In this paper two questions are raised: (1) Is there any meaning to current research? (2) Is meaning important to the language acquisition process? It is necessary to explore the nature of research in general to evaluate what kind of research we are doing. This leads us to consider next the content of research on human learning and on the acquisition of language in particular. Meaning is felt to be essential to any explanation of the process of language acquisition. (Author)
used to make sure that they are both postulates of a clear conceptualization of the subject, i.e., a tentative but clear theory, and illuminators of that theory. I do not think that we have found yet a good conceptualization of the language learner. Some of our researchers try to knock down the strawman of earlier paradigms without having anything to take its place, such as the "interference" versus "creative construction" debate (Dulay and Burt 1974). The reason the latter cannot replace the former is because research cannot be done across paradigms (Kuhn 1970). You cannot disprove conceptualization of a complex subject, you can only find a better one (Kuhn 1970). While it may be advantageous for the field of endeavor to contain many different viewpoints or theories (Feyerabend 1975), it is doubtful if the researcher who tries to look at something from alternative viewpoints at the same time has anything meaningful to say at all. Research that mixes paradigms is, I believe, a-theoretical. The observation that so much of this is going on today in second language acquisition research would lead us to believe that this field is very much at a pre-paradigmatic stage of development and while it continues to be like this, the progress required of normal research is virtually impossible (Kuhn 1970). While I am sure that most researchers agree that we are indeed waiting the discovery of a promising paradigm, few are prepared to give sufficient time, energy, and thought to its development. Too often it is assumed that ad-hoc data
1. **Introduction**

The question raised by the title of this paper has itself two levels of meaning: One question is: Is there any meaning to the kind of research results that have been obtained so far? And the second is: Does the process of language acquisition itself require that meaning play a part? In other words, I am concerned both about the ways language acquisition has been researched and about the content of this research in terms of what we know and believe about the human learner.

2. **The Nature of Research**

Assessment of research involves assumptions about the nature of knowledge. Assumptions exist whether one is a philosopher, an educator or a researcher. It is important to clarify what are the assumptions underlying our approaches, our methods, our techniques and our "facts". The facts of which our knowledge consists are relative, that is, they are dependent on our perceptions, which themselves are closely linked to our prior knowledge and the framework from within which we view the world. So it is that the findings that emerge from regular research are to a very great extent determined by the facts we choose to look for. The kinds of facts we look for are determined by the wider context of our proposed theories and our assumptions concerning the nature of the object under observation. I am afraid that many
researchers tend to forget the rather arbitrary nature of their work and they often assume that they have grasped a bit of true reality. However, the discovery of an external reality, if it exists at all, is not the purpose of research. Research and the kind of knowledge it constructs has its value in the way it organizes and structures our perceived world. A good conceptualization of our world is one which enables us to make decisions of procedure in the kinds of activities we wish to engage in, whether it be teaching or flying to Mars. Therefore in research the findings should be continually critiqued to see if they do indeed add to our understanding of the subject we wish to study.

In the research on language acquisition our understanding of the language learner should be a main focus of attention. However, much research time is spent in taxonomic kind of endeavours. For example, different kinds of linguistic utterances are identified and labelled, and deviances from the standard linguistic model are similarly labelled. Labels, such as "overgeneralization" are not enough to describe the process of language acquisition. To describe process, a process model is required. Moreover, if the kinds of behaviors identified are not explicitly related to assumptions, theories and a conceptualization of the human learner, they are meaningless. Simply, because there are no facts that speak for themselves, more of our research time has to be given to theory construction as well as data collection. The terms we use have to be more than classifications of
collected phenomena if they are to serve functional purposes. To serve a functional purpose a classification must be a concept, that is, a category that is independent (no other term can describe the objects it describes) and powerful in that it gives meaning and understanding to our perception of the objects it describes. An example of a term used in language acquisition as a concept which is little more than a label, in my opinion, is the term "overgeneralization". This term has been used to describe different kinds of phenomena, from calling every man "daddy" to the use of -ed past marker morpheme on irregular verbs like "wented". Another term "analogy" has been used to describe the same kinds of data. The same kinds of data have been described by cognitive psychologists, e.g. Werner and Kaplan (1964), as the learner's lack of differentiation. The term "overgeneralization" seems to have very little power and the wider the range of data to which it is applied, the more apparent this becomes. "Overgeneralization" is a term that derives, moreover, from two conflicting views of the learner, the Associationist paradigm and the Content paradigm (Reber 1973), and so it is not even helpful in shedding light on our understanding of the human learner. However, it could be if it were clarified as a concept which would entail a clearer statement of theory and ensuing assumptions.

