in examining it, holding it up for scrutiny, makes it extraordinary. The social scientist who is looking for generality in his data overlooks the individual event to achieve some mean tendency. For this social scientist, the individual event as unique is error. To the extent that the phenomenologist examines the particular event with a sense of wonder, from close at hand, he is moving toward the novelist and away from the social scientist. To this extent phenomenology represents a reduction in the gap between studies of the human condition in the humanities and the social sciences.

Language and Intersubjectivity

Where does the generality come from in the phenomenological study? From the shared understanding of an experience that the researcher describes and the reader responds to. There is no guarantee that a description will be generalizable but phenomenologists believe that in most cases there are very likely to be similarities in the reactions of different people to similar circumstances. Not in all aspects but in many of them. Phenomenological generality can't be proclaimed, it must be discovered. If it isn't found, that in itself becomes significant.

Ultimately it is up to the reader to decide whether the research has struck at some shared experience or not. The investigator can point to themes which appear but the ratification of these meanings can only proceed with the agreement of the audience. Some have used the term *transsituational* to refer to experience shared by different people at different times and places.

This sharing can occur because humans are awash in a communicative sea. Meaning is alive in everything we do, even when we do not speak. Gestures, looks, touches, even silence are all significant and cannot be disregarded. Our world, the usual everyday one, is a world of intersubjective meaning. Every person is condemned to see meaning in experience.

Language is a major force in binding subjective experiences together. It is a tool for affirming one's vision of reality. As such it constitutes the major source of information for phenomenological research, although by no means the only one. It is the means used by researchers to reach an audience and to reach general agreement. The acknowledgement that something general exists in human experience waits for the agreement of the audience, acceding to the description as something which is understood.

Is it possible to reach agreement in this way? We think so and further think life would be unthinkable if this were not the case. Our social world, the everyday world of human experience, is a shared world. Let us give an example of what we mean from Ton Beekman's life (one of the co-authors of this monograph). He lives in Amsterdam and works in Utrecht:

Early morning in Amsterdam. I want to catch the 8:00 a.m. train for Utrecht because I've got to be at the Institute at 9:00; usual and normal for me. Now I know--so trusted, normal and real is my world--that I have to get up about 7:15, eat breakfast quickly, leave my door at about 10 minutes to eight in order to get to platform 4B in time to catch the 8:00 train. That is where my train will come. So I get up and leave the house on time. It is a lovely day, the sun shines. Good for the sun. On the Damrak the slow moving oncoming stream gets in my way. The red pedestrian light says, wait, but the

station clock shows 7:55. You'll make it easily. Platform 4B is still empty, but there comes my train. I'll be on time, the time that Karel and I arranged to meet.

This example of trust in the world is so usual as to go almost unremarked. We don't have to discuss it. All normal adults know how to arrange their lives in order to catch a train. The Netherlands train system is built around a schedule which one looks at to know where to be, and when, to get where you are going. And in the context red lights, clocks, pedestrians, all take on a particular meaning for Beekman in the light of the goal: to catch the 8:00 for Utrecht.

Most of us do not live in Amsterdam, we don't ride Dutch trains everyday, we walk only a few times in our lives on the Damark. There is a lot here that is unique to Beekman. He lives in his own world. Someone watching him leave the house and following him as he walks briskly from the little alley where he lives to the station would probably guess that he is hurrying to catch his train. Those who live thousands of miles away may not understand the geography of the event, unless they remember Amsterdam; but isn't it nonetheless, believable and understandable, a good intersubjective description? That is, using language to transport us into someone else's world, not wholly, but nevertheless well enough to make it affirmable. You say to yourself, yes that happens, if Beekman says so, then to him; but if not to him, then to many people. I, as a reader, can understand and believe.

Human language is nothing if not the instrument for expressing shared worlds of subjective experience. Literature lives when read because it touches the reader, with the intent of the writer. Language is a profound tool for telling what is going on in our lives. It allows us to reach out to other subjects and to let them see what our world is like, what is unique and what similar. Scholarship, art, and life itself are built upon the power of language to tell more about the experiences we all have.

It is important that we say these evident things because there has developed among many researchers a deep mistrust of language as a tool for understanding and communicating. This has lead to the *operational* transformation of language that we discussed in the previous chapter, and then to ciphers which are felt to be more trustworthy because they are less open to individual interpretation.

Phenomenology is based upon an acceptance of language as the means for communicating, for learning, for reaching agreements. This is not to say that language is the perfect tool; but it is often the only tool. There is also however communication that goes on beyond talk or writing. It is possible to say one thing and to mean another and to communicate this latter through gesture or inflection. Note however that this other extralinguistic way of communicating is also possible

because there is a shared world of meaning which includes the extralinguistic. The world of human meaning is the intersubjective world, the world of situations.

It is a constant struggle to mold our language to the shape and size of our understandings. This is what writers have always struggled to do and those who succeed in creating character can mean, with words, more than they can say. The use of imagination is often necessary to create truths which overcome the limitations of our language. In the intersubjective world where the reader and writer have the possibility of meeting and agreeing, there is language. It should be used as effectively as possible. We cannot change the meaning of the living language and still develop a useful science of human life because communication depends upon the meanings which both come from and go back to, shared experience. It is critical therefore that when we do research we use language that comes from experience, that is empirically based, and that we try not to make up words or attach new meanings to old words. This is not an easy task. Consider Langeveld's (1969) advice concerning education:

Phenomenological study begins by recognizing... "That there already exists a vague house, back yard, and kitchen experience as foundation for the notion of what education... is. This notion shows us the area, the 'sphere' where we should go look for the phenomenon. We then see the phenomenon in its 'available to everyone phenomenal form.' A phenomenological method requires us ...to meet our fellow researcher in the phenomenon as people together mean it and never somewhere else. Usually then we don't begin from 'a general understanding' but from the phenomenon itself as it is met in experience, which we can only analyze if we are at least ready, and in a state to allow the experience to speak and thus not to begin by anticipating in this phase of the research the available insights and see its final meaning as already revealed" (p. 27).

Phenomenology tries to understand the everyday world of experience by using the language of this everyday world. This has the happy consequence that the language of research is living language. It is not an easy task to understand the tool, language, well enough and to use it with precision. Meanings necessarily change. It is, however, the craft of language phenomenologists must use to reach an understanding with others.

Intentionality

In phenomenological research the important information lies in the situation itself and not behind in a set of internal rules, or before in underlying causes. It is therefore essential that first, things be described. Without this step, little of value can follow because it

is in the description of experiences that human consciousness can be revealed.

For phenomenologists, consciousness is always *consciousness of* something; it is an inseparable part of the world which draws it to existence. Consciousness is not an empty bucket to be filled, a variable, a stable *factor*; it is an activity, a moving, bubbling stream. And this activity is inherently intentional. It cannot exist unless it is reaching out into the world and finding itself alive there.

Think for example, about the experience you are having now as a reader. Where is it happening? Are you alive only in your head or are you alive in an *outside* world of experiences toward which you are turned? Are you sitting comfortably in your favorite chair, perhaps, distantly aware of someone dear to you pattering around in the kitchen creating familiar sounds and wonderful aromas that will soon draw you to the dinner table? No doubt something is going on around you as you read, something which is an integral part of your world: and that world is an integral part of you: you are alive in that world.

We all live in a world which opens to us and which we move into. This fact suggests the way one must use language if experience is to be taken seriously and described meaningfully. Description must be full and rich and detailed. Description which reduces experience to the biochemistry of the brain, or underlying rules, as important as those things may be, goes in the wrong direction if lived experience is to be understood.

How Can Phenomenological Research Be Done?

In the next chapter, we will get quite specific about doing. But first we want to discuss two general propositions about doing phenomenology that help in the doing of it: the first bracketing, or to use the Greek term following Husserl, the *epoche*; and the second, recognizing human fate, the reality of our situation which puts limits to understanding but also can serve to guide it.

Bracketing is a way to put subjectivity to use in the service of understanding. Subjectivity is essential because, as we have seen, objectivity, observing the world without being there, isn't possible. We must necessarily look through our own pre-judgments--our *pre-judices*--at what happens. In phenomenology if we are not careful we run the risk of doing research that discovers what we have previously expected we were going to find. Phenomenologists propose the bracketing out of prejudices as a way to overcome this difficulty. To bracket, you simply make a conscious decision to observe without prejudice; you decide you will not pay attention to what you already believe about something. Some would argue that rising above one's prejudices entirely is impossible. Perhaps it is. But bracketing is useful,

nevertheless, because to do it one has first to examine oneself carefully as investigator. The first questions for any phenomenological study are questions we address to ourselves. The questions are these: What are my pre-judgments? What personal commitments do I bring to this study? What do I *know* about the subject that could influence what I see? Having discovered our presuppositions and beliefs and having brought them to light, we know to watch out for them. Later when the study is written, it makes sense to tell readers about these prejudices so that they can watch out for them as they read description and analysis.

If progress in understanding is to be our goal we cannot ignore the limits placed on us by circumstances, our fate, or as Merleau-Ponty called it, our *human finitude*. We are not infinite beings, we cannot know all, but as with the limits placed by prejudice so with our finitude, we can turn this knowledge of ourselves to advantage. We are bound to experience bodily and temporally, and our world is supplied to us ready made, full of people and of things, the perceptual world of objects and the social world of people. We cannot escape these things, nor do we want to. It is therefore well when doing research to keep them in mind; they are the basis of commonality or, to use a more fashionable word, transsituationality, in experience.

In our own transsituational research in Ann Arbor and Utrecht we have seen themes reappear in similar form if they were closely related to bodily feeling. In descriptions of *waking up*, for example, there is good agreement in description across the languages and cultures. In general the closer one sticks to bodily occurrences the more likely one is to see similarity of meanings. Our fate also dictates that history is important to understanding. We are bound, temporally, bodily, and socially to a present time, which is related to a past and directed to a future. Whoever would understand *now* must consider the present in that context.

Are there no enduring truths? There may be aspects of experience so closely bound to fate that they have similar meaning for people. But most experience probably has very different meanings for people in different circumstances. We would expect to find universal meaning the exception rather than the rule.

Thus temporality, body and the pre-existent world play a critical role in phenomenological research since they act as limiting factors on understanding. We cannot escape them. Therefore we must pay close attention to them. They represent, if you will, pre-established themes in experience--inescapably.

Does Phenomenology Represent a Single Point of View?

The answer is no. Phenomenology is not a belief system whose dimensions can be specified for all those who

legitimately use the term. And this is as it should be. We have no desire to see an orthodoxy develop around phenomenology. We are much happier with the idea that phenomenology encompasses a loose confederation of people who share some important beliefs about the content of a human science.

Herbert Spiegelberg in his book of essays, *Doing Phenomenology* (1975), expresses a similar desire for openness but also believes that three minimum requirements must be met by any approach that claims to be phenomenological:

(1) *A phenomenological approach must start from a direct exploration of the experienced phenomena as they present themselves in our consciousness...without committing itself to belief or disbelief in their reality.* (2) *It must attempt to grasp the essential structures of these experienced phenomena and their essential interrelations.* (3) *It should also explore the constitution of these phenomena in our consciousness, i.e., the way in which these phenomena take shape in our experience* (p. 267).

A phenomenological approach is one that fixes on conscious experience, and tries to understand how it happens and what it means. How that is done and for what sorts of experiences is up to the person doing the research. Within these broad guidelines there is room for different problems, approached in different ways.

Early in this chapter we sketched an answer to the question, What is phenomenology? It is *our* answer at the moment and our view is likely to change as we learn more about human experience. We have emphasized language and the everyday world. That is an expression of our interests. Also, we are convinced that the world of dreams is important as are experiences outside of language; dreams and extralinguistic experiences are no less available to phenomenological study because they lie outside the language of everyday experience.

Now, having discussed what phenomenology is, we want to turn to several aspects of the approach we have developed which are not strictly speaking phenomenological, but which we believe are nonetheless important. They reflect our commitments as educators interested in solving educational problems within that *vague sphere* that Langeveld talked about.

Phenomenological Research: The Search for New Possibilities

We believe that research which describes human experience in order better to appreciate it carries with it the potential for change, the chance that better decisions will be made in the future. We are not so naive as to believe that phenomenological insights can only be used to benefit people. It is in the nature of research

that its results are not predictable beforehand, and it is quite possible that something might be learned which could have some harmful effect. Nevertheless, we would argue that research which takes human experience as its starting point has the best chance to uncover new possibilities. If we examine what it is like to be a teacher trying to teach 30 children, or a child trying to make friends at a new school, or a parent when his or her child comes home from school, then we are giving first priority to the interests of people as they live with the educational demands of everyday life. This is, relatively speaking, assumptionless looking. We aren't beginning from a model with teacher as stimulus and child as responder. There is no norm to which each of these people is automatically compared, as with a norm-referenced test. The researcher makes experts of the informants. We accomplish our goal if we understand their circumstances better. Phenomenological study puts human interest first. Experience takes precedence over models, tests, controls, outcomes, norms, and everything else.

An important difference between the experimental-positivistic tradition and the phenomenological tradition is found in the goals each has for research. From phenomenological study one hopes to achieve an awareness of different ways of thinking and acting. It is a search for new possibilities. The experimental-positivistic tradition has as its focus the discovery of *laws* which govern behavior. Phenomenological study tries to open up new possibilities for choosing. The positivistic tradition in which underlying causes are sought makes choice superfluous.

We believe that the phenomenological approach offers the chance to be helpful to people because it does not produce a set of laws for predicting results. Its goal is reached when the reader of a phenomenological study has a better awareness of *the other's* way of seeing things. It is our belief that by revealing alternative meanings, new ways for solving problems will be suggested. It is in this spirit that we will argue in Chapter 5 that phenomenological research can be helpful in education.

The question of helpfulness is related to the discussions of basic research in education and psychology. The argument in favor of basic research--an argument with which we disagree--is that this work is so intrinsically interesting that researchers are compelled by their curiosity to pursue it even if they have no idea how it will be used. Further, it is said that science has profited from the work of researchers who are doing no more than pursuing their own curiosity, who have no concern for real-world practicality. By this logic it is argued that anything which is of some interest to the researcher is a proper object for study. We don't believe it.

Nor do we believe, as some do, that the chief function of applied research is to use basic research results. We agree that applied research is important--in fact all research should be concerned with real-world applications--but we feel that the appropriate starting point is not basic research results but rather human experience. The prevailing view that basic research is foundational and applied research technical is mistaken. This view of the research world is based on a simple-minded analogy between natural science and the human world. It is an unlikely assumption that because of their elegant and objective procedures, methodologically sound analyses in either basic or applied research (whose relevance to the human world is not obvious) are intrinsically important.

There is no reason why applied research which finds its justification in a world of basic research is any more useful than the research which is its justification. The crisis which has developed concerning the value of doing educational research can be traced to this false commitment. Researchers are so busy trying to keep their methodological skirts clean that they forget the messy world in which they are standing. Phenomenological research tries to understand the mess. It is mired in it. Phenomenological procedures will not seem elegant by natural science standards because they acknowledge the nature of the world and try to meet it, the data, on its own terms.

Awareness of History

If there is a *basic* component which justifies educational studies, it doesn't lie in the direction of methodological purity. It lies in a better acquaintanceship with the truths of human history. It is historical study which grounds educational research as we conceive it from a phenomenological perspective. Basic studies for educators are historical, philosophical, literary and linguistic examinations of cultural heritage. They may focus on learning, teaching, and growing up--matters with direct import to education, but they don't have to. Basic research which sets the context for understanding can never be irrelevant because it is discussing our subject matter. We have only to grasp the themes and relate them to our own problems. An understanding of cultural history can be useful in understanding the everyday world of education.

