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NIKLAS LUHMANN: A THEORETICAL ILLUSTRATION
OF HIS DEFINITION OF DIFFERENTIATION

A dissertation submitted

by

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to

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Abstract

NIKLAS LUHMANN:
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by

Michael G. Terpstra

Interpreting the dialogue between patient and physician has expanded beyond the range of the analysis of conversation to the interpretation of concepts and social principles. Questions about the interaction between language and social dynamics complicated the analysis of the clinical encounter. I explored the nature of illness and the effect this event had on the patient. Analysis shifted from concentration on the linguistic structure of the clinical dialogue between patient and physician to a philosophical exploration of the “subject.”

Examination of the clinical dialogue in light of Luhmann’s work on differentiation convinced me that his theory of self-reference contributed to understanding the relationship between language and the social dynamic of the clinical encounter. Accepting Luhmann’s ideas required me to rethink the way in which people know themselves.

This knowledge requires a type of understanding embedded in a subject-free philosophy. Luhmann's system of self-reference lets go of the subjective/objective duality in order to grasp the complex issues of the "informational age."
In the context of the debate confronting the postmodern world, self-reference systems need to intensify efficient informational advantages in order to meet the requirements of an “organized information diffusion” process and maintain rapid information gathering and processing capability.

Illustrating Luhmann's definition of differentiation with a case study of a clinical encounter defines illness in system terminology. During attempts to implement theory, problems emerge in the form of creative misreadings. Value is achieved when these misreadings are recognized and applied as critique. The application of theoretical principles is never carved in stone; Luhmann's theory has proved that for me.
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1997
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"No man knows fully what has shaped his own thinking."
Robert K. Merton

If there is one person I would single out in acknowledging contributions to my work, it is my wife, MaryAnn Stirling Terpstra. This endeavor has had the generous financial and emotional support of my parents, Dr. Chester Terpstra and Dr. Margery Williams Terpstra. My son, Brooke Terpstra, donated time and artistic talent to create my cartoon. My daughter, Heather Martinez, made sure that my grandsons kept me grounded in real life.

The patient mentoring by Jeremy Shapiro provided me with the academic climate to stimulate my imagination in pursuit of this theoretical dissertation. Dr. Marlene von Friederichs-Fitzwater, friend and colleague, gave generously of her time and resources. She was a valuable sounding board in many brainstorming sessions. Roger Davis, a Fielding student, provided encouragement and helped me keep a balanced perspective. Dr. Robert Holub, Chair of the German Department, University of California at Berkeley, provided initial validation of the value of my ideas. Finally, I am deeply indebted to Professor Niklas Luhmann for the time he spent responding to both my written and oral queries.
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PROLOGUE

The prologue provides the reader of my dissertation with an outline of the process involved in the development of the ideas. This preface will identify problems encountered while preparing a theoretical dissertation. Central focus is on my role as the interpreter of concepts and social principles.

At the beginning of this dissertation process, I intended to examine methods for analyzing chaotic and interactive patterning in conversation. The setting for this examination was the clinical encounter. I didn't accept standard explanations for what I saw in the dialogues of these encounters. Simple answers for complex social problems such as Acquired Immuno-Deficiency Syndrome (AIDS) led me to conclude that social analysis required the study of complexity.

Interpreting the dialogue between patient and physician expanded beyond the range of the analysis of conversation to the interpretation of concepts and social principles. Questions about the interaction between language and social dynamics complicated the analysis of the clinical encounter. I explored the nature of illness and the effect this event had on the patient. Interpretation has its origins in the study of the "subject." Analysis shifted from concentration on the linguistic structure of the clinical dialogue between patient and physician to a philosophical exploration of the "subject."
The development of my dissertation topic began with a request to examine the feasibility of using a particular analytical method (Markov Chains). My task explored whether Markov Chains could further explain the results of a published study. This study on physician-patient encounters pointed to a lack of physician comprehension originating with a contrast between what the physician heard the patient say and how he or she responded (von Friederichs-Fitzwater, Callahan, Flynn, & Williams, 1991). The next decision was to choose the type of analysis for the structure of conversation. My research background and methodological approach has an ethnoscientific (Tesch, 1990, p. 25) grounding. Therefore, my focus was on language, and began with the structural analysis of language. My sociological perspective was heavily influenced by Talcott Parsons' "action elements" (Parsons, 1951). The conversational dyad (physician and patient conversing during a clinical encounter) meant that I would explore a process of interactive patterning (Parsons, 1951, p. 24).

Theoretically, the Markov Chain seemed like a plausible explanation of interactive patterning. However, the study of physician/patient encounters did not meet the requirements for a Markov process analysis. Early 1970s probability studies using Markov Chains focused on syntax in order to predict language utterances, and failed to show that this method was appropriate for language (Rubenstein, 1973). Although I did not apply the Markov process, I explored the
appropriateness of the stochastic process, of which the Markov Chain is an example.

My sociological background was consistent with a stochastic approach which "views dyadic conversation as a process (actions that are connected over time), comprising relational (between two people), structural (connected actions that are subject to differing degrees of constraint), and informational (the type of information being communicated) properties" (Thomas, Roger, & Bull, 1983, p. 177).

In the study of physician-patient clinical visits (von Friederichs-Fitzwater, Callahan, Flynn, & Williams, 1991), I noticed a disproportionate number of passive sentences used by AIDS patients during these meetings. In an attempt to understand this particular anomaly, I developed a structural equation model to identify any latent (hidden) variables in the transcribed dialogues. This approach (Loehlin, 1987) allowed me to search for nonlinear relationships in the grammatical structure of the clinical encounters. The computer model used in this study was LISREL (Joreskog, Sorbom, 1993) because of LISREL's ability to compute a confirmatory factor analysis. "The model is based on a priori information about the data structure in the form of a specified theory or hypothesis,..." (Joreskog, & Sorbom, 1993, p. 21).

Prior to the LISREL computations, a study of linguistics and the grammatical explanations surrounding the passive voice was conducted. My
conclusions confirmed a "non-immediacy" or distancing (Wiener & Mehrabian, 1968) factor found in grammar. My study indicated that the passive voice might be an indicator for nonimmediacy in conversations between AIDS patients and their physicians. I then turned my attention to the linguistic and conversational structure surrounding the AIDS patients' conversations. My next query explored the relationship I found between the use of the personal pronoun "I" and the "agent" (logical subject) of passive voice. I wanted to know if nonimmediacy and passive voice were related concepts. My interest was in following the development of information within the context of the patient's conversation. I questioned whether nonimmediacy and passive voice share meaning by reinforcing the relationship between speaker and subject matter.

I wanted to know what this "distancing factor" meant because, from the contexts of the dialogues, it did not appear that the interpretation was consistent with the established definition of distancing. The traditional meaning assumes that the patient is distancing himself from the other speaker or from the topic of discussion.

The route I took to understand this interpretation problem led me to an extensive exploration of linguistic theory. Traditional grammar, using concepts of subject, verb, and object, requires certain presuppositions. For example, Noam Chomsky (1957) developed a scheme of transformational grammar that looked for major change in the function of the subject, verb, and object. This approach led
theorists to seek universal characteristics in language. Searching for universals is a cumbersome process. One becomes so overwhelmed with language data, variations, and exceptions that perspective is lost.

In order to understand the subject in my case, the AIDS patient I had to restrict my conclusions to rules of grammar: in this case, the distancing or nonimmediacy characteristics of the passive verb. If I took the entire dialogue into consideration in the light of traditional interpretation, the required conclusion was not consistent with the evidence. In other words, the patient, according to a transformational interpretation, should have exhibited retreating behavior; but, in the context of the encounter with his physician, it was obvious that he was confronting his problems.

It was at this point that I began my exploration of the interaction between language and social dynamics. During this study another problem emerged. Now my concentration turned to the area of the subject. The problem became one of how to understand the identity of the person. The problem became a question of knowing the patient rather than making assumptions about what the patient was saying based on grammatical rules.

My linguistic studies now turned to the grammatic and linguistic theory of cognitive grammar (Langacker, 1990, 1991). Grammatical structure no longer provided me with the means for understanding the language of the patient. Cognitive grammar discarded this notion of grammatical structure (syntax) and
replaced examining the relations between subject and object with a semantic and symbolic basis.