What is often overlooked in current research on language acquisition is the distinction between our explicit statements of belief and the implicit ones that derive from our
use of certain terms and methods. Our explicit statements of belief have also been termed our "reconstructed logic" (Kaplan 1964) and our "thematic concepts" (Giorgi 1970). Kuhn (1970), however, has used his concept of "paradigm" for both kinds of statements (Kuhn 1970:175); this may be the reason why so many researchers confuse the two through lack of conceptual clarification. From such research a confused and paradoxical message can result. For example, it is very common in the research on second language acquisition to find such statements as is found in Hatch (1974). She states her explicit belief that language learning is rule governed (the Content paradigm). She also states that the sequence of structures is not acquired in the same order nor in the same manner by the forty subjects studied. To explain the variability she draws on the Associationist paradigm with her postulation of frequency in the input language and interference of the native language as explanatory universals of the phenomena observed. And at the end she says that other factors (outside both the Associationist and Content paradigms) must be studied, factors like semantic content, function and the subject's personality. What remains after such an analysis is not clarification but a feeling of hopelessness. If all is relevant, how can it be researched? The trouble is, I think, that the data has been approached in a taxonomic manner—"we will call this x and this y"—rather than a conceptual one. For the latter, one needs to critically appraise the concepts
used to make sure that they are both postulates of a clear conceptualization of the subject, i.e., a tentative but clear theory, and illuminators of that theory. I do not think that we have found yet a good conceptualization of the language learner. Some of our researchers try to knock down the straw man of earlier paradigms without having anything to take its place, such as the "interference" versus "creative construction" debate (Dulay and Burt 1974). The reason the latter cannot replace the former is because research cannot be done across paradigms (Kuhn 1970). You cannot disprove conceptualization of a complex subject, you can only find a better one (Kuhn 1970). While it may be advantageous for the field of endeavor to contain many different viewpoints or theories (Feyerabend 1975), it is doubtful if the researcher who tries to look at something from alternative viewpoints at the same time has anything meaningful to say at all. Research that mixes paradigms is, I believe, a-theoretical. The observation that so much of this is going on today in second language acquisition research would lead us to believe that this field is very much at a pre-paradigmatic stage of development and while it continues to be like this, the progress required of normal research is virtually impossible (Kuhn 1970). While I am sure that most researchers agree that we are indeed waiting the discovery of a promising paradigm, few are prepared to give sufficient time, energy, and thought to its development. Too often it is assumed that ad-hoc data
Fathering will lead to brilliant insights, ignoring an ancient insight that one usually finds what one looks for. So, the first step in bringing meaning back into our research is to start being conceptually clear through careful analysis of the constructs we use. After that decision, one must decide what are the constructs and theory which accurately reflect our conceptualization of the human learner.

In doing this, we come to a very basic issue in psychology. Since the inception of psychology as a science of consciousness distinct from philosophy, the field and its researchers have tended to ape the current methods of the natural sciences. The emphasis has always been on measurability although there have always been a few dissenters, who have stated that the techniques developed by the natural sciences even when modified may not be adequate to the task of dealing with such phenomena as consciousness, experience, feelings, humor, meanings, misunderstandings and so on (Giorgi 1970). Psychology, in its overriding aim to be a natural science, tended to ignore such phenomena and instead deal with such phenomena that could be quantified. So it was, that measurement was considered more important than existence. What could not be measured did not exist (Giorgi 1970). This being so, we can understand better why holistic techniques or global measures of human behavior, while being proposed by various first rate thinkers (e.g. Vygotsky 1962 and Werner and Kaplan 1964) have not been seriously developed. The method
of the natural sciences is characterized by component analysis and reduction to measurables, a search for elemental processes and isolated stimuli in manipulable conditions. But man as a "whole person" (Miles 1959) is more than an object. The meaningfulness of a phenomenon in man cannot be determined by simple measurement and "objective" techniques. Subjective phenomena can be objective in a very real sense (Scriven 1971). The development of techniques which can measure the complex interaction pattern which is man and which can adequately handle the person's own intentionality or autonomy in any behavior pattern is of primary importance in psychology today. Giorgi (1970) calls it the development of a human psychology. An important and quite general trend in many other well-established psychologists was noted by Koch (1959) toward an increasing recognition of the role of direct experiential analysis in psychological science. Koch also notes the trend away from prescribing the hypothetico-deductive model of theoretical research toward seeking methods suited to psychology's own indigenous problems. Language, an essence of man's humanness, should play a central role in any human psychology, as foreseen by Vygotsky (1962). Thus, the study of language acquisition cannot in any meaningful sense ignore the trends in psychology. And these trends are moving away from an emphasis on method to an emphasis on content.