One of the consequences of the aggressive drive to make Scientists of us all has been the neglect of historical-cultural traditions. Our practices, also as researchers, are entwined with the web of historical events to which we are heir. The repository of our historical tradition lies not in *the literature*, meaning the last three years' issues of a few journals in the English language in which only *methodologically sound* articles may be found. Awareness for researchers means

self-consciousness about their own situation. Awareness can be achieved by studying the historical traditions of which one is a part. The alternative is to live with the illusion that educational ideas are no part of the history of ideas. Our obligation to be part of a tradition is one that none of us can escape if research is to achieve its fullest meaning as a source of ideas for a better way to act.

Method Should Be a Function of the Problem

We think it would be exciting and beneficial if everyone did research about the things in the real world which puzzled them. We think particularly of students, who enter graduate school full with the desire to learn more about how to teach reading in a better way, or get uninterested children interested, or save leftout children from their misery, or create a better math curriculum: they come with an infinite list of useful things to be done. But often student-researchers can't do the things they want to do if they first have to have a test, or model, or *scientific* justification in the form of sufficient numbers of children and a *control* group. Methodological requirements which strait-jacket researchers change and diminish the investigation's value, and in addition make the exciting-to-contemplate considerably less than exciting.

The concern for method has been overdone. We'd like to convince everyone of that with our arguments, although we realize that's not possible. Nevertheless, we hope that those who disagree with us will come to realize that none of us should try to force the others to follow them. This, we realize, will call for considerable restraint of power from those who now represent the mainstream view; but such restraint can only benefit understanding.

Phenomenological Research Must Be Superior Work

The description of phenomena is a demanding, creative task which cannot be bound to formulas. It would be a mistake to consider phenomenological study an easy way to avoid doing statistics. A *statistical understanding* of almost anything for which there is a test--and there is a test for almost anything--can be obtained in a week or two. An intersubjective understanding of lived experience, an understanding of the phenomena as given, and the expression of that understanding in language takes most people a lot of time; it is a terribly difficult and often frustrating task if performed with integrity and passion. Writing well is important for all research, but for research into the meaning of experiences, phenomenological research, it is indispensable. It is true that films and audio tape are valuable research tools, but even with these the need to analyze,

select, and compare meanings in writing remains necessary. There is no substitute for craftsmanship with language.

In phenomenological research there is no reason why, because methodological barriers are removed and language is the vehicle rather than numbers, anyone should have trouble judging the quality of a research study. There is evidence; there is inference; there is argument. Judgment about the quality of phenomenological research rests with the reader of the study; the adequacy of the information collection procedures given the problem; the accuracy of the description against one's own sense or reality; the quality of the analysis, given what is found in the research. Phenomenology is not *a* method, but that doesn't make it at the same time a haven for incompetence.

Doing Phenomenological Research

When we work with groups of students or groups of teachers we begin with a topic that everyone can write about. This, in itself, is a revealing experience; it reveals the pervasiveness of intersubjectivity, common bonds among individual experiences. What sorts of topics are widely shared? Topics that deal with our bodies, such as being afraid in the dark, being happy; topics that deal with social experiences, such as my favorite teacher, feeling alone. After selecting a topic we ask everyone to write a short, one or two page, description about it. Three or four people are asked to reproduce their descriptions for the entire group to read. With these descriptions the analysis begins.

At the start of the session we choose one of the reproduced descriptions and everyone takes a moment to read it. Since everyone has already written an account, the reading of this first essay is already a comparison. As we read we look for themes that appear in the essay. These are inevitably the result of a comparison with our own views. It is exciting to see intersubjective agreement appear as the words they've used to describe a subjective event--waking up, being afraid in the dark--or the feelings they thought were uniquely their own, are shared. Our sessions usually consist of several weeks of joint analysis coupled with readings from the phenomenological literature. Thus phenomenology is introduced as a way of doing.

Working in a group, at least at the start, is an advantage because in the effort to achieve understanding a consensus must be reached. This illustrates, vividly, the effort required to achieve an accurate restatement of what appears to be a common theme. After working together for a quarter of an hour on the correct descriptions of an experience it is maddening to have your informant reject your effort. "No, that's not what it is like for me. It may be like that for you, but not me. I ..." Sometimes this leads to a more precise formulation of a shared experience, sometimes to the recognition that something unique is being described. The frustration is usually relieved with some better understanding. Sessions are not dull and time goes quickly; they are themselves good examples of the intersubjective experience.

What we propose to do in this chapter is *walk through* the procedures we've just outlined, giving advice as we go along. We'll imagine that we are working with a group you belong to and use as example one of the topics from a previous seminar.

Phenomenology as a Way of Doing

We will begin with an old chestnut, something that we have used numerous times to begin talking about written description. Before going on to read the examples we urge you to write a description of a time when you were afraid in the dark. Don't worry about how it's done, what to include, and what not to include. It is only necessary that you have something which you can compare to the following examples. Read Suggestion I and then begin.

Suggestion I: Write an account of a single experience, something simple and straightforward; as much as possible stick to descriptive language and watch out for interpretations and attributions of causality in your writing. Don't lose yourself in factual details. It all begins with the lived experience and that is what you should strive to describe. Now write your account.

Afraid in the Dark 1

The last time I was afraid in the dark is long ago. That time I had to go from a nearby village to walk home, where the path went through a woods. It was understood beforehand that I was supposed to be home before it got dark, but because of the insistence of my host that didn't happen. Now I had to pay for that...I imagined the whole way home in my thoughts...which places were the most "dangerous."

What was still being said hardly made an impression. I was asked questions and gave superficial answers. My thoughts were elsewhere.

When I finally left it was almost dark. After a short time I arrived at the entrance to the wood and then it was even darker and more menacing than I had expected. I tried not to attract attention at the same time looking for the best way in, trying to make as little noise as possible. Sometimes I stepped on a twig that I hadn't seen and then I was stung through with fright. I huddled up and looked carefully behind and alongside to see what was there....It seemed to be nothing and that gave me courage to overcome the fear. I spoke to myself saying things like...."Don't imagine such things....Don't make yourself so anxious"...but it was little help. It was as if someone else spoke to me, therefore it was of little help. Suddenly I was terrified again. What is that....A noise...your breathing stops, you feel small, insignificant, anxious; your

knees shake. Later I found out it was a bird flying out of a tree, probably an owl.

I often caught myself going faster, at the same time I realized it and slowed down. It was all too crazy. At the same time I kept my eyes and ears open; you never can know. As I got closer to some bushes I crossed over the path and made a big detour around them. Your hands get clammy. What a relief it was when I got past there. At one place I thought I saw someone standing, my foot refused...then I saw that it was a mistake. Lucky that...

It seemed to take me a long time. Was it so far? Usually you walk that path a lot faster. Now it seemed endlessly long. One more turn and finally I'm out of the woods. Money couldn't get me to go back.

This is a good example of a written description. You get a good feel for the experience and it brings back memories. We have all had the same kinds of experience and we recognize the feelings the text draws out. This drawing out by the text of shared feelings is an example of the intersubjective experience.

Below is another example:

Afraid in the Dark II

When I go home from work in the evenings usually I take the short cut. The short cut definitely saves me 10 minutes. I then leave the well-lit state road and ride toward a dark unlit empty street.

The dark street with high steep hills lying on both sides, a gaping mouth for me. I give myself in there with a feeling of anxiety and uncertainty. As soon as the last lightpole and the last house is lost behind me I feel myself enclosed in the darkness. The dark completely envelopes you and is everywhere. You feel anxious about something that doesn't show itself. It is different than, for example, being afraid of a dog. You know the dog and you can defend yourself by taking a big stick or by choosing another path. The dark is another enemy. It imposes on you from all sides, without your knowing precisely where the danger comes from.

While I hurry along the dark street I narrow my pupils and sharpen my ears trying to identify every sound. Whenever I succeed in identifying a sound it puts me at ease: that is a frightened bird who flies away, that is the wind that whistles in the tree tops. Identifying sounds and naming them puts me at ease.

But no matter how I narrow my pupils and sharpen my ears there is my back which is unguarded. From behind I am vulnerable but I still don't look. By harder pedaling on my bike I try to protect my unguarded rear. I ride on and stay alert.

Then suddenly I'm frightened. I feel a paralysis go through my limbs; is there someone standing there? It is a form, a human figure. When I approach I'm

relieved, it is nothing, it is only a bush. I'm disposed to immediately recognize a figure. And the worst thing that apparently can happen to me is to meet a person here. If I meet someone here I shall watch him carefully from my bike and keep my eye on him, I can't do anything else but mistrust him. Anyone who is wandering around here so late cannot have very good intentions.

In the distance looms the first light pole again and I see the glow from the first houses. I take a deep breath and a feeling of relief overcomes me. I slow the pace of my pedaling. Looking behind now, the darkness recedes.

If I meet someone now, I am no longer afraid. I'll look at him and say "good evening," even if I don't know him.

These two accounts were independently written, yet some similarities between them are readily apparent. We hope you see them, and also similarities between them and what you have written.

Here is one more account:

Afraid in the Dark III

The word "dark" has in our language usage a certain ominous meaning; "dark times," that has a dark look to it, etc. Also the "sound coloring" of the word has something menacing about it.

In a lot of cultures dark has this meaning. Compare for example the story of Genesis where light is good, in contrast to the dark which has something bad about it.

The form and the amount of fear shown by people for the dark differs by culture (in cultures where there is no electricity people protect themselves from the dark, for example, through offerings and dances, we turn the light on) and by individual; one is more fearful than the other.

The oppressive, ominous character of the dark affects everyone to a greater or lesser extent. In the dark well known things become oppressive, an oppressiveness that surrounds you and cannot be localized. Noise that is unremarkable during the day provokes fear in the still of the night.

The threat, the uncertainty that comes out of the dark is more ominous when one walks alone in the dark than when you "cross" the dark with more people. The knowledge and trust of being with other people makes the power of the dark less fearful.

Compare the three descriptions and see whether you agree with us that the first two are *better* than the third. The third doesn't describe a personal experience of being afraid in the dark. It is written from the outside, from an impersonal point of view. In that sense it isn't a description of lived-through experience.

In the third description we are told that the dark *affects everyone*, that some people are more fearful than others, that cultures vary in their treatment of this fear. These things may all be quite true but they do not permit us to understand the feelings, thoughts, and reactions of the person who is fearful when surrounded by darkness. The third description is an example of an analysis without description.

In daily life our common sense informs us sufficiently so we get along nicely. We have little trouble in conversation with friends even about being afraid in the dark. Yes, everyone might agree the dark is like that. For research purposes however it is not enough to leave it at that. We want, as much as possible, to get back to what it is like, for you, for us, when we are having the experience, to bring into awareness what has been taken for granted.

If we ask of the first two descriptions: What is it like, being afraid in the dark, there appear several good answers:

In description I: *I was stung through with fright. I huddled up and looked carefully behind. Your breathing stops. You feel small.*

In description II: *I feel myself enclosed in the darkness. I feel a paralysis go through my limbs.*

One can begin to work with these descriptions. There are also conclusions that the writers have drawn:

In description I: *It was as if someone else spoke to me therefore it was of little help.*

In description II: *It is different than for example being afraid of a dog.*

Both of these clarifying sentences rest outside of the immediate experience. They do not appear to be the thoughts of that moment but rather thoughts that came later as clarifying, amplifying examples. They are not "wrong," we don't want to suggest that, and they may in fact have been a part of the experience; to know that one would have to ask the writers. This kind of questioning provides everyone with the opportunity to clarify their understanding of the text and for the writer to try again to say what happened, if in fact the original text has inadvertently moved too far off from the experience itself.

The Analysis

There are innumerable ways to prepare an analysis of written materials, be they descriptions of lived experience, or transcriptions of spoken conversations, or written notes from observations. Perhaps the simplest to work with is the written description of a first-hand experience. We have worked out a step-by-step procedure that we offer as a starting point for your conduct of an analysis. It is not a fixed formula and we bend it to fit the information whenever that seems best.

The goal of the analysis is to find common themes in the written descriptions and to find language that captures these themes, or what some prefer to call structures. You might want, before going on, to try identifying the common themes in these three (four with your own) descriptions of "Afraid in the Dark." Then you can compare what you've done and how you've done it with our procedures and results. This can be a check on the reality of the intersubjective moment.

We begin the analysis by going to each description in turn and taking from each, as much as possible in the language used by the informant, what seem to be important elements of the experience. What are the *important* elements? That is for each of us to decide using his or her own experience as a guide. It is at this point that the craft of research begins.

In the conduct of positivistic research, individual variations among researchers' judgments (*unreliability*) are overcome with the introduction of a multiple-choice test. Such a test might run like this: When you are afraid in the dark how do you feel? (A) That you are all alone (B) That someone is there with you (C) That you mistrust others (D) All of the above. With this form of questioning the differences among analyses are overcome at the start. In phenomenological study as we propose it, however, disagreements are not overcome; in fact, they are a part of the procedure. A central question, left open in the conduct of each study, is whether there is in fact agreement. A negative answer to this question is not a sign that something is wrong, only that what started out as a study of a single experience has become a study of several experiences.

In conducting a thematic analysis it is important to try to read each description with fresh eyes allowing the important moments to step out of the linguistic framework.

Suggestion II. Read through each description and select from it those moments which seem to be at the center of the event for the person. Those moments which fly up like sparks from the description. Don't worry about taking too much. Try to read each description with fresh eyes, anew, letting it speak for itself of the event.

We present below our list of *moments* taken in turn from each of the descriptions:

I

1. I imagined the whole way home...which places were most dangerous. My thoughts were elsewhere.
2. Wood: darker, more menacing than expected--looking for the best way in.
3. Trying to make as little noise as possible.
4. Stepped on twig--stung with fright.
5. I huddled up.
6. Looked carefully behind and alongside.
7. I spoke to myself--it was little help--

it was like someone else spoke to me. 8. A noise, breathing stops, feel small, insignificant, anxious, knees shake. 9. It was a bird, owl (no need for fear). 10. Caught myself going faster. 11. Kept eyes, ears open. 12. Hands get clammy. 13. Relief to be past bushes. 14. Thought I saw someone--mistake (relief). 15. Seemed to take a long time--seemed endlessly long. 16. Money couldn't get me to go back.

II.

1. The dark street...a gaping mouth for me. 2. I give myself in there feeling anxiety, uncertainty. 3. Last lightpole and last house then I feel myself enclosed in the darkness...it is everywhere. 4. Anxious about something...doesn't show itself. 5. I hurry along. 6. I narrow pupils, sharpen ears trying to identify every sound. 7. Whenever I succeed in identifying a sound it puts me at ease: that is a bird, that is wind. 8. There is my back, unguarded. 9. From behind I am vulnerable but I still don't look. 10. Harder pedaling...protect rear. 11. I ride...stay alert. 12. Frightened...paralysis through limbs...is someone standing there? 13. Approach...relieved...it is nothing. 14. Worst...meet person here...mistrust...cannot have good intentions. 15. First light pole, glow, houses, deep breath and relief overcomes me. Slow pace. 16. Look behind now--darkness recedes. 17. If I met someone now, I am no longer afraid.

III.

1. The oppressive, ominous character of the dark. 2. It surrounds you. 3. Noise...provokes fear. 4. Uncertainty comes out of the dark. 5. More ominous when one walks alone.

As we go through this step, we use each person whose description is being scrutinized as the expert. As *moments* are chosen and written the *expert* is encouraged to comment on or to correct any misstatement of his or her intentions. Often themes are not found in the words of the description but between the lines. In these cases it is important that the choice of words be *correct*.

In research conducted away from one's informants it is difficult to correct misunderstandings. In these studies, it is a good idea to ask informants to read through the analysis before it is in final form. An informant does not have the right of veto over your insights, but his comments may lead to a more accurate formulation or to the insertion of a paragraph explaining that your insights were not seconded.