My theoretical sociological interest settled more and more on Niklas Luhmann's theory of differentiation. My initial interest and curiosity about differentiation is found in the following personal account. Before I started my current studies, I spent some time developing and assisting in the implementation of a decentralized nursing management system at a Northern California hospital. During this time, I pursued an interest in small group process and worked extensively to set up employee work unit councils. These groups of unit-based employee councils fed into several task- and administrative-specific centralized committees. It was not until May 3, 1988, when I met with Virginia Cleland, a nursing scholar at the University of California, San Francisco (UCSF), that we identified that the governing councils served a differentiative function, while the central committees were integrative. The individual governing councils were a work unit participative decision-making body. Their function was to identify problems in their workplace and to develop solutions. The central committees consisted of representatives from each of the governing councils, administration, and management. The central committees developed policy based on the actions of the councils and advice from management and administration. The governing councils functioned in a differentiative mode. Differentiation, in this instance, cannot be understood in the same vein as I later use the term in the dissertation.
Differentiation, here, I associate with delineating an individual's roles and responsibilities in which effectiveness comes from gathering information and providing ideas for solutions to problems. The central committees provided the organization with another function. That function integrated the diverse input and unique characteristics of the governing councils into a functioning whole. This was my introduction to differentiation and integration as organizational functions worth further investigation.

Returning to the sociological perspective of Talcott Parsons' action theory (Parsons, 1951), I addressed the relationship between individuals and social systems. Parsons developed seminal work in sociology, inspiring a variety of further social theorizing. Niklas Luhmann was one of those theorists who revitalized the structuralist-functionalist social theory of Parsons. Although theorists apply Parsons' "action" concepts to their foundations for theoretical development, the directions those theories take are sometimes very different. In his book, "Moral Consciousness and Communicative Action" (1990), Jurgen Habermas extends his communicative action theory, combined with Kohlberg's theory (1973, 1984) of moral development, to find support for a communicative ethic. James S. Coleman (1990) developed a different social theory than Luhmann. I think the reason for this difference is primarily due to the concentration Coleman placed on the structural nature of Parsons, while Luhmann took up the
functionalist position. Habermas is more consistent with Parsons' structuralism as he developed his interactive approach to communication.

It is at this juncture that my previous work with stochastic process and interest in differentiation led me to further explore Luhmann's theory. In order to retain my focus on the conversation between the AIDS patients and their physicians, I was particularly interested in using Luhmann's concept of self-reference (1990a). The concept of self-reference provided no insight into my patient/physician encounter until I was willing to reexamine the "subject" philosophically. Luhmann defined self-reference: "designates every operation that refers to something beyond itself and through this back to itself" (Luhmann, 1986a, p. 145). Eventually, Luhmann's concept of a subject-free systems approach to the analysis of social processes allowed me to transfer my thought processes from nonimmediacy to self-reference.

Without going into the specifics of these investigations, my study of the debates between Gadamer and Habermas, on one hand, and Luhmann and Habermas, on the other, helped me to distill the essentials for the focus of my theoretical dissertation. My argument is that, in the postmodern world, a systems approach must take advantage of the present information age in order to meet the requirements for effectively utilizing that information through the self-referencing process. Luhmann's system of self-reference is the theoretical tool needed to meet the needs of the postmodern world. As a proponent of Luhmann's theory as a
solution to the information overload, I suggest that we can no longer deal with the problem in the same old way, with information as property and with subject/object as the center of an analytical system. Theorists must step outside the current, comfortable mode and take a look at a system without subject and with the fluid capacity to handle massive amounts of information. The amount of information available today is unmatched in any prior century. The means to store and manipulate it has never been more accessible and technologically advanced. Making that knowledge useful is the challenge.

Niklas Luhmann, through a second-order cybernetic systems approach, insisted that society’s problems be viewed from the perspective of the difference between the system and its environment. In other words, “second order cybernetic” means that we, the observer, are part of the system of observation. Access to information and its utilization as knowledge gives us the key to find that difference.
CHAPTER ONE

STATEMENT OF PURPOSE

My process began with an examination of methods for the analysis of chaotic and interactive patterning in conversation, paired with Parsons' notion of "action elements," the nonimmediacy of passive voice, and inquiry into the nature of the subject. I discovered that the concept of the subject leads to dead ends when applied to methods of analysis. The subject defines the focus of thought, speech, or written material while reinforcing the belief that one is dealing with things as a manageable reference point. The solution was not in the avoidance of the traps of subjectivity but rather in discarding the subject altogether. The application of a subject-free concept is set in the description of antagonistic beliefs present in the complex social domain. Today's world is a very complex environment, where social systems need to reflect the complexity. Modern technology continues to create a plethora of tangled information sources. As people choose a means to deal with the overload of information, frequently the choices are diametrically opposed to one another.

In the attempt to deal with the difficulties contributing to our current state of being, solutions come from the observation of others. Knowledge of self is available to a person only through outside observations. That knowledge is
communicated by the social system in which one is currently involved. Luhmann rejected the approach to self-knowledge which presupposes an actor in the sense of subject. In other words, solutions to one's own problems are not found through introspection. The implication for the type of connection Luhmann proposed involves rethinking the way in which we know ourselves. Luhmann not only challenged the subject, he illuminated it.

Luhmann saw the connection with the world through insistence on the fundamental limitations of all observations. It is impossible for anyone to have any direct knowledge of self. One has blind spots in description of self. People have access to self-knowledge through others' descriptions. This reliance on outside descriptions is liberating and does not separate or alienate us from our world. The concept of the subject has historical value, and its development contributes to the richness of social discourse. Luhmann acknowledged the fact that the subject exists, but insisted that the individual cannot adequately describe complex modern society without the communication of social systems.

Information is dormant until it is communicated. Communication cannot be directly observed. In order to demonstrate something we cannot observe, we need some type of marker. Language, therefore, is the evidence of the process of differentiation which demonstrates the difference between a system and its
environment, that is, communication. This is in the context of a subject-free concept where the individual (subject) does not assume the role of “actor.”

Self-reference, in the traditional subject terminology, refers to the individual as the object of reference. In Luhmann’s terminology, self-reference refers to social systems and the function of self-referral. When there is no object of reference -- only a process of differentiation -- the only evidence that differentiation has occurred is language.

The purpose of this dissertation is to clarify Luhmann's subject-free concept of action in a way that shows its appropriateness as a solution to the problem of the subject. The approach taken is to theoretically illustrate Luhmann’s theory of differentiation by: 1) setting Luhmann's presence in the context of the postmodernist discussion, 2) exploring the foundation for a subject-free concept and the rationale for the system-and-environment scheme of differentiation, 3) illustrating Luhmann's definition of differentiation with a case study of a clinical encounter, and 4) wrestling with the feasibility that Luhmann's theory of a subject-free concept of action can transfer to an analytical model.
CHAPTER TWO

HISTORICAL PERSPECTIVE:

NIKLAS LUHMANN AS AN EXTREME POSTMODERNIST

What is an "extreme post modernist?" For some, Niklas Luhmann fits this description (Kellner & Best, 1991, p. 284). Postmodernism is a term used to describe current thinking that challenges the avant-garde positions of modernists. The perspective on postmodernity with which I start comes from a quote: "One way of understanding the so-called postmodernism debate is to see it as a debate about what modernity is, and about those parts of it we want to perpetuate and those we want to discard" (Kelley, 1990, p. 76).

Kellner's and Best's description of postmodernism helps to position Luhmann's work in the context of current theoretical development. The section by Best and Kellner, entitled: "Postmodern Politics: Subjectivity, Discourse, and Aestheticism," serves as my point of departure (Kellner & Best, 1991, pp. 283-294). Here, postmodernism is defined by its failures. If the criticisms originate from the assumption that postmodernism is looking for solutions to problems of emancipation, then the authors are correct in their analysis of postmodernism. On the other hand, if emancipation is no longer the driving force behind the search for solutions, then recounting the failures is no longer relevant. Formerly, the source
of knowledge (information) was in the control of the expert. If wielding that knowledge created oppression, emancipation was necessary to free the individual from that oppression.