3. The Content of Research on Language Acquisition

While language itself may be considered fruitfully as a
logical system, it is doubtful that a logical system can benefit, or even represent a dynamic process like language acquisition. Attempts to impose a static model, such as transformational generative grammar, or even a series of static stages, have not been outstandingly or even moderately successful in conceptualizing the process of language acquisition for us. Conceiving the learner as hypothesizing and rule forming about language structure cannot be borne out by the wealth of speech collected. We need, it seems, to find a conceptualization that truly is process-oriented.

Much effort has been spent in trying to find universals of language acquisition before we have clearly articulated of what such universals should consist. A content paradigm based on transformational generative grammar has led us to seek universals in terms of the syntactic structures produced (Hatch 1974; Corder 1973). I do not find any evidence of success in this approach as witnessed in the many error analyses that have been done. Hatch (1974) for example found that her data could not be accurately described by the notion of a learner who hypothesizes and systematically formulates linguistic rules so she postulates that some learners only are rule-formers while others are data-gatherers. What we need is a coherent theory which will include a notion of universals, important to a theory's generability, but not necessarily consisting of syntactic structures. The theory must be neither too overcomprehensive nor too reduced if it
is to illuminate in any meaningful manner the complexities of language acquisition.

I am afraid that the whole approach to language acquisition has been far too simplistic. For example, much effort has gone into a careful description of the setting, a priori assuming that whether language is learned in a so-called "natural" setting or whether in a classroom there will be a significant difference in the process. This assumption is based I suppose on the paradigm of the natural sciences where for instance plants can be grown in natural surroundings and in a laboratory under more controlled conditions. However, all learning takes place through some human interaction and it seems to me that the types of interaction and their significance for the learner are the important variables rather than the rather artificial postulation of yet another dichotomy. To distinguish between natural and taught language situations is artificial because our focus is on learning, and presumably language is always learned naturally (if not, it is not learned). Language learning has to be an applied science, rather than a pure or natural one like biology, because human beings in their complexities learn in a complex interaction situation of themselves and their environment. A theory of learning, and also of language learning will have to develop its own science. To borrow logical systems of analysis (say, from linguistic science) for a variable dynamic process is likely to be a barren procedure. Moreover,
such applications to teaching situations that are made are questionable. What we need are constructs based on the real learning situation if teaching procedures are to be derived from them.

If we look at the research that has been done, we see that the analyses assume an autonomy for each level of the grammar, based on Chomsky’s (1965) argument for the autonomy of syntax. That is, transformational generative grammar assumes that phonology, syntax, semantics and so on are essentially independent systems of rules, and only in special circumstances is there interdependence. That the research done in language acquisition makes these assumptions is clear from the fact that one aspect of language is studied as if it were independent of other aspects. This approach to language has even been carried over into foreign language teaching and testing, where the various components of the grammar—phonemes, vocabulary, morphology and syntax—are both taught and tested independently. In the TOEFL examination, subjects receive a language score based on the aggregate of the independent, so-called discrete, tests. There has been some opposition to this procedure of testing and so-called integrative tests like dictation and close procedures have been proposed (Oller 1973). We need to understand why it is that integrative tests appear to have higher validity than the discrete, separate component tests. It seems that what is needed to characterize language is not knowledge of the grammar, but an underlying ability that incorporates all of the abstract levels of language.
Cloze and dictation procedures seem to rely on a general comprehension ability as well as a kind of expectancy factor, based on one's experience with the language. For the language user integrative tests are doubtlessly more meaningful. The language user has to understand and in a sense predict the message of the utterances. Any research that assumes that syntax is somehow representative of one's ability in language is ignoring the role of meaning, personal, contextual and social, that occurs in any real linguistic utterance. And this is of course my most condemning criticism of much of the current research.

No one denies that people do develop an abstract knowledge about their linguistic system. Abstraction, generalization and systematizing are normal human processes. But the question is whether the developing use of language is a process that is adequately captured by these processes alone. Language use involves more than the use of a system of grammatical rules. The real role that language plays in the life of the individual has been largely overlooked or pushed under the rug.

4. The Hole of Meaning in Language Acquisition

The functions language performs for the individual may be the crucial factors in language development. Of course some theoretical and practical attention has been given to language functions under the labels of speech acts, communicative competence, discourse analysis and so on. Some research efforts have moved in this direction. However, at the present time most research in the area of second language acquisition has
retained the notion of language as an abstract, logical system. Even in a very promising attempt to describe the process of meaningful verbal learning, Ausubel (1968) is unable to suggest research procedures that will get at the nature of the process he describes. Instead he falls back on hypothetico-deductive research designs which are only capable of abstracting and depersonalizing the very factor, the learning process, that we need to understand in a different way.