Now that we have made a preliminary selection of *forms* in the words used by the informants, we need to

compare them with one another to make a list of shared themes. It is in this way that we can come to a decision about the shared aspects of the experience. Once again we would urge you to try making your own list before seeing what we came up with. There is no right or wrong about any of this. We are trying to use our language to understand and appreciate the meaning of experience for other people. Some do that more insightfully than others. We claim no special powers.

Themes or Common Forms

1. Anxiety beforehand (I-1; II-2).
2. Darkness is enveloping, surrounds you (I-2; II-1, 2, 3; III-2).
3. Unidentified noise is frightening, identification reduces fear--relief (I-4, 8, 9; II-6, 7, 9; III-3).
4. Imagine seeing things, other people and they are not trusted, identification reduces fear (I-14; II-12, 13, 14).
5. Go faster, hurry up (I-10; II-5, 10).
6. Heightened awareness, try to listen and watch more carefully (paradox: frightened by hearing and seeing, see 3. and 4. above) (I-3, 6, 11; II-6, 11).
7. Behind you is unprotected (I-6; II-8, 9, 10).
8. Relief from anxiety, uncertainty, to be back in light, among people (I-13, 16; II-15, 16, 17).

We have been perhaps a bit more careful here than we usually are when we do an analysis for ourselves, but then we probably make mistakes by jumping too quickly from the written account to the statement of a common theme. After each theme we have listed the statements from the initial list which lead to our judgment. In the beginning and certainly when working as a group that is probably a good idea.

In working with more written descriptions the researcher should, after analyzing a few, turn to accounts written by other informants to see what might be missing from the list of themes. To integrate these accounts with those examined earlier, all that will be needed in most cases is a rewording of a theme based upon some further clarification. When a group of people are working together, this step is unnecessary because each person has been able to test the theme formulation against his or her own experience.

In making a search for common themes one almost always comes across unique themes. We call these *variations* in the themes and list them separately. As the analysis goes on there is a continual movement back and forth from text to theme statements, and movement of themes into the variation category or vice versa. As new material is added, original tentative decisions are changed in favor of more accurate formulation. It isn't a flawless procedure but it is systematic. There can be a feeling of exhilaration after a difficult struggle if

one has achieved the *right* formulation and a better understanding.

Variations

1. Try to make yourself small--feel insignificant.
2. Don't look behind.
3. Talk to yourself--it doesn't help.
4. It takes longer.

Suggestion III: *Compare the themes you have chosen with one another. Make a list of shared themes. Try to be careful to formulate the common forms or themes in a way that is faithful to descriptions. Make a separate list for unique variations on the themes. Variations frequently highlight the meaning of the common forms. (See Table 1).*

The Variation

If we look at the variations we can see that they throw the meanings of the common forms into relief. To feel oneself small and insignificant is to make the darkness seem even larger and more enveloping. Smallness of self is not a contradiction of the theme; it actually reinforces it.

The slow movement of time is a complement to the theme of hurrying up. It is a paradox of this experience that you try to hurry along to escape fear and yet everything seems to take longer. Another paradox is the fear that someone or something is behind, yet you don't dare look to see. These variations help to enrich an understanding of the themes.

But we are not yet done with our analysis of "Afraid in the Dark." Another step that can be taken to reinforce or change the themes is to purposely introduce some variation into the description. For example, afraid in the dark in a different cultural setting--in Africa, in Asia, in Latin America; or in another physical setting--at home alone at night; or another social setting--afraid in the dark with others. The latter might be of particular interest because thus far our informants have all, spontaneously, discussed fear of the dark when alone. Maybe one doesn't have the same experience when someone else is there.

Here is a variation from someone who recalls being afraid in the dark with other people:

Afraid in the Dark IV

I'm not sure how well I'll be able to describe this experience. It was an unusual event. It only happened once and hopefully will never occur again. The fear was only there for a few seconds but I remember it even

TABLE I
Afraid in the Dark

<i>Shared Themes/Common Forms</i>		<i>Theme Statements</i>	<i>Variations</i>
1. Anxiety beforehand	I-1	I imagined the whole way home... which places were most dangerous	
	II-2	I give myself in there feeling anxiety	
2. Darkness is enveloping	I-2	Wood: darker, more menacing than expected--looking for best way	Trying to make yourself small
	II-1	The dark street...a gaping mouth for me	(I huddled up I-5)
	II-2	I give myself in there	
	II-3	...then I feel myself enclosed in the darkness...it is everywhere	
	III-2	It surrounds you	
3. Unidentified noise is frightening. Identification reduces fear--relief	I-4	Stepped on a twig--stung with fright	
	I-8	A noise, breathing stops, feel small, insignificant, anxious, knees shake	
	I-9	It was a bird, owl (no need for fear)	
	II-6	I narrow pupils, sharpen ears trying to identify every sound.	
	II-7	Whenever I succeed in identifying a sound it puts me at ease: that is a bird, that is wind.	
	III-3	Noise...provokes fear	
4. Imagine seeing things, other people and they are not trusted. Identification reduces fear	I-14	Thought I saw someone...mistake (relief)	
	II-12	Frightened...paralysis through my limbs...is someone standing there?	
	II-13	approach...relieved...there is nothing	
	II-14	worst...meet person here...mistrust ...cannot have good intentions.	
5. Go faster, hurry up	I-10	caught myself going faster	It takes longer
	II-5	I hurry along	(seemed to take a long time ...
	II-10	Harder pedaling	seemed endlessly long I-15)
6. Heightened awareness, try to listen and watch more carefully (paradox: frightened by hearing & seeing, see 3 & 4 above)	I-3	Trying to make as little noise as possible	Talk to yourself ...it doesn't
	I-6	Looked carefully behind and alongside	help (I spoke to myself...it was a little help
	I-11	Kept eyes, ears open	I-7)
	II-6	I narrow pupils, sharpen ears trying to identify every sound	
	II-11	I ride...stay alert	
7. Behind you is unprotected	I-6	Looked carefully behind and alongside	Don't look behind (but I
	II-8	There is my back unguarded	still don't look
	II-9	From behind I am vulnerable	II-9)
	II-10	Harder pedaling...protect rear	
8. Relief from anxiety, uncertainty to be back in light, among people	I-13	Relief to be past bushes	
	I-16	Money couldn't get me to go back	
	II-15	First light pole, glow, houses, deep breath and relief overcame me. Slow pace	
	II-16	Look behind now...darkness recedes	
	II-17	If I met someone now, I am no longer afraid.	

though it happened 20 years ago so it couldn't have been too insignificant.

I visited a cave, one of those caves which are advertised on billboards along the highway. "Unique largest grotto in the world, Jesse James hideout, etc." As we moved from room to room inside the cave the lights flashed on before us to show the way. There were 40 or more people on the tour so they had to be sure that everyone could see where they were going. When we were well into the cave and the tour, the guide told us, after showing us one *room*, that he would turn the lights out so we could experience complete, absolute darkness; no light at all. Then he switched off the light.

Here the right words will be hard to find. When the lights went off the situation was transformed physically and socially. I was alone. The use of my eyes became worthless. The dark was impenetrable. I tried to see, which is a very frustrating experience. There was nothing except the presence of nothing. I felt myself lost without visual points of reference and then a shock of fear went through my body, a feeling of warmth, the warmth of fright. Suppose the light broke down? Strangely enough I think that I actually resurrected that fear out of some perverse desire to badly scare myself.

After maybe two minutes, it was probably even a shorter time, the lights were turned on. The black murk disappeared and the clarity and weightlessness of the light returned. Darkness has a substance to it that light removes.

If we extract the forms from this description perhaps we can add to our earlier analysis:

IV

1. When the lights went off the situation was transformed, physically and socially. 2. I was alone. 3. Tried to see--frustrating. 4. Nothing except presence of nothing. 5. Felt myself lost--without reference. 6. Black murk disappeared. 7. Darkness has substance.

Here we see a reinforcement of some common themes and also a variation on the source of fear. A paradoxical yet very interesting and illuminating change occurs from a fear of the presence of unknown people when alone in the dark to a fear of being alone when you are with other people, of having the social and physical world so transformed that you become afraid that they will be gone for good.

The theme of enveloping darkness is reinforced in this account as is the heightened awareness; these themes can be seen in the effort the informant expended at trying to penetrate the dark, and in the relief light brings when the episode is over.

Description IV adds an item to our list of variations, "being with others in the dark is still to be alone and fearful." What that has to do with fearing other people, with feeling small, with hurrying up, with the anxiety of anticipation, we are not quite sure; but we think there is more here to be pursued. Also there is an interesting new suggestion about making oneself afraid in the dark. No one had mentioned that in the other examples. That, too, seems a good item for the list of variations. We need to go further, examining more descriptions to see whether it deserves to stay there or whether it is only at certain times we seek to scare ourselves.

Suggestion IV: *Try putting the experience in a different context, a different situation. In other words, consider a phenomenological variation. Often, that gives a sharper picture of the shared aspects of the lived experience.*

Other Information

There is no reason for you to limit your sources of information to the originally collected group of descriptions. We've gone to a novel, *Tom Sawyer* (1875), for another example of being afraid in the dark. There are other literary examples about being afraid in the dark but few better than this one:

So he lay still and stared up into the dark. Everything was dimly still. By and by, out of the stillness little, scarcely perceptible noises began to emphasize themselves. The ticking of the clock began to bring itself into notice. Old beams began to crack mysteriously. The stairs creaked faintly. Evidently spirits were abroad. A measured muffled snore issued from Aunt Polly's chamber. And now the tiresome chirping of a cricket that no human ingenuity could locate, began. Next the ghostly ticking of a death-watch in the wall at the bed's head made Tom shudder--it meant that somebody's days were numbered. Then the howl of a far off dog rose on the night air and was answered by a fainter howl from a remoter distance. Tom was in agony. (p. 89)

This description provides support for some of the already identified themes. The heightened awareness, particularly of sounds, is important in this account. But there is something new here to ponder. Tom experiences the sounds as out there and the description suggests they have a will of their own. *The noises emphasize themselves*: it is the clock which ticks and the stairs that creak and at the end of all this the conclusion that Tom draws, "Evidently spirits were abroad." Tom believes in the power of the invisible spirits who are abroad in the dark. He attributes meaning to the ticking of a "death-

watch." Darkness, sounds, spirits and death, "Tom was in agony."

The attribution of unidentified will to sounds which are only remarkable in the dark is a theme which is well worth considering. It probably isn't only Tom's experience, but we would have to go further to see whether anyone else has ever had this feeling, that spirits are alive in the dark. Perhaps this is just the imaginings of a child, whereas adults see figures of people.

Suggestion V: *Fill out the descriptions with new materials from poems, novels, diaries, folk tales, pictures, tape recordings, observations, interviews, et al. Be careful with this material. The question is not, how pretty is it, rather does it give an adequate descriptive picture of the lived experience?*

Information about being afraid in the dark may be found also in survey or experimental research. Don't overlook these data. Lived experience is the broadest of categories. It encompasses all of the experiences that we have. The general picture drawn in the descriptive-phenomenological analysis can be supplemented by narrowly focused studies.

A Short Summary Essay

Here is a short summary essay of the sort you might write after completing a phenomenological research:

Being Afraid in the Dark

Is there someone who hasn't known the *sting of fright* when a sudden noise appeared from the dark; or when the shadows seemed to reveal a human shape? Who hasn't breathed a sign of relief when the lights went on to reveal the familiar and safe surroundings of one's own room?

We asked numerous people to recall for us an experience they had had of being frightened in the dark. All of them could do so. We took their descriptions and analyzed them to find similarities in reaction and circumstance.

We were able to identify eight common themes in the descriptions of our informants. That is not to say that all informants gave evidence of every theme in their description. It is to say that we were able to discern common patterns of meaning across several of the accounts and that these patterns made sense to us as statements about the meaning of *being afraid in the dark*.^{*} The eight themes are as follows:

1. There is anxiety beforehand.
2. Darkness is enveloping.
3. Unidentified noises are frightening. Identification reduces fear.
4. Imagine seeing things, other people and they are not trusted. Identification reduces fear.
5. Go faster, hurry up.
6. Heightened

^{*}We have attempted to be true to the phenomenon--the experience of fear in the dark--but decisions about the meaning of experience do reflect the researcher's *reading* of the data. Other re-

searchers might reflect a different emphasis. We are confident nevertheless that our different readings would be like two accounts of the same event rather than of two different occurrences. As in any study the only way to be sure is for readers to investigate the phenomenon for themselves.

awareness, try to listen and watch more carefully. 7. Behind you is unprotected. 8. Relief from anxiety, uncertainty, to be back in light among people.

We can begin by asking several simple questions about being afraid in the dark to see whether we have the answers from our informants.

Is it the dark which frightens or something else which is associated with the dark? The answer seems to be that both is the case. The absence of light is at the heart of being afraid. We are anxious in anticipating, and feel relief upon leaving the dark. A young woman who must go through a dark wood to get home is not happy at the prospect and full of relief to be back in the familiar surrounds when it is light.

It is the dark which transforms familiar objects into fearful things. Shadowy shapes seem to be people and people are not to be trusted in the dark because they are up to no good. Noises appear and provoke fright until they are identified.

It is the dark which transforms the senses from normal to heightened awareness. Sounds and sights are carefully sought out. Everything strange needs to be perceived and a great deal that is seen and heard is strange. The dark world is full of new sights and sounds which must be named before they become part of the familiar, safe world.

The dark is close, enveloping, almost physical in the way it encloses the body. The absence of the ability to see and identify things is felt like a blanket around the entire body. It is a blanket which cannot be removed except by light.

What Do People Do To Overcome Their Fear?

They hurry up, talk to themselves, try to identify every strange sight and sound and never look back. In spite of these efforts time seems to go more slowly. People continue to feel themselves alone. The world of the dark persists in its strangeness with sounds that come from the abyss and formless shapes that seem human.

The struggle against the dark is a battle with peaks of anxiety and valleys of relative calm. One is no sooner over one fear than another unidentified something appears to be dealt with. Suspicion seems to predominate in darkness.

This suspicion can be seen in the fear of what lies behind your back. There is the feeling that something unidentified and strange lurks there but you don't look. Why? Because turning around does not change the fact that your back is exposed. It only changes the direction in which the back faces. In addition turning around to check impedes progress toward the real goal--the light. Being sure that there is nothing behind only creates a small reduction in the fear and that is only temporary.

This suspicion which appears with the darkness reveals the power of experience in consciousness and consciousness in experience. The *objective* darkness does not cause fear the way bad food causes a stomach ache. It creates conditions in which the fear of an unknown, unseen world full of dangerous threatening things comes to life in experience. These fears are as real as the darkness.

Can Anything Be Done About Fear of Darkness?

First we can recognize that most of us are afraid at some time or other and that darkness has the effect of heightening our fears. These fears are as real as any other human emotion.

In dealing with children, it is important to understand that fear and darkness go together. A child afraid *in* the dark can also be said to be afraid *of* the dark. The dark transforms familiar surroundings into unfamiliar and dangerous sights and sounds and it also envelopes and encloses eyes and body. It doesn't help to show a child by turning on the light that there is *nothing there* because once the light is off again *it* reappears.

It may be helpful to discuss fear of darkness in school. Children can write their own descriptions of *being afraid in the dark*, as can the teacher. It helps to show that in being afraid you are not alone.