Boyle (1996) told us that we are possibly entering a period of information overload. This implies that the fears of the postmodernists may bear fruit, that we have inadequately prepared ourselves for this potential disaster. The solution begins with information defined as an event rather than a commodity. As a proponent of Luhmann's theory as a solution to the information overload, I suggest that we can no longer deal with the problem in the same old way, with information as property and with subject/object as the center of an analytical system. Theorists must step outside the current, comfortable mode and take a look at a system without subject, and with the fluid capacity to handle massive amounts of information.

A continued discussion of Best's and Kellner's enumeration of postmodernism's failures will further illustrate the definition of differentiation. The definition of postmodernism includes elements pertinent to the debate about the information age. I believe that Luhmann is addressing the information age and the complex issues surrounding it.

The stimulus for this conclusion originates with Luhmann's idea that communication requires the synthesis of three selections: information, utterances (Mitteilung) and a need to "understand it all" (Luhmann, 1990a, p. 3). In order for
communication to be a function of social systems, Luhmann defined information as an event. Once information is conceptualized as an event, then the process of synthesizing information, utterances, and understanding becomes feasible. When social systems function in their communicative capacity, then the complexities of intersubjective interactions are eliminated. Luhmann's strategy is to use an abstracted systems model in which the basic unit is not the social role, as with Parsons, but rather the communicative function of social systems.

The problems of the information age include addressing issues faced when accessing an overwhelming amount of information. The problem affects the determination of the validity and usefulness of the superabundance of information. Luhmann's systems theory connects the person to the information by giving control. Control is in our hands because we are part of an all-inclusive approach to the defining of reality. Information is not a commodity, but is included in the synthesis of events that contributes to the communication of the system.

The enumeration of the perceived failures of postmodernism sets the agenda. The postmodern agenda includes the exploration of the theory of differentiation, especially the distinction Luhmann made between system and environment (1982, p. 230).

The critics of postmodernism identify an inadequate notion of subjectivity which puts the subject (actor) in an isolated position, one without meaning. Luhmann contributed to this postmodern debate on subjectivity with his concept of
a subject-free approach to the relationship between antagonistic beliefs in the social domain. Although I argue for Luhmann's position on the "subject-free" concept, Luhmann recognized modern philosophy's need for a reinvigorated concept of the subject. If one requires the subject to understand reality, then Luhmann expanded its foundation to be inclusive of "all processes and systems within which 'meaning' plays an essential role" (Luhmann, 1982, p. 325). Luhmann guarded against the use of the term "subject" because, historically, it has acquired an individual personal referencing connotation. The desire to avoid the confusion between action and its presupposed actor requires the conscious effort to view both action and actor as constructs of the observer. Therefore, any reference to self-perception must be seen as the observer's invention.

The foundational accomplishment of postmodernism is its recognition that subjectivity needs reconstruction. Several authors recognized this contribution in a variety of expressions (Knodt, 1994; Jameson, 1991; Kellner & Best, 1991). Knodt pointed out that "the binary logic of classical ontology is exhausted" (1994, p. 93). This means that the logic which maintains a separation between the subject and object no longer holds. In a discussion of literary style, Jameson demonstrated how an author is postmodern by identifying the emptiness of the subject (1991,
p. 133). In their brief praise of postmodernism, Best and Kellner recognize subjectivity as one of the needs that postmodernism addresses (Kellner & Best, 1991, p. 286).

One of the problems I discuss in the prologue to this dissertation is germane to the overall postmodern debate. The problem involves how one comes to know the identity of a person. While this is not the only issue, it is pivotal to the development of this dissertation. I am only scratching the surface of the historical debate on this topic. The debate continues without an apparent end in sight. In Chapter 3, I elaborate on the specific debates between Habermas and Gadamer, and Habermas and Luhmann.

Postmodernism strives not to restrict interpretive possibilities. Best’s and Kellner’s (1991) criticisms of postmodern theory fall into three categories. They stated that “postmodern theory thus lacks positive notions of the social, failing to provide normative accounts of intersubjectivity, community, or solidarity” (Jameson, 1991, p. 283). Shortcomings include the inadequate handling of the subject. The subject or agency problem leads to nihilism. The postmodernists lack a grasp of and response to the real world. Included in the postmodern debate are Habermas, Gadamer, and Luhmann. In the opinion of Best and Kellner, Habermas fulfilled the expectations of the postmodern agenda. Habermas provided a normative theory of intersubjectivity by grounding his communication theory in an ego-alter relationship (self-others).
The recognition of the subject, or the problem of subjectivism as a preoccupation of Western thought, is not new. Hans-Georg Gadamer (1976) joined Heidegger in attacking the Western obsession with subjectivism. Gadamer’s objection primarily focuses on the subjective approach that ignores the intrinsic temporality of human beings and the temporal quality of interpretation. The problem Luhmann identified is the postmodern tendency to fuse both the concepts of “Being” and knowledge of self. He thought that this tendency obscures the dynamic quality of the subject.

Luhmann concluded that, after society has reflected upon itself, the "citizen of the world" reaches limits and the response is postmodernism (1994a pp. 30-32). There is only so much that can be said about any problem before the usefulness of the subject is exhausted. Postmodernism’s reaction against anything "modern" understood the alienation of the individual, attempted to address the problem of the subject, and looked for solutions to problem of emancipation.

Luhmann recognized modern philosophy’s need for a reinvigorated concept of the subject, and his theory of differences or differentiation is that attempt. He spoke about a rebellion against the search for universals in which his systems theory of self-reference is a substitute for completeness (1986d). Self-reference "designates every operation that refers to something beyond itself and through this back to itself" (Luhmann, 1986a, p. 145).
For Luhmann, a social system of self-reference perceives the object of its inquiry from the perspective of its own self-reference (Luhmann, 1986d). Therefore, the following quote plays a pivotal role in my pursuit of an illustration of the differentiation definition: "Self-reference is a necessary theoretical tool for system analysis: in fact, without self-reference no system could be related to the environment" (Luhmann, 1986d, p. 130).

The demonstration of the use of this theoretical tool requires a connection between systems and self-reference. A demonstration of this linkage answers Luhmann's question:

How, then, does society observe and describe the world by using itself as a system-reference, by developing the higher reflection capacities of a system, and by using the distinction of system and environment (of words and things) to dissolve the paradox of the world as a frameless, indistinguishable totality that cannot be observed? (Luhmann, 1993, pp. 774-775).

When this question is rephrased as a statement, the concept of self-reference becomes an operable theoretical tool. The statement, "society observe[s] and describe[s] the world by using itself as a system-reference," (1993, p. 774) is at the core of Luhmann's reasoning.

My first task is to construct the presuppositions for "developing the higher reflection capacities of a system" (p. 775). My second task is to demonstrate theoretically the functioning of differentiation "by using the distinction of system
and environment to dissolve the paradox of the world as a frameless, indistinguishable totality that cannot be observed" (p. 775).

Branko Horvat (1982) described the climate in which the postmodernist approaches social and economic issues. The historical relevance of Horvat's "production of information" (1982, pp. 337-338) is pertinent to the advancement of a system's reproductive advantage. The coordination necessary for the operation of an information regulatory mechanism requires "organized information diffusion" and an "enormously increased speed and precision of information gathering and processing" (Horvat, 1982, pp. 336-338). David Prychitko went beyond this historical description of the information age to address "the knowledge problem" of social planning (1991, p. 87). The conscious allocation of scarce resources is complicated by the multiple demands for a commodity. The destination for a scarce commodity is decided on the basis of information received.

The following summary illustrates the knowledge problem: "The assumption of complete knowledge of the relevant factor, production functions, and equilibrium prices does not solve the knowledge problem, but in fact obscures it" (Prychitko, 1991, p. 88). A system based on the concept of equilibrium faces the knowledge problem (pp. 87-88) because it ignores the problems of the transmission of that knowledge. The amount of information available today is unmatched in any prior century. The means to store and manipulate it have never been more accessible and technologically advanced. Making that knowledge useful
is the challenge. One solution is to describe informational advantages and organize information diffusion. This involves overcoming the strictures of a theoretical language dependent on traditional definitions where concepts are often equated with structure.