Perhaps, a very clear distinction between the learner's metalinguistic knowledge, i.e., his abstracted knowledge about the language, and his language use, has to be made and kept throughout the research (Corder, 1974). This heuristic should, at the least, lead us to develop techniques for studying the process of language use as a process, (why what is said to whom), rather than as a logical system.

The different role that meaning plays in the logical codified system and in the psychological intentional system also needs to be identified. As Vygotsky (1962) pointed out, word-meanings are the link between the individual's intentional meanings (his thoughts) and the society's codified set meanings. I think that at this stage we are not able to be more precise about meaning than to state that meanings are present in every utterance. The Given-New Strategy proposed by Clark and Haviland (In press), explains the Given as the set meanings of the various levels of the grammar, including the pragmatic and cultural ones, while the New incorporates
the given with the situational intentional context in which the individual finds himself, thus producing a creative construction. (This is the only meaningful interpretation of creative construction in language acquisition that I can think of.) We can postulate, as did Vygotsky and Ausubel, that meanings are what is stored in the brain, they are the content of cognitive and affective structures and that man has at his disposal many means, the chief of which is language, to express and communicate these meanings. A lot of work will be needed to define the concept of meaning in language and to refine our understanding of it. One of the ways to do this will be the development of a human learning theory.

5. Characterizing a Learning Theory for Human Beings

A learning theory presumably has to bridge the gap between the logical and the psychological. It has to deal with wholes of complex skills, whose sum of parts is less than the whole (Pappert 1974). Researchers in the field of language acquisition should take particular note of this point. There are many skills, for example bicycle-riding, juggling, and, I believe, speaking, which lose their essence when analyzed into separate components. A description of the whole skill is not possible through adding the component descriptions. Such skills require holistic conceptual analysis. The essence of the skill is often captured in a single unifying concept. For example, in order to ride a bicycle one must psychologically
stop trying to balance and allow one's body to blend into the bicycle's center of gravity. In language learning we may find that a similar letting-go of conscious effort is necessary. In everyday conversation we do not concentrate on the rules of construction but on the message we wish to convey. Werner and Kaplan (1964), as well as Vygotsky (1962), have given us examples of holistic approaches to the study of language acquisition. It is a shame that these approaches have not been developed further by other researchers.

To capture the essence of language in our descriptions of its acquisition process we first need to make explicit the basic assumptions we feel are necessary to a theory of language learning.

6. Necessary Assumptions about the Nature of Language and the Learner

Assumptions concerning the nature of language, must, I believe, include the following:

1. that language is always a dynamic process. Even competent native speakers are continually developing their word power and their ability to express themselves linguistically.

2. that language plays a unique role for man. It is not merely the link between thought and word or word and object, but rather it captures reality (Brockelman 1965); it gives reality to the meanings, both individual and social, we wish to express.
3. that expression and communication are mutually interdependent. We express ourselves when we communicate and we communicate when we express our meanings (Gusdorf 1955). Thus from Gusdorf's existential viewpoint language is the most important basis of man's social being. And when language itself is conceived as the conveyor of meanings rather than a system of syntactic or even pragmatic rules, we can see why learning to express oneself in a foreign language may be more than learning the rules of syntax and communication, i.e. more than linguistic competence. In a psychological derived analysis, the interaction of the learner with his environment becomes a necessary part of the language acquisition process. Thus, one of the major obstacles at present to the search for universals, variability in the rule system, will of course not be considered a problem but an integrated part of the acquisition process, because variability is an artifact of postulating a logical system. Contextual factors which have previously been either reduced by experimental controls or over-emphasized when studied as the independent variable need to be integrated into the learning process itself.