The Consequences for Action

Research in education can lead to helpful action. This does not mean that every study must identify consequences. But we do suggest that research into the meaning of experience for teachers, children, and parents has the potential of being valuable when time comes to make decisions about teachers, parents, and children. We mentioned at the start of this chapter that planners could use the reactions of those who must live with their decisions to make better choices. If, for example, a school principal is about to introduce a schedule change, a new regulation, or a new curriculum, a better decision is likely to result if teachers, pupils, and parents are studied to see what their experiences are in the present situation. Too often we assume that we know the meaning of experiences for others. But the everyday meaning of an experience for parents, for pupils, and for teachers may be different for each. Learning more about the meanings of the experience should be helpful.

Let's see what happens if we go back to being afraid in the dark. What does our provisional analysis suggest that might be helpful. Immediately, one thing comes to mind. Adults ought to be more understanding of children's fear of the dark. Why? Because the dark is a scary place. It makes you feel alone and it makes all

kinds of sounds come out that you didn't notice before and you see things sometimes, too.

Who hasn't heard a mother or father, comfortably seated in the living room, reply to the child's cry, "Daddy, I'm afraid; it's dark," with "Go to sleep there is nothing to be afraid of." Sometimes parents even go in, turn on the light, and show the child that there is nothing to be afraid of. That is no solution at all. It doesn't respond to the problem. The fear is in the murky, surrounding dark. It isn't in the light. Turning on the light doesn't show anybody anything.

As a general rule studies of experience have the value of changing that other person's *irrational, annoying* actions into rational, sensible, understandable ones. Where this is true applications flow naturally from results.

*Suggestion VI: Phenomenological research is done with an eye to the consequences for action. Based on the research results, try to formulate recommendations that might lead to more possibilities for human autonomy, a better situation for those on whom a decision is to be visited. Knowledge of history can help to suggest directions for action.**

*More about this in Chapter 5.

Written Descriptions and the Child's World

To this point all of the written descriptions came from adults. It is possible to have adults reflect on their experiences as children and to learn from retrospect. But the information gained in that way is not the same as the first hand accounts of children. Adults tend to romanticize their past, particularly their youth. Children don't.

How does one collect written descriptions from children? Does it work? We think it can be done; we've done it. We want to urge you to try it. The following descriptions came from children who have just made the transition from elementary to secondary school. They were each asked to write about their experience in the new school:

The New School I

In elementary school it was really nice. Our teacher was also always friendly. They had a lot of plant posters in the class and they also had an aquarium. There were also nice kids; we were the oldest in the school. We also did a lot of things we weren't supposed to.

The move to the new school was kind of lousy the first day. But that is always true when you're back again with big kids.

The first day we had almost nothing to do then more and more. But I quickly made some friends.

The New School II

The first day in high school was fun (in Holland children go directly from elementary to high school). Because you felt so big and if anyone asked you what class you were in you answered proudly, "first." But actually you feel small because there are big kids on the playground. You get a nickname, Red, Shorty, etc. And you get more homework, math that I never had before, and English.

First you were the biggest and now the smallest. That stinks.

These written descriptions were collected in Holland from first year classes in secondary school in September shortly after school had begun. The children were told and permitted to discuss descriptions of real life events. The discussion was begun by reading to the children an example from someone starting military service. This made it possible to give concrete examples of what a description should tell about, without directing the children too specifically and running the risk that they would copy the example. Then the children were asked: *Try to write about your first day at school. What sort of experience was it for you? How did you feel? Try to follow the example that we talked about from someone starting Army life. You don't have to write a pretty story. Just tell what it was like for you.*

After five minutes, several children still had written nothing. The researcher talked individually with them and helped them to get something on paper even if it was only a few sentences. Here is an example of one of the shorter descriptions:

The New School III

I found it well organized but everything was big and new. You are so little that everyone can push you around. I was nervous the first day at school.

The child is closer to childhood events than an adult but less adept as a writer. In addition, there is the difficulty that writing in school is usually analyzed for errors and graded, making children hesitant to express themselves when they are not certain of correct spelling and punctuation. Children often write less because they get a better grade that way. If written descriptions are to be of value these difficulties must be reduced. It makes little difference to the researcher of experience whether the commas are there and the words correctly spelled. These are not problems. What makes the exercise worthless is writing for correctness, for a grade. Consider the following example:

The last year of elementary school had begun. It was the most difficult year. The transition from elementary school to high school was in sight. We worked hard and we completed many exercises. We were told how it would be in high school. The last day arrived and final reports were given. It wasn't good but it wasn't bad. But we made it. After the summer vacation you would be in the new school. You wondered if it would be fun. And then the day arrived when you went to the new school, got new books, you class schedule and thought, this is a neat school. After a few months you were used to the school and the teachers...

Rich in style and poor in information about first-hand experience. Suggestion I has not been followed. We're not saying that this child can't express himself; on the contrary, only that the requirements of writing well for a school grade and the requirements for a good description of first-hand experience sometimes conflict. When information is collected from children in class by a teacher then there is a good chance that you'll wind up with something *nice* but not informative. For this reason it is often better to talk with children and to tape the conversation, transcribing it and analyzing the transcript.

Children live in a world apart from adults. They look at the same event and see it differently from teachers and parents. Being the littlest one on the playground can be frightening if you are alone and the others are together. Perfectly innocent happenings can take on ominous meanings. As one child said, "I was nervous." Who hasn't been as a child in a new situation?

We think it is valuable for adults, parents, and teachers to learn more about the lived world of the child because the first step to a better educational climate will only come by understanding how the child understands the things that are happening. This is a theme that makes phenomenology phenomenology. Humans are condemned to finding meaning. Events are filled with value and portent. The child's meanings are as irreducible and just as important as an adult's. To educate children better it is helpful to understand these meanings.

There are other kinds of research in which children are used as a means to the end of better understanding of developmental theory. These are important studies but of a fundamentally different nature than phenomenological ones. Understanding theory does not reveal the meanings of experience as they appear to the child and it is these meanings which direct action. We act based upon our desires, our intents, and these rest firmly on our understanding of events. If we would help the child, there is no alternative but to try to penetrate the barriers to the child's world.

This awesome task can be done, and in Chapter 5 we will give a few examples of how others have done it. For the moment we will content ourselves with a further suggestion.

Suggestion VII: Assemble children's descriptions of lived experience. Give children the chance to express themselves as directly as possible. Use verbal as well as written materials based upon the circumstances and the child. Put verbal reports on tape and write them out later. The less experience you have with the analysis of phenomenological experience the more material you should use.

Observations and Interviews: Hints for Getting Started

Perhaps the most difficult task for the interviewer is learning to be silent so an informant can speak. An interview is a structured conversation in which the questioner is guide and assistant. It is a mutual exchange. If your informant comes away knowing more from you than you do from him or her then you have talked too much. You might try attending to your own tolerance for silence in conversations over the next few days. Are you the kind of person who always steps in to fill the silence? Then you should try to change this habit when you interview.

An interview requires an intention or focus. Since you have asked for this talk, your informant will expect you to be prepared with questions. This should not be a list from which you read; that can be stultifying. Best is to have a clear idea of what you hope to learn from the session and to use those ends as guides to your questions. One thing which makes an interview superior to a questionnaire is the ability of the questioner to change direction with the lead of the informant. Don't be worried if the topic you started out to study becomes something different in the course of your interviews. A phenomenological study can start out about one thing and finish as something different: a study of children in single parent families can become a study of family life styles; a study of draft resistance can become a study of identity. Your obligation is to learn from your informants, so don't be too rigid if they take you in unforeseen directions.

A tape recorder is an excellent aid to memory but sometimes it can get between you and the information you want. If your informant is nervous about being recorded you should be prepared to dispense with the recorder. If you know shorthand you are in good shape. Otherwise it is best to try to take down the most important comments using your own system of abbreviation. Try to get significant statements verbatim if possible. You can do this by telling an informant that you liked what was said and you want to be sure to get it. In these cases people are usually glad to say it again and in

reformulating sometimes it comes out even better. As soon as the interview is over you should go somewhere where you can fill out the notes taken during the talk. The longer you wait the less you will be able to recall.

The place of the interview is almost as important as the way you conduct the interview. You need to be able to talk freely. To be alone or at least without distraction is important. On the other hand you don't want to be in an environment which inhibits all but the most careful talk. In short, you and your informant should be in a setting that is friendly and comfortable, one in which conversation comes easily to both of you. Perfectly fine interviews have been done in a variety of settings.

Everyone talks about the importance of rapport but can anything be done to foster it? Not without some practice. Rapport means mutual trust and that is not always instantly present when two people meet for the first time. You can make a good start by speaking honestly about yourself and your interest in learning what you've come to learn. This first meeting you should be willing to tell about yourself and your intentions with the same candor that you hope to encounter later on in your informant. We are not suggesting that you tell your life story, rather that you be ready to answer questions, honestly, about what you are trying to learn and why.

Interviews with children present special difficulties, particularly with the younger ones. It can be helpful in these cases to have something concrete to talk about. This can be a toy, a picture, or a game. Ann Wood (1982) who studied young children growing up in single-parent families found in one case that a child was able to talk freely if he pretended to be answering the questions of a sportscaster. Robert Coles (1968) says that it sometimes helps a child to talk if he or she is encouraged to draw. Paper and colored pens can be a valuable aid to expression. If you can forget you are an adult with an adult sense of time and if you will play along with the child then you will get answers to questions *in the margins* on either side of the play.

An interview can't be turned into a formula. It is a social encounter which will go its own way if done well. We offer the above suggestions as help in getting started. The best way to learn to interview is to do it, preferably with the chance to discuss your successes and failures with others who are also beginning interviewers. This is the time to organize a research seminar with others who are also getting started.

It is often easy to find people to interview. Most of us have seldom been asked about our own lives as teachers, pupils, patients or what have you. Sometimes it is hard to put a second question because an informant is so eager to talk. This is a nice benefit of doing phenomenological study. You reveal to others a sense of the importance of their own experience. Interviews and observations usually lead to written transcriptions and in our experience the suggestions we've given in this

chapter are as valid for transcripts as they are for written descriptions.

Suggestion VIII: *Conduct an interview about a topic which interests you. Prepare yourself by reviewing the things you hope to learn. Take notes during the interview. Afterwards try to reconstruct the interchange. Compare your written reconstruction with the taped version. Review your performance with others also interested in the research interview.*

Now we turn to suggestions for recording observation. An observer is never just that. In settings where other people, particularly children, are living through the events of a day it is difficult for another person to be there unnoticed and unobserved. It is probably just as well. To *do* along with the people you are trying to learn about is to know with more certainty than if you simply watched. Therefore in our research we prefer to speak of participant observation rather than observation without involvement. We don't mean to suggest that you cannot learn from the latter, rather that you learn something different.

You cannot write down everything that you see while you are seeing it so, as suggested earlier, it is important to make time after your observations to write down what occurred: what you saw as well as what you thought about it. This will seem a tedious task sometimes, but it is important to keep it up. As a matter of fact, it is an excellent idea to keep a journal of your own experiences in doing a phenomenological study whether you rely on observations or not. This enables you to retrace the development of your thinking and can be a valuable source of insight when the time comes to write your study.*

*Roger Hart, author of *Children's Experience of Place* (1978), told us that he used small note cards to jot down things he wished to remember to look for or to ask the children about. Cards can also be used to jot down short reminders during an observation which later can be expanded into fuller accounts.

Although a theme or focus can be helpful in deciding what is important and what not, it is probably unwise to try beforehand to set forth too explicitly what you intend to see. Often what you thought was most important before becomes less so after you have been in the setting for a time. Thus we would urge that you not preclude too quickly, that you remain available to see something important but unexpected. This would suggest that when first you enter the research situation you be open to learn from it and that you try to remain open to it until you have a better understanding of what life is like for the people you are observing.**

**To borrow the language of Kurt Wolff in *Surrender and Catch* (1976), you must *surrender* to the situation in order to *catch* on to it.

In our experience, one or two years of effort is not unusual in learning to know a setting well enough to be able to understand and communicate the meanings it has for the people living in it. Meaning lives in a context, both the immediate and the historical. An insightful study exposes this context to scrutiny. The observer is a participant who sees the everyday as something interesting, to be discussed and explained, and on which to reflect and consider how it might be changed.

Because observational study requires an acclimated observer, and becoming acclimated takes time, those who

are already part of the setting could, if they were willing, conduct their own research and communicate their insights to others. Teachers especially are well suited to conduct studies of the worlds in their classrooms. We know that teaching is itself difficult and demanding, but we also believe that research is renewing and invigorating. Research pays off in insights and enthusiasm.

A phenomenologist is a kind of story teller and the value of his or her work rests in the power of the story to communicate new understandings or, perhaps better, to reveal hidden meanings. This happens when the account is an accurate and clear reflection of the observer's understandings. The goal is not to convince the reader that what happened is the only thing which could have happened or that it will necessarily happen again. Rather it is to say that it did happen this time and from that to try to draw out the significance for those who participated.

Suggestion IX: *Conduct observations in a setting with which you can become familiar. Choose a setting in which you can move with ease, a classroom, dormitory, dining hall, or lounge. Focus observation on some interesting part of the whole. Keep a record of your observations. Analyze your written record for common themes.*

A final word about writing. Language is the basis for understanding even in the scientific world. It is prior and thus it is essential. Because language is so important, we urge you to say what you want to say when you write; let your meaning come through loud and clear, and feel free to ignore the prescriptions and proscriptions that are often associated with science writing. If it seems appropriate to you to use the pronoun *I* then use it; there's no reason to refer to yourself through some contortion like *the present researcher* in service of a crazy notion of objectivity. Similarly, if you believe something to be true or false, then say so; you don't need to write about your research as if you were reporting results of a statistical test. Forget about the prose some scientists feel obliged to use and eschew senseless writing like this: "No difference is expected between the outcomes of treatment A and B," when in fact the whole literature review led to the opposite expectation. It is part of the craft of research to use language with care and precision; your language must make sense to you and to your readers. The demands of good language usage are difficult enough without the artificial barriers some authors permit themselves to be limited by. To write is to learn about the adequacy or inadequacy of your thoughts. Poor writing, obscure writing, statistical gobbledygook, teaches you little or nothing about those thoughts. If there is no struggle by the writer to be clear, or we might again use the word honest, then there is likely to be little benefit to the scientific community and no benefit to the community at large in the results.

Some Problems With Phenomenological Research

There are many criticisms that can be made of the phenomenological point of view generally and the version we've outlined in particular. In this chapter we will present some objections and our responses to them. We probably aren't the best source of strong criticism because we are favorable to the positions, so we'd suggest that you look elsewhere for the views of those less favorable.*

*We have identified some critical sources in our references. In particular, we'd recommend Piaget's *Insights and Illusions in Philosophy* (1971).

We've chosen to focus our discussion on some of the more obvious criticisms. Ours is not a general defense of phenomenology but only of our version of that point of view. We've argued among ourselves about the value of this chapter since we have some trouble criticizing phenomenology ourselves. No sooner do we state an objection than we are ready to fight to demolish it. Nevertheless, we've included the discussion because we want to be as fair as we can. We want to be fair, because we can always learn more by looking at things from another perspective. Conflict between points of view is usually productive of new insights.

It also might be valuable for you to see how we respond to criticism. Maybe you can improve on our line of attack. At the moment there are many hostile critics of anything which isn't *scientific* in the narrowest sense of that term so it behooves researchers who are considering doing a descriptive phenomenological study to think about how they might answer the sort of objections we've identified.

Objection 1: It is difficult, maybe *impossible*, to replicate a descriptive study of experience.