My argument is that, in the postmodern world, social systems need to intensify efficient information advantages in order to maintain a viable position. Luhmann's system of self-reference is the theoretical tool needed to meet the needs of the postmodern world. It is a simple, direct, and profound guide to effective information utilization.

Viewing the economy as a social system allows Horvat's regulatory types to be applied to the issues pertinent to the information age. Study of the type of market operating under organized information diffusion is especially relevant to the present postmodern discussion. As discussed previously, the information age requires assessments of the validity and usefulness of the superabundance of information. It is a knowledge problem because the information is not being utilized.

The work of Talcott Parsons influenced both Habermas and Luhmann. Parsons' theoretical insight is fundamental to both sociologists, each theoretician gleaning ideas for divergent purposes. Luhmann stated that his intent is not to reinvent social theory but rather to reinterpret and replace outdated approaches to the examination of society (Luhmann, 1986c, p. 3, 1982). A recurring theme in
Habermas' work is the dualism concept of moral (subjective) and instrumental (objective) action (Habermas, 1990).

Best and Kellner saw Habermas as providing solutions in areas where the "extreme postmodernists" failed: "Habermas, by contrast, grounds his communication theory in an ego-alter relation that privileges non-coercive forms of inter-subjectivity" (Kellner & Best, 1991, p. 283). The physical boundaries of an organism and the physiological processes are easily discernible for Habermas, but not in reference to a social entity. The difficulty in transforming this model into a social systems approach comes from the way knowledge is built in support of theory.

Luhmann utilized the autopoietic system (self-producing) concept that has its origins in the biological model (Maturana, 1981). "A social system comes into being whenever an autopoietic connection of communications occurs and distinguishes itself against an environment by restricting the appropriate communications. Accordingly, social systems are not comprised of persons and actions but of communications" (Luhmann, 1986a, p. 145). As we shall see, Habermas reached an impasse at the juncture where he incorporated hermeneutics into communicative action. Luhmann proceeded to build a systems approach to differentiation.

Pivotal to Habermas' theory of communicative action is the interactive established paradigm of intersubjective understanding (Habermas, 1984).
Luhmann found it difficult to comprehend how Habermas' complex theory of society can arise from everyday discourse to form intersubjective understanding (Luhmann, 1986c). According to Luhmann, Habermas does not utilize the theoretical resources available from other disciplines, for example, cybernetics and systems theory. Rather, Habermas relies on a paradigm of intersubjective understanding for his theoretical development.

Habermas attempted to use an interpretive approach in which intersubjectivity reinvigorates critical theory. That is, he combined language, interaction, and communication to restore the emancipatory intentions of critical theory (Mendelson, 1979). Intersubjectivity, to Habermas, is a level of communication, "on which the speaker and hearer, through illocutionary acts, brings about the interpersonal relationships that will allow them to achieve mutual understanding" (Habermas, 1976, p. 157). The distinction Habermas made between life-world (web of relations) and system is similar to his insistence on the separation between the object and subject of interpretation (Habermas, 1987; Hartmann, 1985).

In an article revisiting the debate between Habermas and Luhmann, Eva Knodt concluded that Habermas' communicative action theory is a system in a Luhmannian sense (Knodt, 1994, p. 79). Knodt's argument that Habermas' "discourse" is the result of the closure of a system draws from Luhmann's concept of functional differentiation (Luhmann, 1987). Discourse, for Habermas, refers to
a "linguistically mediated interaction" (Habermas, 1990, p. 201) that provides the testing grounds for validating universal claims (Habermas, 1984, p. 42). Knodt's analysis of Habermas conceptualizes discourse as an autopoietic (self-producing) system that combines language, interaction, and communication. Knodt was saying that Habermas' theory of communicative action is not a universal social theory but can be included as one of the autopoietic systems within Luhmann's systems approach. Habermas set up his theory of communicative action within a set of boundaries that separate systems from the life world. Since Luhmann viewed the world as a progressive sequence of interlinking systems, Habermas' communicative action theory becomes identified as one of those many systems. Habermas separated systems from the life world, while Luhmann saw all of life through systems. Luhmann's definition of a system does not distinguish between a system and the life-world as Habermas argued. A system, for Luhmann, is all-encompassing and includes society as one of many systems (Luhmann, 1987).

Habermas is a creative gleaner of diverse theoretical concepts who skillfully integrated material useful for the development of his communicative action theory (How, 1985). The concept of "creative misreading" (How, 1985; Canovan, 1983; La Capra, 1977) is applicable in these instances. The creative misreading tailors another person's concepts for purposes not necessarily consistent with the originator's intent, and it also creates obstacles to one's own
theoretical argument. I return to the discussion of creative misreadings in the chapter 5 of this dissertation.

One of Habermas’ barriers is his inability to accept Luhmann’s ideas on system borders.¹ This barrier prevents him from understanding Luhmann’s distinction between environment and system. The parameters by which a system functions or defines its activity are termed its “borders.” For example, the borders of an organizational system are fixed, thus defining the scope and vision for the system. Family systems do not have fixed borders.

In the late 1960s, a debate between Habermas and Luhmann focused on their approaches to systems and society. In this forum, Habermas began to publicly challenge Luhmann’s functional claims for a systems theory. Apparently, Habermas saw Luhmann’s theory as unraveling the advances made in Parsons’ action theory. Luhmann, on the other hand, considered that his work takes Parsons’ formulations to the next level. He considered that Parsons would have updated his thinking in response to new theoretical breakthroughs.

Habermas engaged in another debate, this time with Gadamer, that shed light on Luhmann’s position on the concept of subject. Ideology and interpretation were the focal points for this encounter. Habermas came out of the Frankfurt School for Social Research with an agenda to reinvigorate the mandate for

¹ Robert Holub (1991) is the primary source for this discussion of the Habermas vs. Luhmann debate.
emancipation. Habermas’ solution was to introduce interpretation as a method in the study of economic and political systems.

After examining Habermas’ evaluation of Gadamer’s hermeneutics (method for interpreting), my conclusion is that Habermas’ rejection of Gadamer’s ontological perspective is based on Habermas’ preservation of the distinction between object and subject. Gadamer objected to Habermas’ acquisition of hermeneutics for analysis in the social sciences because of the logic of intentional alienation and distancing methods (Gadamer, 1976, pp. 26-36). Historically, sociology requires a dogmatic objectivism. This objectivism stands in the way of a hermeneutical method which is based on the concept of hermeneutical reflection (combining history and self). Maintaining the distinction between subject and object leads to problems.

Habermas used hermeneutics for the purpose of emancipation from the shackles of tradition, veering from Gadamer’s starting point for interpretation. Meaning defined through the concept of the subject, that is, through personal reflection, becomes the object of thought. Gadamer (1976) believed that the origin of interpretation for any experience comes before the action the experience initiates. For Luhmann, this means that communication causes action and communicative action is a function of the social system. Communication precedes action, contrary to Habermas’ theory in which action is a precursor to communication through intersubjectivity. The logic of Luhmann’s conclusion is
that if the subject were "characterized by the conscious actualization of the intentional structures of experience" (1990a, p. 22), it is then placed outside of "Being" (Sein, ekstasis). "It gives us something that cannot be: an isolated ego" (Luhmann, 1990a, p. 22).

The problems faced when accessing an overwhelming amount of information create the need for theoretical perspectives radically different from those that may have been sufficient in past history. If the distinction between the objective and the subjective is removed from the sociological method, then the discipline is in danger of losing its scientific perspective. If the distinction remains, then the fears of the postmodernists that the individual has lost his unique identity and is in need of emancipation are justified.