There are also some assumptions that have to be made about the nature of the language learner. These are:

1. that the language learner is autonomous (Krimerman 1972); that is, we must recognize the role of the learner's own intentions and choices in the learning process, and in the kinds of meanings expressed and communicated.
2. that attitudes and feelings are closely interwoven with cognitive activity in the learning process. Such attitudes and feelings are not likely to be obtained through simple attitudinal-motivational scales but need to be studied as an integrated part of the process. For studying feelings and learning we will probably have to look to the gains made in other fields. For example, Carl Rogers (1959) has summarized for psychotherapy the basic conditions under which a beneficial interaction between two people can take place. Beneficial is defined by a mutually desired change in behavior. Not unlike other behavioral learning requiring change, learning a second language is apparently fraught with identity conflict and anxiety—mere intellectualizing about the system to be learned seems hardly an adequate teaching technique, yet nowadays it is commonly employed. From the psychotherapy branch of psychology we can also in addition to individual needs and abilities learn much about learning in groups. Mathew Miles (1959) in his book *Learning to Work In Groups* sets forth a program which provides the learner with a situation in which his "ideas, values, emotions, attitudes, feelings, and concrete behaviors are involved in a training technique so that experimenting with different ways of behavior is safe and desirable." Compared to a psychotherapeutic group it is the social self rather than the individual self that is involved. That is, not the inner reasons for such
and such a behavior but the understanding of how he relates to others and how he can become more skillful is what is emphasized. If any of you think that such a proposal is irrelevant to the second language classroom, I refer you to the successful studies reported by Curran (1972). It seems to me that at the least this approach seems promising and deserves some attention. It is also possible that the insights gained through understanding group learning could have explanatory value for first language acquisition as well as second.

As presumably both groups of learners, being human beings, are affected by similar desires for approval and success,

3. that central to learning is the meaningfulness that any structure has for the learner. The very nature of cognitive structure can be described on this basis (see Ausubel 1968). For what we perceive, retain and forget are all determined by the organization and dynamic character of cognitive structures. It seems highly probable that it is meanings of some kind that are absorbed into these structures, they are the correlations between object and word, between syntax and sense.... Recall to mind one's own frequent searches for the right expression to communicate the meaning which is already there.

I have outlined several assumptions which I feel must be part of the development of a theory of language acquisition. In stating them I feel I am stating the obvious and it is a source of surprise to me that they have been relatively neglected.
7. Meaning in Language Acquisition Research

Naturally, the first question one wants to ask is, what will the data we collect look like? What are meanings? It seems to me, it would be premature to set up a superstructure or taxonomy of meanings at this stage though this may be an ultimate goal when we understand better the notion of meaning. All we can do is observe a learner, or group of learners, over time and collect observably relevant phenomena. This will consist of both explicit and implicit evidence provided by and for the learner on the following: (1) his desire to learn, (2) his attitudes toward foreign language, (3) his feelings of anxiety, inadequacy, confidence, (4) what he says, when, and to whom and for what purpose, as well as what and why he does not speak. What is important is the way the data is collected. Close observation of the living subject is crucial as is the use of research tools, such as tests, in a critical manner. For the explicit evidence, language tests, interviews and questionnaires can be given but not as the sole means of measurement. The implicit evidence could be obtained through video-taping of the learning session to allow for more thorough observation. One phenomenon that must be described in detail is the feelings and behaviors of the teacher, or the experimenter-interactor. Most research has tended to conveniently overlook the influence of the researcher on the data collected.

Meaning will have to be observed at three different levels:

1. the set meanings of the grammar of the language in its words and their relationships,
2. The meanings of the used speech—when what is said to whom is/is not appropriate (speech acts).

3. The meanings expressed in a speaking situation, the intentions and implications of any utterance spoken in a real speaking situation. This third level of observation is particularly important to our search for process in language acquisition and it is the area least developed in terms of theoretical constructs and research techniques.

8. Conclusion

It is perhaps inappropriate to label this section, "conclusion" since in actuality it is a "beginning." I am advocating a marriage between teaching and research, not just the application of "applied" linguistic research. Such studies can be both a study of language acquisition and the development of methods of teaching language. In this way the research done on language learning will have direct and viable application to teaching method—we will be developing an applied science.

Second, we will be observing directly a learning process, and in seeking to describe process we will have to develop concepts to capture our insights. The teacher's involvement would be in the person in the process of learning rather than the subject matter, and therefore an activation of the student's potential for behavior change should take place and can be observed. An experienced teacher has many intuitions about the learning process and these need to be encouraged to surface, to be analyzed and developed—out in the class where learning should be taking place.
REFERENCES


Prockelman, P. 1965. Introduction to Gusdorf's Speaking.


Corder, Pit. 1974. personal communication.


Derwing, Bruce L. 1973. Transformational Grammar as a Theory of Language Acquisition


Giorri, A. 1970. Psychology as a Human Science; A Phenomenological Approach


Miles, M. D. 1959. Learning to Work In Groups: A program Guide for Educational Leader


Potrice, H. 1972. Theories are tested by observing the facts or are they? NSSE 71st Yearbook


23


Werner, H. and B. Kaplan. 1964. Symbol Formation