Many critics of phenomenology point out that it is difficult to reproduce a descriptive study because it takes place in the ongoing stream of events, and they note that empirical study is done to achieve understanding which goes beyond one's opinions; according to them, if it is scientific the research must be checkable. We would agree it is hard to redo a phenomenological study. In fact, it is hard to redo any kind of study when humans are involved because conditions are never entirely replicable, and it is easier to recreate the appearance of similarity in a controlled experiment or where tests are administered. Piaget (1971) gives a general statement about the importance of verification in research:

The ordinary meaning of the word "truth" refers to that which is verifiable by everyone. The method of verification does not much matter provided it is open to all and guarantees to the subject that it is not centered on his self or on the authority of a master, but that the position he puts forward can be verified by anyone who questions it (p. 80).

The concern expressed here has two aspects. First, if the researcher's audience is to accept a result as true, the audience must be certain that the observations in the study are not the researcher's personal projections, *centrations* in Piagetian language, or based on the authority of some powerful figure; and second, that this can only be guaranteed if the doubters in the audience can check up on what has been done. The results of research must therefore be publicly verifiable.

We maintain that while doubting is valuable--and indeed necessary--it can come into conflict with truth. This can become a problem when the phenomenological observer reports something unique that doesn't happen again. Gadamer suggests that this doubt can even exist for a person who has lived through an experience. Have you ever seen something from the corner of your eye which was gone when you looked for it? Did you really see something? We believe that things are no less important simply because they only happen once:

Modern science thus simply carries through in its methodology what experience has always striven after. Experience is valid only if it is confirmed; hence its dignity depends on its fundamental repeatability. But this means that experience by its very nature abolishes its history. This is true even of everyday experience and how much more for any scientific versions of it (Gadamer, 1975, p. 311).

We acknowledge that some visions of the truth are not verifiable through repetition, although many experiences can be checked; often a description is so convincing that the reader doesn't doubt its accuracy. At other times, where doubt does exist, little can be done to certify accuracy beyond assuming the integrity of the investigator or reviewing any written reports upon which the analysis was based.

These available checks on accuracy, however, cannot solve the fundamental problem that Gadamer raises in response to the criterion of replicability. Some parts of experiences are simply unique. They are no less important for that but it may be impossible to prove them to others. Here there would seem to be a genuine difference between the values expressed in a descriptive study of lived experience and the requirements for the conduct of *science*. If one accepts the criterion of replicability then some phenomenological results will fall outside the guidelines for *truth*. We can see no way to create

procedures to resolve this difference between verifiable forms and personal forms of truth. The phenomenological investigator may not be able to prove his vision of events to doubters.

The matter of verifiability and the doubting audience raises the interesting question of where doubt comes from anyway. The origins of modern doubting certainly go back at least to Descartes, who was ready to doubt everything except his own doubting. His radical rejection of ordinary everyday experience is not in our view a sensible foundation for the conduct of educational research. In fact, we wonder if doubting is a part of the ordinary apparatus for ascertaining *truth*. We suspect it is not. Rather, we suggest that doubt plays a very small part in judging the accuracy of an observation. Doubt arises when the opinions of audience and researcher are in conflict. Most of the observations reported in our ordinary lives are accepted without doubt. In the world of the scientist, systematic doubt is made into a fundamental necessity. It is interesting that even Piaget fell victim to his audience's doubt when his work was repopularized in the United States in the 1960s. Many felt the need to check up on him because his procedures were open to question, and his reports--that children don't see the world as adults do--conflicted with what was expected. Now that others have repeated his observations, doubt has subsided, but there are still some doubters, people for whom the replications were not convincing. They were not convincing for many reasons: because no replication is ever exact and even when it works there are discrepancies; because there are always alternative ways to explain a result; because there was not sufficient control of the testing conditions, since all children were not asked the same questions in exactly the same way. There will probably always be some whose doubt is so overwhelming that they cannot be convinced.

But the possibility of a doubting audience should not become a tyranny over the researcher. There are ways to convince reasonable doubters--to argue clearly and cogently from a set of shared beliefs, to create a more adequately comprehensive world view using one's results. The first task in any research is to convince oneself, then to convince others. A tyranny of scientifically replicable rules makes the convincing of doubters foremost, more important than the understanding of some events. It presumes there will always be important doubt. We'd prefer to find out for ourselves what is going on and then see whether significant doubt remains, in our minds or anyone else's.

The scientist reporting results is like the writer telling a story. The writer who succeeds knows his audience and speaks to it, providing information to quell doubt where necessary, but not overdoing it. Overdoing it would mean losing the audience by boring them or confusing them. The writer's task is to be clear and accurate and know your audience. Research is also a

retorical skill and in the best sense of the word--the presentation of a clear argument. Every research report speaks to a particular audience and it is to that audience that the information must be directed. Every report presumes some areas of agreement and some of doubt. Where doubt is expected the writing must respond, but where agreement is presumed nothing special need be said.

When a community of scholars has been taught to expect results to be presented according to methodological formulas, then any deviation from those formulas is likely to be doubted. A problem for those conducting phenomenological research is how to construct convincing arguments for this audience without losing other audiences for whom these same methodological prejudices do not exist.

Objection 2: A phenomenological study is too subjective.

The words *subjective* and *objective* have become slogans in many mouths--the latter meaning *trustworthy*, the former *untrustworthy*. Before turning to the criticism of phenomenological research that relies on these meanings, let us tell you what *subjective* and *objective* mean to us.

A subjective experience is one that happens for someone; it is personal, immediate and real. That is, if someone were to ask what your reactions were to your favorite musical piece you'd report what you felt and attest to the reality of those feelings. It would be a subjective report because it was your own and only your own. To find out about these and other personal experiences, the researcher has to ask and perhaps also observe: a subjective experience is a private event.

An objective experience is impersonal, a public event. It is the experience, or that part of an experience, which more than one person has had. If, instead of telling about your personal reactions to a musical piece, you reported that it was written by Bizet, was played by the Amsterdam Concertgebouw Orchestra on January 31, in 30 minutes, under the direction of Bernard Haitink, you would be reporting objectively those parts of the experience which everyone who was present would agree about because they are *object-ive*. You could also say that an objective report tells what could be known without actually going through the experience. There was no need to have gone to the Concertgebouw on January 31 to be able to report the objective events; people who had been there could have told you, and you'd know as much, objectively, as they did.

When critics point out that phenomenological studies are subjective rather than objective, they are exactly right. We study the personal, private event. Our goal is to describe this experience as it is for the person who is living through it. Not as it is for everyone.

People who criticize phenomenology's subjectivity do not trust the significance of the personal event. They ask how, if something happens to just one person, can we really be sure it happened? Our answer is, we can't. Studying experience can be troubling in its uncertainty,

but we trust our informants. What they say is what happened. If you think it wise to check the consistency of a report, there are ways you can do it, internally and externally. But even if the check reveals that someone is lying, that in itself, as Freud showed long ago, is quite useful information for someone who would like to understand the experience of another.

A phenomenological study is the outcome of the interaction between two subjectivities, not only the informants but also the researcher's. Phenomenological researchers have to use their own personal reactions--also subjective--to the event and to the report, to create a refined account of what is going on for the people who are living through the experience. The process of refining pages and pages of descriptive material is also subjective. In other words, it may be experienced differently and refined differently by different investigators.

But is there anything wrong with different people reading the data and coming up with different ways of representing it thematically? Or even in the researcher's recognizing that there may be different, perhaps even conflicting possibilities in the material from time to time as you deal with it? Is it really better that things come out agreeably, *object-ively*? Should we avoid or deny some aspects of experience because of that? We don't think so. We believe there may be many different ways to report information, some complex, some cleaner, more aesthetically pleasing. The researcher's task is to judge which is the correct way to communicate the insights that the data represent.

But are there no bounds? There definitely are. The bounds of common sense, of fair argument, and of honest prose have served human beings very well for a long time and we subscribe to them. If the researcher is confused it is only fair to say so and maybe even identify sources of the discrepancies. It is amazing how convincing honest confusion can be and how helpful to understanding. Research should confront the idiosyncratic rather than run from it.

The outcome of research need not be agreement. Agreement happens sometimes, but not all the time. Researchers who ask honest, intriguing questions have no right to expect anything more fulfilling than broader, clearer understanding, and better questions for the next go-round. The goal of research in the human sciences is not to identify once and for all the rules that govern behavior. As we've said before, understanding is the goal, and appreciation of the difficulties, paradoxes, absurdities and confusions that experience represents. Sometimes what appears to be the clearest answer from research isn't very clear at all. Experience--and certainly the part of it called educational--is rarely simple to comprehend.

So phenomenological study is subjective; according to some, too subjective. It relies on personal reports of informants and judgments of investigators. Given the

nature of the subject, there is no alternative to subjectivity.

Objection 3: In a phenomenological study, researcher bias interferes with clean results.

There is bias or prejudice in the point of view of every observer. In a descriptive study, this can be pernicious because there are no ways to be sure, as a reader, that the reporter is not projecting his own opinions into the account. One way to be sure, according to some social scientists, is to remove the biased investigator, placing the study on a sort of procedural conveyor belt and allowing events to go forward under experimental or statistical control. But removing the investigator doesn't actually remove bias; in fact, it makes it so central to the research that it may no longer be obvious that it was introduced by choice at the outset.

In a descriptive study, it isn't possible or even advisable to remove the biased interpreter from the scene. Bias of a sort is necessary and helpful to the conduct of phenomenological research. Bias is represented in the commitment to conduct the study in the first place, to examine one set of events instead of some other, and to analyze results thematically rather than statistically or vice versa. Trying to stop the investigator from making biased judgments means at the same time removing the most sensitive recorder available.

But the bias of the investigator is a strong asset. When you do phenomenological research you should communicate your biased viewpoint to readers. If readers know why you are doing the study, what your major interests, questions, and commitments were before you began, they can *be-(a)ware*. The rule that you must make hypotheses, a rule often expressed in social scientism and followed so woodenly and ineffectively in many dissertation studies, probably had its origins in a similar concern.

We believe it is far better to state clearly--before, during and after--what have been and now are your feelings, beliefs, and commitments. Human investigators are like a magnifying glass. They are going to focus on something and bring it to light. Readers are going to see that something in a new way, and with some distortion. Telling about yourself, making yourself a part of the study, allows the reader to know where distortion may lie. The result is a clearer picture which is the best we can hope for.

Objection 4: The language of phenomenological research is too vague and ephemeral.

As we said earlier, phenomenological philosophy tends to be *wordy* because it talks about personal emotions and thoughts. Because the language is so difficult and therefore occasionally unclear the approach is sometimes dismissed by social scientists as useless. Social science is committed to a kind of unemotional language which resists the introduction of an evocative prose.

When phenomenologists discuss an observed result, it may be difficult to avoid a complicated presentation. Sometimes the description will seem to demand it. But if it is best, however, to keep the writing as uncomplicated as possible, it is also best not to try to make it seem more important than it is. Nor is there any need to try to pretty things up, to make the descriptions more orderly than they really are, or to fit them into a neat analysis.

We would concede that it is not easy to describe something which doesn't fit in with most of your other observations and leave it at that, an anomaly. There seems little beauty in the loose end; one wants to tuck it in, or to cut it off and throw it away--to pretend it was never there. But it may be that the loose end holds the real clue to what has happened, to some new insight.

Objection 5: It is difficult to conduct a phenomenological study with nonverbal subjects.

Yes, it is difficult to conduct research with young children or with others who have difficulty expressing themselves. This difficulty has perhaps special force for phenomenology where one tries to understand the meanings of experience. Obviously, that is easier if you can talk with your informant. Nevertheless, we have conducted research successfully using stories written by children as young as 11 or 12 years of age, and it is possible to conduct successful interviews with very young children, as Piaget has shown.* A good research interview particularly with a young child isn't easy to conduct without some practice, but it is a skill worth acquiring.** Simple observation is also possible with very young children.

**The Child's Conception of the World* (1969).

**Robert Coles, as he has reported in *Children of Crisis* (1964), has used drawings successfully to help younger children express often difficult feelings and thoughts.

Objection 6: There are no procedural guidelines for conducting phenomenological research.

That is correct; it is up to the researchers to figure out how best to learn what they want to know, as anxiety-provoking as that might be. One colleague who has conducted numerous studies using interviews to collect data reports that he is always anxious when starting to reread the transcripts because he has no guarantee that this time themes will emerge. Another colleague has expressed misgivings about the qualifications of most graduate students to work well within an open research design. His view was that, for most students, following formulas were better suited to their capabilities because their choices were reduced and they were therefore less likely to make a mistake, to miss something, to wind up with a handful of sand and no gold. We agree that it is easier and safer, and probably quicker to follow the previously agreed upon procedures of conventional research designs and statistics *a la* Campbell and Stanley (1963).

Phenomenological studies are necessarily idiosyncratic. They are unique to the investigators and to their problems. Individual differences are bound to exist; no disappearing is possible for the investigator.

The investigator is central and significant to the problem choice, the procedures, and the written results.

Objection 7: The phenomenological method is ahistorical.

It is Piaget's view that phenomenological philosophy reduces the effects of cumulative experience to a single moment and, proceeding from an "introspective analysis" of that moment, tries to pontificate about the structure of all experience. Shortsighted, he says; it is hard to disagree.

All empirical research runs the risk of forgetting that its subjects have a past, forgetting that people remember and remembering makes today different from yesterday. In addition, each group of us lives with the past, in the form of a culture. For Piaget, analysis that ignores these historical givens is incomplete. We do not disagree.

Phenomenological research, unlike the philosophy Piaget alludes to, has no pretensions to transcendental significance nor is its method introspective. Its goal is to describe what happens and to understand its meaning. Piaget's criticism of the philosophy does not apply with the same force to the procedures we have in mind.

Nevertheless, Piaget's argument is important. Since a study of experience focuses on a single event there does seem to be a danger that its history will be forgotten. But in practice, history is rarely forgotten. Often, phenomenological studies have a developmental form. It is true that if the researcher is interested in describing the way a good teacher teaches there may be no need to describe history, but if the researcher's purpose is to say something about the way good teachers got that way then a developmental focus is necessary. In fact, any observational study which requires months and even sometimes years of observation is developmental by nature.

The study of experience is also a study of social context and the social context is always a historical context. The way people behave toward one another and their expectations are part of our cultural history. Interpretation of experience depends upon understanding of this history, too.

Historical awareness has yet another component; in addition to being concerned with personal and social history, phenomenological researchers must also be aware of their own historical boundedness as investigators. This is what we referred to earlier as our human fate, our finitude. We cannot escape the times in which we live, times revealed in the things taken for granted that don't need to be discussed, which everyone seems to agree about. Social scientism, control, precision, certainty, and measurement are examples. We can't escape from these and other aspects of our historically-determined present any more than our informants can. To take a historical point of view means to be critical not just about our informants but of ourselves, too. Our only defense against the arrogant belief that our viewpoint is certain is the

humble recognition that our ideas, our procedures, our analyses, are inescapably historically-based. A recognition of *historical and developmental points of view* involves a manifold focus on the personal context and social history of our informants--and ourselves.

Objection 8: Phenomenological research is frequently based on the memory of informants.

Although a phenomenological researcher can ask informants to describe something as it happens, or they can make an observational study, it is often the case that phenomenological research is memory-based. This can indeed be a problem because recall of an experience can be different from an immediate report and the researcher isn't sure which of the two is the more accurate.

One way to respond to the problem is by comparing accounts which are related differently in time to the event. As we suggested in Chapter 3, comparing children's descriptions with adult recollections can sometimes highlight changes which memory has introduced. Or, observations can be compared with retrospective accounts. Comparisons such as these suggest whether, and if so in what ways, understanding of a prior experience has been changed by events which followed. It would be incorrect to describe any of these or similar procedures as means of controlling for the effects of memory. Getting rid of memories to see what the experience was *really* like is not a reasonable goal. That would be like trying to eliminate the experiencer in order to study experience.