Luhmann's solution includes the exploration of the theory of differentiation, especially the distinction made between system and environment (1982, p. 230). The approach removes us from the quagmire of individual roles and activities and forces us to examine the evolving process of describing differences. The goal includes a need to determine the validity and usefulness of the superabundance of information. Luhmann's systems theory connects us to the information by giving control. Our understanding of who we are is far behind our ability to utilize information.
CHAPTER THREE

THEORETICAL CONSIDERATION
WHEN EXAMINING NIKLAS LUHMANN’S THEORY OF DIFFERENTIATION

The first part of this section will explore the background and development for Luhmann’s subject-free concept. The subject-free concept of action must be understood before any illustration of differentiation. Double contingency, interpenetration, and self-reference are constructs for the subject-free concept. Language restricts our ability to conceive of a subject-free thought process.

Luhmann stated that the reason for this difficulty is that:

The predication is forced on the subject of sentences; this suggests the idea, and reinforces the old habit of thinking, that we deal with ‘things,’ to which any qualities, relations, activities, or surprises must be ascribed .... In this form, things provide handy clues for managing references to the world (1995/1984, p. 77).

It is not always evident how double contingency, interpenetration, and self-reference relate to each other. The difficulty with following Luhmann’s development of these ideas is that he has reconstructed each concept so it is hardly recognized as it was originally formulated. Luhmann's development of double contingency, interpenetration, and self-reference is nontraditional.

The second part develops the rationale for the functioning of system and environment in Luhmann’s scheme. I also discuss and identify three essential
features in the theory of differentiation: a) The interdependence of variables maintains system, b) the environment allows for structures and processes, and c) a social system emerges as a result of communication through an autopoietic connection.

Background and Development for the Subject-Free Concept

Taking into account the complexities of modern society, Luhmann advanced beyond action theory. Responding to the need for a current social theory that addresses the concerns of an increasingly complex society, Luhmann (1982) split away from the structural-functionalism of his mentor, Talcott Parsons. For Luhmann, the function of social analysis no longer refers to the activity of roles or participants in activities but rather to the relationship between system and environment (Luhmann, 1995, p. 176).

In challenging Parsons’ (1977) functional structure of social systems, Luhmann broke away from the old Kantian notion of the subject (Luhmann, 1982). Luhmann stated that the term “subject” belongs to the historical tradition which ties the subject to the foundation of modern reflexive (turning in on oneself) individualism (personal communication, September 20, 1996). This historical tradition stems from the philosophical works on self-identity (Kant, 1965). An argument exists for a Kantian transcendental self where the self does not acquire self-knowledge through self-awareness (Kitcher, 1982). Parsons’ social image of
man views the individual as social process of interaction between the self as subject and the self as object.

Luhmann's approach severed the connection between the physical world and the social to describe and analyze problems relevant to the information age. A Luhmannian approach dismisses any type of equilibrium notion in systems. The result of Luhmann's rejection of equilibrium theories was the discarding of input-output social models, especially Parsons' four-function social system theory (Luhmann, 1982, pp. 52-55; 1986a, p. 6; 1990b, p. 93). Luhmann did not totally disregard the applicability of input-output social models. In recent correspondence, Luhmann reiterated the restrictive characteristics of the input-output schema and saw the illustration for these restrictions in the firm (organization) which distinguishes between labor markets and product markets (personal communication, September, 20, 1996).

A systems approach that starts with communication replaces Parsons' "action theory" that emanated from the interaction of actors. The following quote emphasizes Luhmann's use of communication rather than action as the basis of social analysis: "Sociality is not a special case of action; instead, action is constituted in social systems by means of communication and attribution as a reduction of complexity, as an indispensable self-simplification of the system" (Luhmann, 1995, p. 137).
The discussion of the postmodernist debate earlier emphasized the need for more self-defining philosophy. Postmodernists felt that modernism alienated the individual. There was a call for a return to the subject of self-knowledge. Luhmann denied the traditional approach to self-knowledge which presupposes an actor in the sense of subject. The subject-free approach begins with the system's necessity to observe itself only from what it can observe (Luhmann, 1991).

In analyzing the observation of self-reproducing systems, Luhmann noted that part of the problem is that the observer is also a self-reproducing system. Thus, it finds itself constrained by the conditions of its own self-reproduction, and it includes itself in the field of operations, because it cannot avoid gaining information about itself (Luhmann, 1986b, p. 186). This observation of observation allows us to view the blind spots in others and excludes the possibility for self-observation. We know ourselves only through others' observation of our blind spots. Our connection with the world is through Luhmann's insistence on the fundamental blindness of all observations. This connection is liberating and does not separate or alienate us from our world. The implication for the type of connection Luhmann proposed involves rethinking the way in which we know ourselves. Luhmann not only challenged the subject, he illuminated it. Our blind spots connect us to what is real. Knowledge of ourselves is thus subject-free.
The construction of a subject-free way of theorizing begins with Luhmann’s incorporation of the biological theory of autopoiesis (Maturana, 1981). Autopoiesis defines systems that distinguish between the system’s internal environment and the environment’s external realm. The system’s self-perpetuation depends upon the physical operation of the system. Luhmann adapted the autopoietic terminology to include psychic and social systems by defining these systems as nonliving. These nonliving systems reproduce themselves through their closure and openness. Closure is the inability of people to understand themselves outside the context of a social system. The psychic system reproduces itself through its consciousness, while the social system propagates through communication. Openness characterizes the structural nature of the system and environment.

Luhmann’s idea of closure means that communication happens within the system and not between the system and environment. Communication is always an internal operation of the system. The notion of openness allows the system to expand and shrink according to the requirements of the social system. Luhmann extended the biological autopoietic model by distinguishing between the social system’s operation and its observation. The act of observing is discussed later as interpenetration. The distinction between the system’s self-perpetuation and the act of distinguishing between system and environment results in the creation of information. The differentiation function of a system includes itself in the field of
operations and, as a result, the system cannot avoid gaining information about itself.

Self-reference emphasizes the process of differentiating the differences between the system and the environment. This act of identifying differences illustrates the elemental psychological attribute of distinguishing figure from ground. Philosophically, this distinguishing feature creates a tautology or paradox. This means that the problem of paradox presents an impasse to the practical application of knowing something. The paradox, from a philosophical perspective, means that a distinction is made between what something “is” and what it “is not.” The patient states that he is “ill” and the observer (the physician) knows the patient is ill by distinguishing between what is said by the patient and what is not. Ill is figure and what is not ill is ground. The distinction between the patient’s statement, ill, and the possibility that he would not have stated it creates the paradox.

Luhmann’s solution to this problem of knowing, paradox, is fully discussed in the subsection, “Double Contingency.” The current discussion focuses on what the solution provides. I will illustrate how I have incorporated illness into Luhmann’s frame of reference. In order to accomplish this, I need to explain a few concepts basic to Luhmann’s vocabulary.
Code, communication, program, and information are conceptual elements that have a common thread. These terms associate with each other in a very dependent manner. The speech uttered by a person is contingent upon an outcome made possible by a potential choice. Information is dormant until it becomes part of the communicative function of a system. Information, seen as an event rather than a commodity, serves the goals and interests of the particular system. The defining characteristic of code is the program.

Any evidence of communication indicates the existence of a paradox. Luhmann's systems theory answers the paradoxical question by providing the means to distinguish between what something "is" and what it "is not." The following illustration addresses this point. In a coastal setting, in order to get to the beach by the shortest route, the public walks across private property repeatedly. After a certain length of time and volume of use, the well-worn beach access becomes part of public domain. In this illustration, code is the choice the public makes to access the beach. The code is contingent on the possibility of other routes or choices. The system, in this case, is the public reaching a destination. The program is the conditions that allow this choice of route to become the rule or criteria for the path to become a public right-of-way. Information is the event that occurs when an observer sees the people use the well-worn path. Communication is the synthesis of three elements: the information plus
the person’s decision based on the contingency to do otherwise, and the understanding resulting from the decision to take this route.

Luhmann continued to address questions posed by the dilemma of paradox through an application of second-order cybernetics. Cybernetics (from the Greek word for helmsman) defines the relationship between the observing system and the observer. Second-order cybernetics includes the observer in the system studied while first-order cybernetics is simply a system of observation (von Foerster, 1970). The relationship, one of inclusion with the system of observation, affords the observer insight. The insight gained by a person is not accessed through personal self-awareness but by the social system undoing the self-referential paradox. The desire to avoid the confusion between action and its presupposed actor requires the conscious effort to view both action and actor as constructs of the observer. Therefore, any reference to self must be seen as the observer’s invention. This also presupposes that there is no value in searching for universals but, rather, completeness in understanding how paradoxes define differences, the heart of the reproductive cycle of systems. Self-reference "designates every operation that refers to something beyond itself and through this back to itself" (Luhmann, 1986a, p. 145).