This doesn't mean that experiments have not been designated which try to do it. But to approach a separation, these studies must move away from the ordinary, everyday world, giving subjects nonsense syllables to remember in a *laboratory* setting, and both context and content are wrenched from their ordinary meanings. These studies achieve their controls at the cost of learning anything valuable in the real world because they remove experience from its meaningful context. The results are meaningful only in the world of laboratory studies and of nonsense syllables.

Memory and its role in human experience aren't easy to understand. For our part, we think that recollections of past experience are a legitimate, and sometimes the only source of information about important events. We believe that these recollections should be used with the acknowledgement that they are not exactly the same as the original experience but that they nevertheless speak significantly about that experience. They are not unrelated to it. If the researcher places recollections in the context of the informants' present situation both can be better understood. Collecting material from several sources can further help to bracket the present from the past.

Eventually, the researcher arrives at the task of deciphering the relationship between the event as it was and as it is recalled. The deciphering begins with the

researcher's recognition that the two are not separate but part of an entirety which could be called the complete meaning of the experience. The meaning of the experience is not itself unambiguous, and it can be read in many ways, even in its immediacy. Its full meaning isn't removed by time, it is changed; in a way it is completed. Moreover, recollections are themselves interpretations of the event and what has come after. But memory is a problem only if experience is thought of as a singularity. If we think of every experience as full of potential meanings, then understanding is a continual filling out of the picture. We've all heard historians say that the meaning of an event can't be understood immediately, time must pass so it can be understood in its context. This is no less true for personal experience.

The experiences children have playing hide and seek can be described from the observers' point of view, by the child playing, and by the adult recollecting. These are not conflicting truths, though the accounts may disagree; they are all a part of the meaning of that experience. Understanding what hide and seek has come to mean for the adult can only enhance what the child tells us. If we try to understand the experience given its origin, it can tell us more about what we want to know. A recollection is not the experience itself but it is relevant to it and important for understanding.

Why Educational Research?

It is Sunday morning in the Amsterdam Vondelpark. The sun is shining. A preschooler, she is about three years old, walks three or four feet in front of her parents. She wanders off the path. Walking in the soft sand is difficult, but undaunted she presses on until thick branches bring an end to her adventure. She stands where she is, uncertain. Father and mother remain on the path watching her progress. Now father says, "Come on back and we'll go on." And she does.

Later, the same day elsewhere in the park another little girl about the same age wanders off the path and away from her parents. Their reaction is immediate: "Hey, stay on the path," says the father, taking her by the hand and leading her back.

It is simple enough to see in these two situations that different values are involved in the parents' responses to similar circumstances. In the first case the father gently asks the child to return. Perhaps he doesn't feel strongly about remaining on the park's path and wants his daughter to have the chance to explore by herself. The other father seems to feel that the rule about staying on walking paths is important. Perhaps he wants his daughter to learn to obey the rules. In one case there is a *laissez-faire* find-out-for-yourself approach, in the other a commanding controlling approach. Who's right? We have a preference and suspect you do, too, but that's not the point. What we're trying to show with these examples is that it can be helpful--provocative to reflection--to examine and think about different ways of handling educational circumstances. It is a way to reveal alternatives. In reflection lies the potential for change and improvement and an acknowledgement that people have the power to choose. It is likely that these parents were not fully aware of the values implicit in their actions. It is not unusual to want to act in one way and not be aware that you are contradicting your own desires. Consider this incident, one of many similar incidents, reported by Silberman in his book *Crisis in the Classroom* (1970):

A sixth-grade class in a racially-mixed school. A black girl calls out the answer to a question the teacher had asked of the entire class. "Don't call out," the teacher

responds. "You sit where I put you and be quiet." A few minutes later, when a blond-haired, blue-eyed girl calls out an answer to another question the teacher responds, "Very good, Annette; that's good thinking!" (p. 92)

It isn't easy to be a consistent parent or teacher. Acting, and reflecting on your actions, are different. In educational circumstances it can be very helpful to research, that is to reconsider action to see whether what was done had the intended meaning.

In 1970 Silberman concluded after extensive classroom observations that "schools fail...less because of maliciousness than because of mindlessness." It is to the problem of mindlessness that educational research from a phenomenological perspective tries to speak by bringing intentions out from where they hide in the ongoing parade of unreflected moments so we become aware of the meanings represented in actions.

Educational research like the process of education itself seeks to reveal meanings of which we were previously unaware. Paulo Friere speaks of education as a process of *conscientization* or becoming aware, in which experience is understood by examination with others in a dialogical encounter. By seeking to name experiences in the world one necessarily transforms experience. This too is what educational research from a human science perspective does. Through description, analysis and thematic identification in interaction with informants, one names the world. This moves the overlooked from background to foreground, making it possible for critical reflection to lead to understanding and to change.

The search for meaning is particularly important in the educational situation, where someone has taken responsibility for someone else. Often a child turns to an adult, relies on an adult. The passage from Silberman shows how vulnerable children are. They are not helpless but there is little chance for them to fight back when they are abused. And what do children learn when they see a teacher act differently to black and white children? Because adults have so much power over children it is important that the educational situation be continually examined by research.

This research should not be, cannot be, the exclusive territory of an "educational researcher" who tells results to a practitioner. We believe that everyone who teaches, and we mean teachers in the broadest sense, including parents as well as professional teachers, should be *engaged* in research. Informally they already are. Everyone who watches, thinks about what they have seen and acts on that information is engaged in research. Research isn't separate from life; it is a special way of regarding life. It is a habit of mind which all of us have more or less and which can profitably be cultivated in everyone. We believe that it is particularly important for parents and teachers to cultivate the research habit of mind.

The split which now exists between those who do research and those who *consume* it is unfortunately growing broader. The wedge driving these functions and the people who do them apart is our social practice. We now pay researchers, and handsomely, to understand a practice which they themselves do not carry on. To justify their special role, they are expected to speak with authority about educational situations in general. To do that they must comprehend without reference to particular children, teachers, contexts, or situations. Given these demands researchers have created a whole world of educational events which live in their research and development *models*, not in the real world. Research is alienated from practice. Educational researchers have made a world in which educational encounters have become manufacturing events with children as products and educators as assembly line workers. These researchers are as much prisoners of their models as the educators who are supposed to use the results. Is it any wonder that the question of how to apply research results continues as a difficult problem. It is in fact an unsolvable problem because educational research has been so alienated from its proper context that results are largely without meaning for those who are expected to use them.

We believe that research separated from practice is meaningless and practice without research is mindless. Research and practice must exist together in one situation. Where practice is informed by research there is interest, vitality and even wonder. Where research grows out of practice there is involvement, excitement and relevance.

During the last two decades an ever increasing amount of advice has been voiced, some of it contradictory, about how education ought to be conducted, education in its broad sense at home and at school. Experts seem to know everything while parents and teachers are expected to be hungry for the latest *findings* as if they had no other way to learn except from researchers. A passive attitude on the part of teachers and parents toward learning about practice is itself a barrier to better practice because to act wisely as an educator means to act thoughtfully, reflectively, and with awareness. People must recognize that the educative act is creative, not fixed. The enthusiasm which marks interaction between learner and teacher comes when both appreciate the power of the other to learn. A sense of wonder is the source of fine teaching, exciting learning and interesting research. Research and teaching feed one another. To appreciate what a child is doing and to help him do better is to understand the enormity of the accomplishment and be thrilled by it. To have a sense of wonder at the educative act is to reach the real source of good practice because practice is not engineerable. It is an art which calls always for learning (which is research) from the teachers as well as the children.

We hope it is clear that we are not suggesting that teachers and parents should add to their duties the ones carried on now by developmental and educational psychologists. Far from it. Research is not synonymous with statistics, research methods, writing articles or having a Ph.D. Rather, to do research is to learn from experience, to cultivate a sense of wonder at what happens, to be amazed at the things which a child does and to pay attention.

In the following excerpt Valerie Suransky reports on her research with Sasha, her young son. Her article, published in OUTLOOK (1980), is one example of the kind of research which a parent can do. She is, of course, also a professional; but we believe that her example is nevertheless one that any parent could choose to follow. We don't necessarily mean the writing of the article. Rather we mean the interest in, and wonder about, the thoughts and words of her child:

The First Disappearance: October, 1979

By almost seven months Sasha had developed distinctive welcomes for Len, his brother Shael, his grandparents, and me, which involved a constellation of different physical reactions: gestures, sounds, and smiles. He "talked" a lot, using different tones and placing his "words" in distinct and appropriate contexts. I-ma-ma, which he addressed only to me, meant mummy, food, being held, or a combination of these. Ba-da-da-ba or da-da meant daddy or bathtime, and these he addressed only to his father who had, by now, an established and exclusive bathtime ritual. Uppa or pah meant "pick me up", which he would ask of any family member, and ba-ba was used as a general term to refer to anything else in the environment.

In mid-October Len went to a conference in Texas for several days. The first two nights that he was away I bathed Sasha (and evidently performed poorly as a substitute!). During the bath the first night he looked around and shouted "da-da, ba-da-da-ba," as if he were intentionally calling his father. He repeated the same pattern the following night. When Len did not appear, however, Sasha stopped saying da-da and on the third night did not call his father. The word temporarily disappeared from usage.

On the fourth morning, when Sasha woke for his five o'clock feeding, I brought him into our bed. After he had been breastfed he turned his head and caught sight of Len, who had returned late the previous evening. He touched his father's face and very softly said "ba-da-da-ba" in a tone of great pleasure and happiness. The following two nights he was restless and each time he woke he shouted "ba-da-ba" and wanted to be held only by Len; was he afraid Len would disappear again?

The way Sasha reacted to his father's disappearance and subsequent reappearance seemed to me to indicate that not only had he actively thought and spoken about his

father but he had put words in the context of actions and retained an image of an event over successive days.

According to Piaget, action always precedes thought. For an infant in the sensorimotor stage, practical knowledge is developed and forms the substructure of later representational knowledge through the construction of the permanent object schema. The events I have described were the first real challenge of the "disappearing object." For Sasha they involved a complex unravelling of images, needs, appearances, separations, and reunions, all expressed in the one-word statement ba-da-da-ba. This indicates the power and complexity of infant holophrastic speech for, as Lewis Carroll points out in *Through the Looking Glass*,

*"That's a great deal to make one word mean,"
Alice said in a thoughtful tone.*

*"When I make a word do a lot of work like that,"
said Humpty-Dumpty, "I always pay it extra."*

*"Oh," said Alice. She was much too puzzled to
make any other remark.*

J. J. Rousseau believed that a teacher could always learn more from a pupil. It is in exactly that spirit that we suggest teachers should also be researchers, sharing their findings with one another, with parents, and when appropriate, even with children.

Meaningful research must be grounded in a context. To be so grounded the researcher must understand the culture of the context. Think of the difficulty this poses for anyone who is a full-time researcher. The researcher is an outsider who must overcome this deficit with long and careful observation of the situation. A teacher is already part of the landscape.

There are many examples of very fine studies done by teachers which we would put in the human science tradition, studies which interpret and analyze the meanings of experience for the participants. In the references we have listed some. Here we would like to offer as an example an excerpt from a study by Frances Hawkins (OUT-LOOK, 1980). It is a good example of teacher-conducted research where the teacher uses observations over time to try to understand and help a child.*

*It is worth remembering that this piece need not have been published to qualify as research. Although there is no reason why teachers shouldn't publish their work for others to learn about, publication itself doesn't make research research.

A WINTER'S TALE: PHILIP

Frances Pockman Hawkins

I had not noticed Philip until he found his way to us one cold morning after Christmas break. Across the sprawling courtyard of the Farm School, from farmhouse to workshop, this three-year-old had left his group and come alone, and now there he stood and watched behind the table of finger-painters. He was so engrossed that I could take a good look at him. Thin, neat, and tight, he had a strangely worn look about him. From painting to painter

his eyes darted, with little expression in his face except for a tic-like grimace that would come and go. I felt at once his uniqueness, and some diffidence toward it.

Joan, the teacher of the three-year-olds, had recently spoken to me about her "strange little fellow" and had asked me to take notice of him the next time we had our groups together. No wonder. I realized that for all the worm look, there was a fierceness about this child that I had never met before. Certainly it was not common in such a controlled and sustained facade as Philip lived behind. My professional self was at once engaged. Later, Joan and I agreed that it might be better if Philip chose to join the four-year-olds. Perhaps he would be challenged to participate by the older group's activities.

Enrolled late in the fall, Philip came only on Tuesday and Thursday mornings, as did many beginners. Although he turned four soon after New Year's the two days each week were to prove particularly advantageous to him because of his strenuous and fatiguing use of them. They also allowed me to concentrate my understanding on him when he was there without neglecting the others.

For some weeks (days only, as measured by Philip's twice-weekly attendance) he was a floater between the groups. In neither group did he speak often or join in any activity. Even in Joan's carpool he was silent and observing. His mother reported that he couldn't wait for his "school day." It was a puzzle. He seemed in the beginning so sure of his style of navigating alone that I was intimidated, after tries that failed, from any kind of small talk. He was totally ignored by the children in both groups. But when we calculated, he was spending more time with my group. His visage alone continued to keep me at a distance.

I use the term visage because, unlike Hamlet who wore his "suits of woe," Philip dressed in the then-popular cowboy regalia: boots, shirt, jeans, even swagger. But like Hamlet, Philip could have said of himself that "he had that within which passeth show." Philip wore his clothes as if they were pasted on, and could never be mussed. In the beginning they never were, and seldom once he could participate. Gap between jeans and shirt? Impossible to imagine. No fat tummy, belt secured always. Had he ever had any baby fat? Some few don't, of course, and he must have been one of the sparse ones. With the pale yellow cast to Philip's skin it took me some time to realize that he was healthy. "Won't stay home for a stomachache," his mother reported to Joan one morning.

I was not to meet Philip's mother until the following fall when I would pick him up each school morning. Her words were always few if she was out waiting with him and she seemed a quiet one. I learned later that she had been seriously ill. Pressures and troubles within families can be harder on some children than on others

and Philip's reactions were unique to him. The reactions, not the troubles themselves, were certainly my primary province.

When a child has grown accustomed to carrying his defense with him, any breaking away from it must come from the child. Philip was no exception. He came into the workshop from his carpool one morning with a Dennis-the-Menace doll under his arm and a nice new swagger to his step. A smile seemed almost to come through his mask and before long he broke his long silence with a pronouncement. "This here is ma lil ole Dennis-the-Menace doll and ahm just lak him. Ahm a lil ole menace myself, thas what ma daddy calls me...his lil ole menace." It was not the Oklahoma accent which threw me--we had a sprinkling of those--but the confidence and bravado which accompanied his broadcast. For most of the morning Philip forgot to observe and wandered rather happily, for him, around the busy children, with Dennis under his arm, and to no one in particular would say "The is ma Dennis..." It was like a rehearsed speech which asked for no response.

Dennis-doll was a benign protection for a while, and lived under Philip's arm as he returned to his tours of inspection. One could not but wonder at the irony of Philip's calling himself a menace. The last thing Philip, in his role of inspector, would have done would be to use anything in school, and never misuse it. At home? I doubted the aptness of the label there, too. It was a nice joke between Philip and his father, certainly.

Other sorts of pronouncements followed now, similarly ignored by the other children. For days these announcements were satisfying to Philip. They seemed his way of stepping with caution from his former silent self. Pulling the string tie around his neck even tighter, he might announce, "Ah lak this tie to be tight, ah jus lak it that way." His clothes were of deep importance to him; they too were his protection and were not, as with other children, to be commented on by the teacher. Who would dare remark on the shininess of armor, or its fit?

And then, slowly, there seemed a direction to these broadcasts. They were directed toward me, if not to me. I became hopeful that communication was consciously intended and expected, and I was not wrong. Philip was finally ready to look me in the eye, if only fleetingly. He felt safer and he showed me he knew it. He was not alone in this segment of breakthrough. Less troubled children who cannot hazard initial direct address will quickly test and judge whether their silent signals, their hidden messages, are being received and interpreted before trust is given to the receiver.

Although I had never before known such a child as Philip there was for me a persistent *deja vu* in his appearance. Sometime in those early weeks the reason for this became clear. Philip was from an early Renaissance

canvas or mural! Giotto himself had painted such infants. In those fourteenth century portrayals I had always assumed the artists were seeking to portray the wise look, the little man. And so, in a sense, they were. But now, with this Renaissance baby before me, in my class, I wondered if there were not more of these sparse, old-before-their-time babies in those days when childhood itself was short and risky, when nourishment was scarce and survival always in doubt. Among our abused children there is a wariness, an en garde look. And on our TV screens, in news and documentary, children appear who reflect more than their share of the world's misery and hunger.

Remembering Giotto I recall an aspect of Philip's proportions. If his head was too small for his age in relation to his body, his arms were properly short. At the time I missed this, but I remember how the cuffs of the plaid cowboy shirt were always folded back on the sleeve before being buttoned. Even manufacturers of such clothes, fitting small boys in other proportions, did not understand those short arms. (Not so ignorant most Africans; from teachers there we learned that one of the tests of whether a child is ready to enter school is whether he can touch the opposite ear with one hand over the top of his head. Sometime between five and six the human young can do this.) Philip was appropriately short-armed.

Not long after I had noted the new direction in Philip's behavior--his being near me with his declarations--his inner world began to break through his strong protective facade. At first I didn't know what was happening; such a child was new to me and I was still unprepared for his inevitable misery. Every activity, from clay modeling to carpentry or painting, was to be scrutinized with his eagle eye, his judgmental eye, pronounced upon, and left alone. "Ah sure caint climb up thar with those lil ole kids, not me...Dennis don't lak for me to put him down...not for one minute." After this sort of pronouncement he would stalk off to another observation post, almost, I felt, as if distance would strengthen his inner resolve to abstain.

What could a teacher do here to help? There were times when I felt totally dissatisfied with my role and then Joan and I would take stock. By my own respect and acceptance I was already protecting Philip from possible reactions of laughter and disdain from the other children. As professionals we understand how subtly but absolutely are such feelings communicated. I felt Philip's growing acceptance and trust of me but I wasn't sure my understanding was yet worthy of it. As things cleared for me and I did begin to appreciate the seriousness of his battles, my self-analysis proved correct; I hadn't understood in the beginning. I had underestimated both the depth of his troubles with growth and his newly forming decision to meet them head on.

Up to this point we have argued against the split between research and practice. It is a position in which we believe strongly, but we do not therefore believe there is no role for someone called *researcher* who is willing to learn, in context, from informants. In our view the researcher is someone who wants to learn so that he or she can reflect back what has been learned to those engaged in practice. Research must be a dialogue founded on mutual respect for what each can learn from the other. Often an outsider will see things in a new light and in contributing this view suggests a reform for practice. In the following excerpt, Valerie Suransky (1977) describes a Montessori preschool classroom where she was an outsider. After two years of observation, Suransky subjected her data to thematic analysis. The work ethic appeared as a major theme in the life of this school:

Upon entry into the Montessori classroom, I was struck by the remarkable orderliness of the environment, the state of tidiness of the classroom and the fact that there was virtual silence in a room filled with 12 toddlers and two teachers. The ordered state of the room was constant i.e., there was no change in appearance between entry and exit time. As the infants entered the room, they were greeted by the teachers, taught how to take off their jackets and hang them up on a coat hanger, and then encouraged to find work to do.

There were a number of rules which pertained to work which the teachers spent a great deal of time teaching to the children:

- (i) *All work was to be fetched from the shelves, laid on a table or floor mat and replaced in the exact spot after completion.*
- (ii) *When working at tables, chairs had to be pushed in prior to returning work to the shelves.*
- (iii) *No child may interfere with another child's work.*
- (iv) *No running or rough play or shouting was permitted in the classroom.*

During the fall, the entry point of most of the toddlers, almost all of my observations centered around work-related instructions and interactions.

Work and Possession

Celia entered the class a few weeks after its inception. She investigated the environment, the materials and obediently put work back when told to by the teachers. She saw a puzzle of Pete's lying on the table and went to put that away, too. Teacher (T) Martha: "Celia, that is Pete's work." Pete was then instructed to retrieve the work, place it back on the table and then return it to its original place on the shelf. At this point, Celia wandered off to another shelf and picked up play animals. (T) Martha ran over. "Celia, you left your work out.

References*

Arnold, W. J., *Nebraska Symposium on Motivation*, 1975, *Conceptual Foundations of Psychology*. Lincoln: University of Nebraska Press, 1976.*

Ashton-Warner, S., *Teacher*. New York: Bantam Books, 1964.

Bateson, G., *Steps to an Ecology of Mind*. New York: Ballantine Books, 1972.

*These books we found influential and helpful in our own work. They include philosophical studies of the human sciences, as well as books about the history and philosophy of science.

Beekman, T. and Mulderij, K., *Beleving en Ervaring*. Amsterdam: Boom Meppel, 1977.

Berger, P. J. and Luckmann, T., *The Social Construction of Reality, a Treatise in the Sociology of Knowledge*. London: Penguin, 1973.*

Berger, P. L.; Berger, B.; and Kellner, H., *The Homeless Mind*. New York: Vintage Books, 1974.

Bleeker, H. and Mulderij, K., *Kinderen Buiten Spel*. Amsterdam: Boom Meppel.

Brassai, Quoted in "Review of 'The Secret Paris of the 30's,'" *New York Times Book Review*, September 19, 1976.

Broadbeck, M., "Logic and Scientific Method in Research on Teaching." In *Handbook of Research on Teaching*. Edited by N. L. Gage. Chicago: Rand McNally, 1963.

Campbell, D. T. and Stanley, J. C., "Experimental and Quasi-Experimental Designs for Research on Teaching." In *Handbook of Research on Teaching*. Edited by N. L. Gage. Chicago: Rand McNally, 1963.

Carew, J. V.; Chan, I.; and Halford, C., *Observing Intelligence in Young Children: Eight Case Studies*. Englewood Cliffs, NJ: Prentice-Hall Inc., 1976.

Coles, R., *Children of Crisis*, Vol. I: *A Study of Courage and Fear*. New York: Dell Publishing,

Put that back and put this work away first--no, push your chair in first and then put it away."

Jeremy and Leroi stood up from a double table. Sharon and Paul took their seats and continued a weight activity. (T) Jackie: "This is Jeremy's work. This is Leroi's work." She called the latter two back. "Put it back on the shelf, please." Jeremy: "I don't want it." (T) Martha: "Well, I'll help you with it and then Sharon and Paul can take it to the shelf again." She explains to Paul, "Paul, this is Jeremy's work. He needs to put it away before you can take it."

Alan prepared to thread large beads at another table after leaving a bowl of small beads (which he could not thread) on a previous table. (T) Jackie: "I'm glad you want to do that but you're going to have to come down and put away all those beads in this dish first." Alan squealed a protest and did not do as he was told. (T) Jackie picked him up, laid him flat on his stomach and forced him through physical pressure to pick them up while she remained bending over him.

Janey took Sandi's hanger and tried to hang it up for her. (T) Jackie: "Janey, that is Sandi's hanger. Sandi, can you hang up your own hanger, please?"

Montessori (1964) believed that satisfying engagement and absorption in work led to the formulation of a system of inner controls, a sense of personal fulfillment which facilitated the development of an inner strength and self discipline on the part of the child. Due to an earlier family socialization process which the child had undergone, where the inner discipline had not been sufficiently stressed, it was necessary to establish an external locus of control in the classroom whereby the children would "internalize the external," and thus be given the correct momentum for intrinsic discipline and motivation, which Montessori assumed was fundamental to child nature. As work was the mode basic to the development of self the practical translation of this work ethic assumed a series of training periods in the classroom.

While the initial Montessori socialization period--the fall semester--concentrated almost exclusively on commands, instructions and prohibitions related to work--the subsequent winter semester was devoted to the normalization through work period that Montessori envisioned.

The final excerpt which follows is unlike the rest; it represents a different way of doing phenomenological research. Martinus Langeveld (1953) tries to describe the feelings of a child in a secret place, and in doing so he evokes in the reader similar feelings and recollections of childhood experiences. His is a literary research style which has largely passed from the scene in

- Co., 1964.*
 Vol. II: *Migrants, Mountaineers and Sharecroppers*. Boston: Little, Brown & Co., 1972.*
 Vol. III: *The South Goes North*. Boston: Little, Brown & Co., 1972.*
 Vol. IV: *Eskimos, Chicanos, Indians*. Boston: Little, Brown & Co., 1977.*
 Vol. V: *Privileged Ones*. Boston: Little, Brown & Co., 1977.*
- DeGroot, A. D., *Methodologie*. 'sGravenhage: Mouton, 1972.
- Einstein, A., (Quoted in) "Talk of the Town." *New Yorker*, March 5, 1979.
- Eysenck, H. J., "Forward." In *The Measurement of Intelligence*. Edited by H. J. Eysenck. Lancaster: Medical and Technical Publishing Co. Ltd., 1973.
- Feyerabend, P. K., *Against Method*. New York: New Left Books, 1975.*
- _____. *Science in a Free Society*. London: New Left Books, 1978.*
- Fitzgerald, F., "Onward and Upward with the Arts: History, Text-books." *New Yorker*, February 26, March 5 & 12, 1979.
- Gadamer, H. G., *Truth and Method*. New York: The Seabury Press, 1975.*
- Geertz, C., *The Interpretation of Cultures*. New York: Basic Books, 1973.*
- Giorgi, A., *Psychology as a Human Science*. New York: Harper and Row, 1970.*

favor of objective description and analysis. As readers of research we have through the years become less forgiving and more skeptical. Among the guiding questions today is: how does the writer know that?

There are undoubtedly some who would call Langeveld's essay a piece of fiction, as though that somehow made it less valuable. Nevertheless the essay was written to inform educators about the power and importance of secret places in the life of the child, places to be alone yet close to caring adults. In Holland, Langeveld's essay has proven of practical importance, too, in the development of classroom spaces for young children. In each Dutch preschool class, it is not unusual to find a *secret place* where a child can go to be alone, to be quiet, secret and yet safe.

It is also fitting, we think, to include this excerpt from Langeveld since our work has grown from his example; and yet it is difficult for us to send readers of English directly to the source because so little of his work has appeared in English. Thus we offer this excerpt as an example of the tradition of evocative, speculative phenomenology which has for the time being passed into disuse but which, we believe, is nevertheless of importance for understanding the world of children. As you read, see if you don't find yourself returning to memories of similar experiences in your own past. Ask yourself if Langeveld hasn't brought the child's world into better focus, made its significance easier to grasp, and given meaning to what might otherwise have been overlooked:

The Attic as Secret Place

Was there ever space so alien as the attic which we saw before us as we poked up out of the attic trap door? The attic met us with eyes that saw us "from out of nowhere." They didn't look at us, but they were as an all-seeing presence close by, to watch us until the trapdoor was closed and we were descending the stairs or ladder.

If the trap door is presently opened by another, then the head that turns up is from another world than the attic and belongs to the intruder. He disturbs the tranquility in the attic, his voice upsets, he breaks apart the soap bubble of life in the secret place. The alien world of the secret place becomes our own, yes: more our own than anything in our surroundings in the living areas downstairs in our house.

The secret is hidden as well in the emptiness of the empty as in the fullness of the full attic, that sometimes brings with it ominous meaning, the "Unheimliche." Th un-Heim-liche: that which is not from the house. In the secret spaces the "unhousely" always rules. Therefore one could, among other things, make the space into a "boat" which travels over the threatening waves, into a "cave" in the inhospitable mountains, into a nest in

*These were typical middle class family dwellings in Holland.

Hart, R., *Children's Experience of Place: A Developmental Study*. New York: Irvington, 1978.

Hawkins, F., "A Winter's Tale: Philip." *OUT-LOOK*, 38, Winter 1980, pp. 4-15.

Heisenberg, W., *Physics and Beyond*. New York: Harper and Row, 1971.

Hudson, L., *The Cult of Fact*. London: Jonathan Cape, 1972.*

Husserl, E., "Phenomenology." *The Journal of the British Society for Phenomenology*, 2, 1971, pp. 77-90.*

Inhelder, B. and Piaget, J., *The Growth of Logical Thinking from Childhood to Adolescence*. New York: Basic Books, 1958.

Introduction to Aristotle. Edited by R. McKeon. Chicago: University of Chicago Press, 1973.

Jacobs, J., *The Death and Life of Great American Cities*. London: Penguin, 1965.

James, W., *Talks to Teachers on Psychology*. New York: Dover Publications, Inc., 1962.

Jensen, A. R., "How Much Can We Boost I.Q. and Scholastic Achievement?" *Harvard Educational Review*, 39, 1969, pp. 1-123.

the unapproachable heights, into a "scene" in an unfathomable "play."

The independence of the attic from the house also comes from the fact that its dimensions have no relationship with those of the house. The attic stretches out unendingly under the burning sun from the prairie of oceans above the two rooms en suite of the modest duplex type two-under-one-roof government employees house.* The attic floats away from the house lying under it as a ship or an airplane and takes on dimensions from its undetermined meaning. The attic is often also the unoccupied space: people can lay down train tracks there, walk through deserts--not without running into obstacles, but without meeting things there which through their stay in the utilitarian world have the unshakable meaning of current use. The uninhabited space can become a formed space, wherein the train line leads through a landscape of suitcases, chests, hampers, etc.

In the salon this piece of furniture is a table. Since it was decommissioned, it can receive a new meaning in the free attic world. No command holds prisoner; no prohibition turns one aside. Now on the table arises a view of Indian tents, where we with legs crossed and "even" with shoes on, smoke the peace pipe with the Sioux we've just met. Things change their names which are whispered to us without being spoken by the secret of the attic. Soon we will say the names....

In the full attic, concealed in secrecy, the unexpected places hide themselves--become secret places, huts, holes, riffs, and mountain places. Things themselves take up a position as a part of the total scene...except for the familiarly serving apple crate, the trusted stranger. Its visage is closed, eventually even averted, with it nothing can be done. It stands in one place without moving and unable to be moved; from sheer familiarity it holds a meaningless place. It is exactly the robust every dayness that makes the apple crate expressionless in the midst of things which speak. And isn't it very certain that behind the curtains over there this "lifeless article" doesn't stand ready for the jump to the unexpected? We look now behind the curtain: a stove appears docilely to be what it is. Then we really move the curtain aside and open the secret place up to join it to the places where we live and act. The stove still hesitates, but whenever it can makes its power useful as dolphin or ship's cannon it leaves the uselessness of its intended use. It achieves meaning. It is constituted in an ongoing world. A world that we learn to know whenever, e.g., the volatile upheld curtains unexpectedly fall shut behind us. It drives an anxious palpitation to the throat. "Who did that?" The "unperson" of the secret place has moved himself for a moment in this space.

Time in the attic stands still or flies by. It is the same thing. But it doesn't stand still with the exasperating compactness of fear or grief. It is gone. And whenever we come downstairs again from the attic

*In contrast, we find ourselves in agreement with Paul K. Feyerabend who says in his book *Science in a Free Society* (1978), "Every school in the philosophy of science has given a different account of what science is and how it works.... Science is not one tradition but many and hence gives rise to many standards."

where the clock looks at us, can it be, that the clock has practically stopped and can it be, that its hands, while we had just turned our backs, had moved forward three hours. The clock has no relationship to time that, in the hiding place as one says, was "forgotten." Time was certainly not forgotten, people can only forget the clock. But a being-in-control-programmatic division of time is not part of the secret places, because these places lie outside time and its reign; they are also in that sense hidden.