The patient and physician continue their dialogue and, as their encounter progresses, the observation of the blind spots in each other contributes to the
knowledge gained. Chapter 4 describes illness as a theme developed during a clinical encounter.

The attempt to access knowledge of what "is" or "is not," creates the paradox. There are two solutions to this problem. The first solution is to ignore the problem altogether and develop theories excluding this paradox. The second, the solution proposed by Luhmann, is the binary coding concept. Binary codes arise out of positive and negative values assigned to what "is" or "is not" thus allowing for the possibility that one choice could transform into the other contingent choice. This, therefore, allows systems through binary codes to "undo" paradox. This undoing process occurs as the system orients itself to the difference between figure and ground. The system adjusts to what "is" or "is not" through its own self-reference.

The analysis of social systems requires identifiable components -- these components, for Luhmann, are utterances. The action of the speaker is known through the sequential unfolding of utterances. The unfolding of utterances creates the need for events to be coded or uncoded. During this process of the sequential unfolding of utterances, one assumes coding. The rationale for this assumption is that an utterance presupposes the choice made: 1) to maintain current usage and provide opportunity to reformulate it appropriately within the experience and 2) provide information that verifies the choice to exclude other
usages and meanings. In order to trace the unfolding of this process, binary codes identify the duplication of information created by the paradox.

As stated earlier, cybernetics defines the relationship between the observing system and the observer, while second-order cybernetics includes the observer in the system studied. The relationship between observation and system, paired with Luhmann’s insistence on action being an invention of the observer and following the communication process of social systems, creates the paradox. The foundation for the paradox is the contingency that “other” choices were possible and are still options for the unfolding of the utterances (events).

Adjusting to the paradox can only be accomplished by the observation of another observing system. The presence and recognition of the paradox provides building blocks for “knowing,” thus eliminating the need for presuppositions, a requirement for our first solution.

Double Contingency

Luhmann furthered Parsons' functional approach by confronting problems about the transmission of knowledge. Luhmann was able to build upon the work of Parsons and make it relevant to the complexities of today's world.

In seeking solutions to problems encountered when explaining the transmission of knowledge, Parsons found that double contingency was an
obstacle (Parsons, 1951). Double contingency involves the relationship between the speaker and the addressee. Simply put, the difficulty is that action cannot take place when the speaker is waiting for the addressee to respond, and the addressee's response is dependent upon the speaker's action. This creates a communication stand-off, each participant waiting for the other.

Parsons' solution, articulated in his concept of action, makes the assumption that the participants interact based on preexisting norms. Luhmann recognized the problem of double contingency; however, he maintained that Parsons avoided the problem, sidestepping it with the notion of normative assumptions.

The problems Luhmann encountered are no longer structural ones involving intersubjectivity (or between "actors") but have to do with the function of communication. He used the problem of double contingency as a solution to overcome the obstacle it creates. Rather than focus on the impasse created by the double contingency, Luhmann took the process back to the creation and reproduction of meaning. At this point, Luhmann attempts to solve these functional problems by appealing to the success of models from biology (Maturana, 1981; von Bertalanffy, 1950). The across-the-board transfer of biological theory to social theory presents problems. Luhmann resolved the difficulties by reconceptualizing the social as nonliving systems "whose basic elements consist of communications, vanishing events in time that, in producing
the networks that produce them, constitute emergent orders of temporalized complexity" (Knodt, 1995, p. xiii).

There is a gap between what is understood by the speaker and what is understood by the addressee. For Luhmann, this gap is the contingency which allows for affirmation or negation of the exchange between participants. The contingency is reduced as the communication initiates action, thus determining an affirmation or negation of the essence of the other participant. From this perspective action is an emergent phenomenon. This returns to the prior discussion concerning the blind spots that we all share. We are able to see the blind spots of others while oblivious to our own; therefore, the gap between speaker and addressee.
Interpersonal Interpenetration

The formation of social relationships occurs through personal and impersonal contacts. The process of interpenetration allows recognition of the personal characteristics that form social relationships. Knowledge of human beings (psychic systems) requires a key to understanding the relationship between human beings and social systems. The key is the concept of interpenetration. Interpenetration requires a reciprocal relationship between autopoietic systems as they become part of the environment for each other. The psychic system (consciousness) is part of the environment of the social system. The reciprocal interdependence creates disorder for the psychic system.

Both psychic systems and social systems are autopoietic, which means that they share a structural relationship. Due to the fact that psychic systems and social systems exist completely dependently on each other, further explanation is required. The mind, through the psychic system, is sustained through the state of consciousness, while social systems continue their existence with communication. It is in this state of necessity that these different systems (psychic and social) form a relationship where this need for a reciprocal interdependency creates the disorder.

The cause for the disorder within the psychic system (one's consciousness awareness) is interpenetration. Language is the evolutionary result of an accomplishment of the interpenetration process. The disorder present in the
psychic system is the effect of language transferring social complexity into psychic complexity.

Social systems emerge as the result of the tumultuous effort psychic systems expend in the effort to communicate.

The mind therefore participates in communication as a structurally determined system and as a medium. This is only possible because the mind and communication, psychic systems, and social systems, never fuse or even partially overlap, but are completely separate, self-referentially closed, autopoietic-reproductive systems. As I said: humans cannot communicate. (Luhmann, 1994b, p. 379)

The accomplishment of this evolutionary process of interpenetration is language (Luhmann, 1995/1984).

**Self-Reference**

The transcendental distinction between subject and object was replaced by the distinction between system and environment. I will now continue the discussion about the development of the relationships between social system and elements (includes psychic systems) of the environment. Originally, my discussion introduced Luhmann’s concept of interpersonal interpenetration by way of their (system and environment) reciprocal interdependence creating disorder for the psychic system. I emphasized that, as a result of the accomplishments of interpenetration, language transferred social complexity into psychic complexity.
Although complexity cannot be observed, the consequence of its presence is felt in the tension between the system (self-reference) and environment (everything else that is not system). Continuing the development, Luhmann shifted his analysis to redefining the system/environment distinction within a general theory of self-referential systems (1995/1984). Luhmann replaced the subject/object relationship with the self-referential system where communication is the lowest common denominator for social analysis. For Luhmann, the self only exists because of the difference exhibited between itself and everything else.

Problems of how one conducts empirical research arise with self-referential systems theory. This problem is fully discussed in chapter 5, “Creative Misreadings.” The theoretical consideration important for the present discussion is how a self-referential system can replace the traditional concept of the subject. In his appeal to let go of the subject, Luhmann summarized our attachment: "The significance of the figure of 'the subject' (in the singular) was that it offered a basis for all knowledge and all action without making itself dependent on an analysis of society" (1991, p. xli). The use of terms such as “subjectivity” and “subject” are useful only when discussing comparisons and contrasts between structuralists and functionalists. If one continues to push for a subject/object comparison, then the subject refers to self-reference and object fulfills Luhmann's notion of environment. The subject can only have some comparative value if defined in dynamic terms,
such as: "It lays the foundations for itself and everything else" (Luhmann, 1991, xxxix).

It is my contention that American theorists would understand Luhmann's theory if they could set aside the subject/object format. Robert Bales and James Coleman are two American theorists who rely on the subject/object dichotomy in their theoretical development. Bales (1950, pp. 71-72) made reference to the subject-object polarity as an important aspect in stabilizing the relationship between people. Coleman (1990, p. 507), focusing on the actor's role in society, used the concept of the object self and the acting self.

Bales treated generalizations made in relation to personality, social system, and culture as structures removed from each other through increased increments of abstraction (1950, p. 31, Bales & Cohen, 1979). Bales ties these levels of observation to the subject-object polarity: "The concepts in that section [actor & situation as a frame of reference, see pp. 42-48] are all derived from the subject-object polarity which we assume to be a descriptive characteristic of any human interaction" (1950, p. 49).