Basic or Interpretive Science: The Case of Educational Research

The educational community is badly split about the purposes for doing research. We have tried to make clear our belief that research should be helpful by revealing the overlooked meanings in situations. Research in this view is dialogical, descriptive, and interpretive. The researcher's job is to learn from informants by taking their experiences seriously and reflecting on those meanings in dialogue with the informants.

On the other hand there are those whose commitment rests with an idea of science which leads them to other conclusions. Fred Kerlinger, who was President of the American Education Research Association in 1977, said the following in his presidential address to that group:

...Bodies of research aimed at theoretical understanding of psychological, sociological and other behavioral scientific phenomena of possible relevance to educational thinking and practice may have beneficial though indirect effects on educational practice. A corollary is that basic research is more important than applied research in its potential effect on education.

A theory presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena.

Science...has no other purpose than theory or understanding and explanation.

Many people think that the purpose of research is or should be to improve the lot of mankind. Not so. Either men improve man's lot or it doesn't get improved (p. 5).

This is a viewpoint which differs from our own.* Here the commitment is to a vision of science as a single tradition in which research is conducted to serve theoretical understanding. In this view as theory builds so does understanding which may have an indirect effect on practice.

If Kerlinger and those who agree with him are correct then researchers should be scientists first and only incidentally worry about solving practical problems. In this way problems will be truly solved because solutions will arise from the replicable findings of scientific

_____. "Social Class and Verbal Learning." In *Social Class, Race and Psychological Development*. Edited by M. Deutsch, I. Katz, and A. R. Jensen. New York: Holt, Rinehart and Winston, 1968.

Joncich, G. M. (Ed.), *Psychology and the Science of Education, Selected Writings of Edward L. Thorndike*. New York: Teachers College Press, 1967.

Kerlinger, F., "The Influence of Research on Educational Practice." *Educational Researcher*, 6, 1977, pp. 5-12.

_____. *Foundations of Behavioral Research*. New York: Holt, Rinehart and Winston, 1964.

Koch, S., "Language Communities, Search Cells, and the Psychological Studies." In 1975 *Nebraska Symposium on Motivation, Vol. 23*. Edited by W. J. Arnold. Lincoln: University of Nebraska Press, 1976.

Kohl, H., *36 Children*. New York: New American Library, 1967.

Lopate, P., *Being With Children*. Garden City: Doubleday and Co., 1975.

Langeveld, M. J., *Beknopte Theoretische Pedagogiek*. Gronigen: Wolters-Nordhoff, 1969.

_____. "De 'verborgen plaats' in het leven van het kind." In *Persoon and Wereld*. Edited by J. H. Vanden Berg, and J. Linschoten. Utrecht: Bijleveld, 1953.

Linschoten, J., *Idolen Van de Psycholoog*. Utrecht: Bijleveld, 1970.

McNiff, S., "Art, Artists and Psychotherapy: A Conversation with Robert Coles." *Art Psychotherapy*, 3, 1976, pp. 115-133.

Medley, D. M. and Mitzel, H. E., "Measuring Classroom Behavior by Systematic Observation." In *Handbook of Research on Teaching*. Edited by N. L. Gage. Chicago: Rand McNally, 1963.

Merleau-Ponty, M., *The Phenomenology of Perception*. London: Routledge and Kegan Paul, 1962.*

Milne, A. A., *When We Were Very Young*. New York: E. P. Dutton & Co., 1924.

Misiak, H. and Sexton, V. S., *Phenomenological, Existential and Humanistic Psychologies, A Historical Survey*. New York: Greene and Stratton, 1973.*

Minkowski, E., *Vers Une Cosmologie*. Paris: Aubier, 1936.

study which are accurate throughout the particularity of actual conditions.

It is this vision which has given rise to the positivistic programs of training for graduate students in the social sciences and to rigid policies for judging articles acceptable for publication in professional journals. Generally the standards are strict and stringently enforced, which suggests that the opinions informing the actions are held as if they were not opinions but rather proven facts. But if we ask what proof there is that science is a monolithic structure which must be pursued in a unified way, it becomes apparent that there can be no simple proof. The answer has to lie in the results from a cumulative tradition of work. If we find we are better off after much work building basic theory in order to predict, then we will know that Kerlinger, *et al.* were correct. But note that this test is based on a practical criterion--"that we are better off." Would the *basic scientists* accept his criterion? We suspect not. What then? It would seem one must either believe that science is good because it is scientific or accept that the final decision about the value of scientific work is a pragmatic one.

The conundrum is in any positive way insoluble. We are therefore forced to rely on our beliefs. To choose the path of basic science or the path of interpretive-phenomenological study is, it seems to us, to commit an act of faith which cannot be shown to be right or wrong. If we are correct in this analysis then it would follow that neither one nor the other tradition can prove its superiority. We are therefore all free to consider different traditions and to choose for ourselves the path we wish to follow. Thus every research study also involves us in dialogue with the tradition of which that research is part. We must consider that tradition's impact on practice and our ability to make an impact on the future by extending it. Every researcher commits an act of faith based upon a personal understanding of the wisest course and no one of us can prove we are right. What we can do, however, is consider the consequences that are likely to flow from the choice.

Research which begins as basic study with no particular applications in mind often becomes influential in practice. Consider the case of operant conditioning in which lessons learned from the study of pigeon learning were applied to the language of humans by B.F. Skinner in his book *Verbal Behavior* (1957), or how the same *basic* research was brought into classrooms. Since classrooms weren't pigeon coops, teachers weren't food pellets, and children were different from pigeons, all three were remade to look like their laboratory *analogues*. This made the research applicable but at the expense of the classrooms and teachers and children. The results of this work provided *help* to teachers, help in the form of principles designed to guide their actions.

Montessori, M., *The Secret of Childhood*. Calcutta: Orient Longmans, 1963.

Moore, P., "Nader Chides Researchers, Scores Testing." *APA Monitor*, 7, November 1976.

Page, E., "Nader v. ETS," Letter to the Editor. *APA Monitor*, 7, December 1976.

Phillips, D., *Abandoning Method*. San Francisco: Jossey Bass, 1973.*

Piaget, J., *Insights and Illusions of Philosophy*. New York: Meridian Books, The World Publishing Co., 1971.*

_____. *The Child's Conception of the World*. Totowa, NJ: Littlefield, Adams & Co., 1969.

Polanyi, M., *Personal Knowledge: Towards a Post-Cultural Philosophy*. New York: Harper & Row, 1958.*

Rabinow, P., *Reflections on Fieldwork in Morocco*. Berkeley: University of California Press, 1977.*

Rabinow, P. and Sullivan, W. M., (Eds.), *Interpretive Social Science*. Berkeley: University of California Press, 1979.*

Riesman, D., "Observations on Social Science." In *Individualism Reconsidered and Other Essays*. Edited by D. Riesman. New York: The Free Press, 1954.

Roche, M., *Phenomenology, Language and the Social Sciences*. London: Routledge and Kegan Paul, 1973.*

The truth of these principles was presumed to be beyond question because they had been established *scientifically*.

The belief of some scientists in their power to see with utter clarity sometimes leads them to make puzzling claims. Here is an example from Arthur Jensen (1968). In writing about the *problems* of the so-called disadvantaged child he says:

The first clear-cut indications of S-V-R (Stimulus-Verbalization-Response) learning in the child which, we have already indicated, is the first stage that clearly sets the child apart from lower animals psychologically, can be demonstrated in specially designed laboratory experiments at around the age of six. Until this stage of development is reached, the child shows little superiority to the chimpanzee of comparable age. But with the attainment of S-V-R behavior, the child intellectually leaps far ahead of his anthropoid cousin. It is interesting that throughout history every society which has ever instituted formal education has decided that this is the best age to begin the child's formal schooling (p. 132).

We disagree with Arthur Jensen. Because we place our trust in observations of children as they are in everyday life and mistrust contrived experiments, we reach a different conclusion. We find children very different from chimpanzees and much before age six.

It should be clear from these examples that the kind of research one chooses to do, basic or applied, matters. We think it unfortunate that the prestige of the natural sciences has so rubbed off on social scientists that opinions of people like B.F. Skinner and Arthur Jensen have been interpreted by some as scientifically established fact. What in the light of everyday understanding seems utterly silly is accepted by some as profoundly true and must be tried out on helpless children by eager educational *innovators*.

Contrast the general pronouncements of Skinner and Jensen with the efforts of a Frances Hawkins or a Valerie Suransky to describe particular circumstances and interpret their meaning for purposes of reflection. To some people, this latter work does not seem as profound because it does not attempt to speak with the same force of generality as basic research does. But we think Aristotle's advice in *Nicomachean Ethics* (1973) applies in this case.

For it is the mark of an educated man to look for precision in each class of things just so far as the nature of the subject admits (p. 348).

It is undoubtedly the case that large government bureaucracies seek not precision in each case but general solutions to problems whether such solutions are possible or not. Our view is that global solutions are not likely to be found and further that by suggesting there are

Sartre, J. R., *Being and Nothingness*. New York: Washington Square Press, 1966.

Schutz, A. and T. Luckman, *The Structures of the Life-World*. London: Heineman, 1974.*

Silberman, C. E., *Crisis in the Classroom: The Remaking of American Education*. New York: Vintage Books, 1970.*

Skinner, B. F., *Verbal Behavior*. New York: Appleton Century Crofts, 1957.

Speigelberg, H., *The Phenomenological Movement, A Historical Introduction*. Den Haag: M. Nijhoff, 1965.*

_____. *Phenomenology in Psychology and Psychiatry*. Evanston: Northwestern University Press, 1972.*

_____. *Doing Phenomenology*. Den Haag: Martinus Nijhof, 1975.*

Spradley, J. P., *Participant Observation*. New York: Holt, Rinehart and Winston, 1980.*

_____. *The Ethnographic Interview*. New York: Holt, Rinehart and Winston, 1980.*

Spradley, J. P., and McCurdy, D. W., *The Cultural Experience: Ethnography in a Complex Society*. Chicago: Science Research Associates, 1972.*

Strasser, S., *The Idea of a Dialogical Phenomenology*. Pittsburgh: Duquesne University Press, 1963.*

answers, general ones, bureaucracies suggest to teachers and parents that their role in the quest for improvement is a passive one--they are to wait to be told the better way.

If practitioners are made into passive consumers of scientific news we have lost a significant source not only of information but of commitment. In our view educators need to recognize that their experience is not irrelevant to better understanding of practice. Educational practice requires a kind of certainty, of commitment to a way of acting, which is based on learning from prior practice. Put simply, good educators have always been good researchers. They have learned from their past and used what they learned to do better. This is a never-ending cycle. It is this commitment to a process of learning from practice which is endangered by a reliance on news from basic research. Practical research can be the source of useful information and foster active involvement in the teaching-learning process. This isn't a new idea. Rousseau must have had a similar idea in mind when he said: "The teacher can always learn more from his pupil." And we would add that it is this process of learning more which itself constitutes the most important part of the research process, not the particular answer reached.

We do not denigrate the motives of *basic* researchers who have striven with the best of intentions to make life better for fellow human beings with general solutions, but we want to make clear the difficulties we see at the heart of such efforts, and perhaps at the same time suggest why they have so often failed. For it is central to basic researcher's views that human individuality is *error*, that at a fundamental level cultures are--or should be--uniform, that situations are irrelevant, and that there are moral values to which everyone can subscribe. General solutions reduce the power of human choice, they assume that change can be stopped long enough to put *solutions* into practice, and that a higher power, the authority of science should be obeyed. There is little need for critical reflection nor need there be any argument about alternatives if there is only one best solution: the right one! The end product of such certainty is a reduction in autonomy and freedom for the individual. In the *Social Construction of Reality* (1973), Berger and Luckman speculate about the dangers of the single point of view:

On the one hand, there is the continuing appeal of a pedantic scientism, which either has no utopian imagination at all or, much worse, produces utopias of its own that make the blood curdle. On the other hand, there is the powerful appeal of messianic utopias, most of them spurred by the heady rhetoric of revolution and violence. Interestingly enough, both attitudes seem to have a marked affinity for totalitarian solutions to the problems of contemporary society. Perhaps there is an

Strauss, E., *Phenomenological Psychology: The Selected Papers of Erwin Strauss*. New York: Basic Books, 1966.*

Suransky, V. P., "On 'Yaisins,' 'Cheeyios,' and 'Evybody' Got Toes: An Ethnographic Portrait of Sasha the Meddlepaws." *OUTLOOK*, 40, Summer 1981, pp. 3-16.

_____. *The Erosion of Childhood*. Chicago: University of Chicago Press, 1982.*

_____. *The Erosion of Childhood, A Social-Phenomenological Study of Early Institutionalization*. Doctoral Dissertation, Ann Arbor: University of Michigan, 1977.

Twain, M., *The Adventures of Tom Sawyer*. New York: Harper & Brothers, 1875.

Vanden Berg, D., *Being and Education, An Essay in Existential Phenomenology*. Englewood Cliffs: Prentice Hall, 1971.*

Ward, Colin, *The Child in the City*. London: The Architectural Press, 1978.*

Wittgenstein, L., *Tractatus Logico-Philosophicus*. London: Routledge and Kegan Paul, 1961.

Wolff, K., *Surrender and Catch: Experience and Inquiry Today*. Boston: D. Reidel, 1976.

Wood, A., *Growing Up With Divorced Parents: A Phenomenological Study of Preschool Children's Experiences*. Doctoral Dissertation, Ann Arbor: University of Michigan, 1982.

intrinsic connection between cognitive totalism and political totalitarianism: the mind that can only tolerate one approach to understanding reality is the same kind of mind that must impose one all-embracing structure of power if it ever gets into the position of doing so (p. 235).

It seems to us much more realistic and thus helpful to acknowledge the complexity and *infinite* diversity of interpretation to which all human situations are subject. The ability to interpret ourselves lies at the heart of the human condition. We are interpreters, makers of our own meaning. Our interpretations are in principle boundless. It is always possible to see things in a new way and having done so change our view of ourselves, of others, and of the situation. The end product of our insights isn't likely to be certainty about what it all means but rather *appreciation* of the predicament in which we all find ourselves. Perhaps if we try to operate on a smaller scale, putting the understanding of educational problems as we find them first, and our scientific egos last, we can be helpful without being a threat.

If we begin our attempt to help in education with the situation as we find it, rather than with an assumption about a fundamental solution, then we are likely to find from the beginning a variety of personal meanings, changing with time and circumstances. Phenomenological research can help in the solution of problems by helping all of us to appreciate the multifaceted nature of educative experiences. And different circumstances usually call for different actions. If, instead of finding the one answer, we try to do a little better in each particular case, perhaps we can avoid the oscillations from fad to fad to which educational practice has been subject during the last three decades.

We began this chapter with the question: Why do educational research? Our answer is, we hope, now clear: to be useful, by understanding situations from the point of view of those living through them. The goal is not, in our view, the advancement of basic science. If basic science needs to be advanced we leave that to basic scientists, whoever they may be. If educators don't study educational problems they are unlikely to be understood very soon. If we wait for *basic* science to get around to us with useful solutions it may be a long wait. We think it could take forever.

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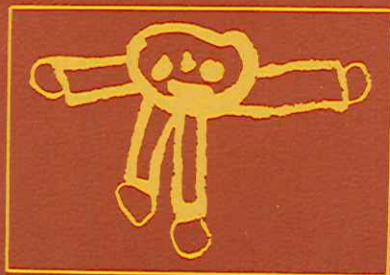
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