Warning against traps in social theory, Coleman (1990, 1988) attempts to bridge the gap between an extreme emphasis on subjectivity and an obsession with objectivity. The first trap is radical methodological individualism; this concept explains social action as the aggregate of individual actions. The second trap is structuralism which does away with the concept of subject or human agency.
One of the effects of structuralism, argued Coleman, is a concentration on the whole structural aspect of social interaction. This argument claims that structuralism eclipses individual choice and, therefore, excludes human freedom. In order to avoid the theoretical traps against which Coleman warned, theorists must walk a tightrope between radical individualism and extreme structuralism.

Focus, in Luhmann's theory, is on social systems. When the concept of self-reference is viewed from his perspective, terminology points to the function of social systems and not to personal or individual activities of people. Self-reference is a reference to a function of the social system, and it "designates every operation that refers to something beyond itself and through this back to itself" (Luhmann, 1986a, p. 144).

Luhmann hesitated to call the actor a subject, since this presupposes that an actor creates action. The argument continues as the subject historically connotes a self-founding. Action, for Luhmann, follows communication and, therefore, cannot be the creation of what historically is the subject, that is, the individual. Action is the result of a social system rather than the psychic system. For this reason, the focus of Luhmann's work is self-reference rather than what has been the traditional starting point, the self.

An illustration of the difference between Luhmann and the "structuralists" could be envisioned as follows: Consider the content of social analysis as if two people in a park were playing ball. If one took a photograph of that scene, the
structuralists could analyze the figures in the photo as subject and object.

Luhmann would see nothing from a photograph. Understanding, for Luhmann, comes from observing the motion inherent in the activity.

The cartoon depicting two theorists at a local sports bar (Fig. 1) illustrates a principle of differentiation. This principle is a process by which people distinguish between figure and ground. The first depiction of a TV screen represents a frozen segment of time, a still image of an occurrence in the game. Although Luhmann saw nothing on the screen, Habermas drew upon interpretation for analysis and conclusion. The instant replay broadcast in the last section of the panel graphically illustrates Luhmann's process by which the distinction between environment and system is made. The environment in the illustration is the baseball diamond. The social system under analysis is the game of baseball in which the players move according to the parameters of the game (system). This dynamic event can be seen and understood by Luhmann, whereas the static "photo image" representation showed him nothing. Understanding, as illustrated in the cartoon metaphor, does not require interpretation.
Figure 1. A cartoon illustration of differentiation theory.

(artist Brooke Terpstra/ copyright by Michael G. Terpstra 1997)
System and Environment

Elemental Constructs

The concepts of system and environment are so central to Luhmann's theory that, without these words, the theory of differentiation would be hard to describe. Luhmann's development of systems and environment is through the relationship these concepts have with each other. The existence of system and environment can only be observed through their difference. This observation is through the effects of the communication. Communication is the basis for system reproduction and operation (Luhmann, 1986a). The identifiable components of the system are utterances for social systems. The utterances, when followed sequentially, represent the action of the speaker. Utterances are the building blocks for the system's regeneration (Luhmann, 1990a, p. 12).

The activity of speech (utterances) is the identifiable element in illustrating the theory of differentiation. It is important to understand that the activities of speech (utterances) are identifiable events and not the abstraction of a physical element. Simply stated, differentiation is the act of distinguishing between events. The smallest essential event is a potentially negatable event (Luhmann, 1995/1984, p. 154). The negatable event (utterance), as we will see in what follows, allows the system to have a point of reference.

In a subject-free context, physical representations are replaced with events unfolding during a sequence of occurrences over a period of time. Luhmann
differed from Parsons in that "social systems are not comprised of persons and actions but of communications" (Luhmann, 1986a, p. 145). The analysis, in this case, does not examine the parts of speech or the speaker. Physical representations of the activity and abstract representations of human beings (speaker) are avoided. The basic element of analysis is the "event." For example, a conference consists of a series of events and activities that define its purpose. The events have the potential for being useful or not in accomplishing the goal of the conference. This potential or possibility that the individual events could or could not contribute, is the essence of what Luhmann called the negatable event.

The system reference determines the point of view from which one begins an observation and designates the system's boundaries. This point of reference is arbitrary and determined by the observer who defines the parameters of the system. The reference point starts the process toward a reduction in complexity. Luhmann stated that "the choice of a system reference only determines the system from whose point of view everything else is environment" (1990b, p. 418). A system produces information through a comparison process with other possibilities; information is not something "out there" waiting for absorption (Luhmann, 1990a, p. 4).

**Essential Features**

During the course of tracking the development of Luhmann's ideas on systems, I observed three distinct emphases:
(1) the interdependence of variables maintains systems,

(2) the environment allows for structures/processes, and

(3) a social system emerges as a result of communication through an autopoietic connection.

Luhmann's thinking about social systems began with Parsons' ideas of interaction as a process of systems. The idea that the fundamental property of a system is the interdependence of variables provided the basis for Luhmann's approach to systems. The interdependence describes the relationship between elements of a system. The following quote marks the beginning of Luhmann's thinking on the interdependency of variables in a system: "The boundary of the system is defined in terms of 'constancy patterns' that are tied up to a harmonious set of common norms and values, mutually supporting expectations, and the like" (Parsons & Shils, 1952, p. 107). Parsons' description gave structure to the concept of system.

A system is a set of constructs arranged in a fashion that links elements serving a unified function. With the structure in place, Luhmann advanced upon Parsons' approach with a concentration on the "unifying function" of system. He considered that Parsons would have updated his thinking in response to new theoretical breakthroughs rather than using outdated approaches to the examination of society.
The process orientation requires the synthesis of information, utterance, and understanding in order to generate meaning through the process of communication (Luhmann, 1990a, p. 3; 1979, p. xi). This process is a basic requirement of the system of Luhmann's approach. The environment is the requirement of Luhmann's theory that makes it possible for the structures and processes of a system to interact.

This is the case since only by reference to an environment is it possible to distinguish (in any given system) between what functions as an element and what functions as a relation between elements. Exaggerating slightly, we can even say that a system is its relation to its environment, or that it is the difference between system and environment. (Luhmann, 1982, p. 257)

The type of system that Luhmann used in his construction of a theory of differentiation is autopoietic (Luhmann, 1990a). Autopoietic systems are formally defined "as unities, as networks of productions of components that recursively, through their interactions, generate and realize the network that produces them and constitute, in the space in which they exist, the boundaries of the network as components that participate in the realization of the network" (Maturana, 1981, p. 21). Autopoietic systems can operate in response to self-reference by relying on the environment. This development allows for a description of differentiation through the tracking of elements of communication.

Self-organization is the primary characteristic that ensues from this definition. The very derivation of the word, "autopoiesis," points to a system of

For Luhmann, the interaction between structure and process is the function of a self-producing (autopoietic) system. It is through autopoiiesis that systems reproduce themselves "by means of a network of these elements themselves and in this way distinguish themselves from an environment . . . (in the case of social systems) communication" (Luhmann, 1986a, p. 143). Parsons defined a system as having "constancy patterns," and Luhmann extended this patterning activity into the interactive process of systems. Since Luhmann had the advantage of knowledge from theoretical biology, with the introduction of autopoietic systems, the interactive process as described Parsons could now possess the ability to self-reproduce.

Originally, Luhmann included structural restrictions on the nature of his autopoietic systems. For example, in a 1986 version of an article, "The Autopoiesis of Social Systems" (1986b), Luhmann did not consider the environment an interactive part of the synthesis of information. With the development of concepts such as self-reference and complexity, Luhmann (1990a) dropped the exclusion of the environmental involvement.

For Luhmann's scheme to differentiate between system and environment, it is essential to apply a subject-free concept. The reason for this necessity is the communicative function of social systems which preceeds any activity initiated by a
subject. Communication cannot be observed, but action which requires a subject is observed.

The methodology for the theory of differentiation requires the following three essential features: The interdependence of variables maintain systems, while the environment allows for structures and processes; the emergence of a social system is the result of communication through an autopoietic connection.
CHAPTER FOUR

ILLNESS AS A SYSTEM OF INTERPENETRATION:

ILLUSTRATION THROUGH A CASE STUDY

Understanding Luhmann, in and of itself, is a difficult task. An understanding of Luhmann's theory does not guarantee application. In order to demonstrate possibilities for Luhmann's theory and the applicability of his theory in its purest form, I will appeal to the pragmatism of a case study. The case study is a clinical encounter between an AIDS patient and his physician. Since the record of this encounter is in transcribed form, I concentrate on the language recorded between the patient and physician (see Appendix B).

This chapter illustrates how illness is a system of interpenetration. The use of a case study demonstrates the differentiation between psychic systems and social systems, and that interpenetration is the means by which differentiation occurs.

Interpenetration reveals the inner event of illness where language is a reflection of an inner world rather than a focus on interaction between conversants. Interpenetration bridges the patient's conscious awareness of illness with the medical practitioner's need to understand. As I have already discussed in chapter 3, Luhmann redefined interpenetration by reconstructing double contingency, borrowing autopoietic principles from biology, and emphasizing solutions to issues of complexity.
Since, in this case, I am working with language, Luhmann's concepts of language begin my exploration. For Luhmann, language increases the complexity of the life world, or as he defined it, psychic systems. The psychic systems are part of the environment of social systems. Here, a clinical encounter is the system reference that determines the point of view from which one begins an observation and designates the system's boundaries. The formation of the relationship between the patient and physician is through personal and impersonal contacts. The process of interpenetration allows the participants in the clinical encounter to recognize their personal characteristics that form their social relationship. The dialogue (language) between the patient and physician is the evidence that interpenetration has taken place. The analysis of language for my purpose identifies activities of speech (utterances), remembering that this process is not a device or abstracting a physical element. Since the purpose of this essay is to illustrate Luhmann's theory, the unit of analysis is the event. Differentiation is the act of distinguishing between events. Interpenetration allows the patient and physician to be aware of each other. The language spoken between the participants in the clinical encounter has the effect of transferring social complexity into psychic complexity.

My review draws from a larger study of physician-patient clinical visits (von Friederichs-Fitzwater, Callahan, Flynn, & Williams, 1991). In an analysis of those dialogues, I noticed a disproportionate number of passive sentences used by
AIDS patients. My initial analysis of this case study concluded that a nonimmediacy or distancing (Wiener & Mehrabian, 1968) factor was present in the grammar.

The function of the passive voice that projects meaning into the language of the patient's life world is a feature that allows multiple noun clauses at the end of sentences (Svartvik, 1966; Palmer, 1974). The following example of a passive sentence from a clinical dialogue shows multiple noun clauses: "I was diagnosed a year ago, which was nice for me, I mean, a year, but the thing is, and I plan on more, but the thing is, so it was sort of an odd couple of weeks, the last couple of weeks" (Appendix A, ll. 064-069).

My search for a consistent theoretical explanation for this passive phenomenon led me to explore the passive in detail. The patient is using the passive in order to express complex emotions. The use of multiple noun clauses indicates complex or abstract thought.

The traditional meaning of nonimmediacy assumes that the patient is distancing himself from the other speaker or from the topic of discussion. Nonimmediacy did not adequately describe the anomaly to my satisfaction. When I studied the entire dialogue it was apparent from the literal context that the patient was confronting his illness. I wanted to know if there was a theory other than nonimmediacy that would accommodate an alternate function of passive, that is, one that allows multiple noun clauses to be placed at the end of sentences.
Communication is made possible only as a self-referential process. This means that communication takes place within the social system and not between the social system and environment. In the example of patient and physician, the social system is the clinical encounter in which the "illness theme" defines its goals and boundaries. The above quote is an event (segment for analysis) within the greater collection of events, the clinical encounter. The environment for this social system includes the two participants (patient and physician) and everything else. The information gleaned from this clinical encounter is known as a result of differentiation. First, a distinction is made between the environment (including the psychic system of patient and the psychic system of physician) and the social system of illness. Then, differentiation includes the first distinction and the reproductive process of the social system. Differentiation is the distinction between the self-perpetuating activity of the social system (autopoiiesis) and the distinction mentioned above as the accomplishment of interpenetration (language).

The patient and physician, because their psychic systems are part of the environment and a condition of differentiation, form a temporarily reciprocal interdependent relationship with the social system (clinical encounter). The evidence for this interdependent relationship is language. The adaptation to the interdependent relationship just described is emotion. The emotional responses expressed by the patient are the effect of language transferring social complexity
into psychic complexity. The transference of social complexity into psychic complexity is the driving force behind the concept of interpenetration.

Complexity

Differentiation is a meaning-based processing of experience. The process functions in a cyclical manner by both reducing and preserving complexity (Luhmann, 1991, p. 27). The reduction of complexity allows us to comprehend extremely complex concepts, while the preservation of complexity prevents us from reducing a complex world to a mere simplistic perception.

The experience of the patient unfolds during the clinical encounter. Luhmann reminded us that the "concept of meaning refers to the way human experience is ordered" (1990a, p. 25). Through the communication between the AIDS patient and his physician, the patient's illness is given meaning. As we shall see, the system generates meaning through the process of differentiation that functions by combining three different selections: information, utterance, and understanding.
Double Contingency

Communication is the medium from which social systems operate. Communication differentiates, and the difference is "thematized as the unity of what is different, as communication and non-communication, that is, as a paradox" (Luhmann, 1994a, pp. 25-26). This paradox is similar to the problem of double contingency discussed earlier. The language uttered by the speaker (patient) on the subject of illness is evidence of internal observation (self-observation). The receiver/participant in the clinical encounter (physician) responds as an external observer of the illness. The only valid theme in the system's communicative process is the one emerging through internal observation (Luhmann, 1995/1984, p. 180). In the case of my clinical encounter, it is the theme of illness. The paradox is that both the speaker (patient) and addressee (physician) contribute to the knowledge of the illness, but the only valid theme comes through internal observation. Internal observation is the self-observation of a social system. Luhmann reasoned that the system (clinical encounter) is accessible to itself only through communication.

In this illustration (the clinical encounter), knowledge of the patient is communicated through the theme as a "meaning-employing system" rather than the source for the creation of meaning (Luhmann, 1979). Meaning, for Luhmann, is not the "conscious actualization of the intentional structures of experience" of the patient (1990a, p. 22). Understanding the clinical encounter is realized through the
activity of the social system (clinical encounter) rather than identifying the patient and physician as the source of understanding.

The clinical encounter represents two distinct and separate worlds, one from the physician's perspective and the other from the patient's experience (Toombs, 1993). These worlds are known by the language style the participants use. The language of the patient reflects illness as an inward experience. The point of reference for the physician is different than it is for the patient.

The problem discussed by Toombs in the following quote illustrates the problem of double contingency. "In the clinical encounter the body becomes objectified. With this objectification the unity of lived body disintegrates and the body is alienated from the self. The alienation from self engenders a profound sense of loss of control" (Toombs, 1993, p. 83). This illustration presents a partial picture. Toombs' conclusion about clinical encounter assumes an object and subject dynamic. Anyone who develops an objective/subjective model avoids the problem of double contingency. The problem is that one's conclusions are determined by the object/subject dilemma. The dilemma is knowing who is the subject and what is object. Toombs' methodology that created the above conclusion about clinical encounters emerges out of the object/subject duality.

An alternative perspective, such as that of Luhmann, envisions the function of social analysis as the relationship between system and environment. When Luhmann used the problem of double contingency as a solution, it became part of
the social system's autopoietic characteristics. A methodology developed along the lines of Luhmann's theory does not emerge from an object/subject duality. When I use the concept of double contingency, it contributes to the idea of illness as a system of interpenetration. Luhmann's solution to the problem of double contingency is to utilize its presence where meaning emerges through the clinical encounter.

**Autopoiesis**

"Interpenetration is . . . a relationship between autopoietic systems" (Luhmann, 1995/1984, p. 218). Autopoiesis, simply defined, is the process of a system's reproduction through its own network of structures. "Systems" refers to biological systems, psychic systems, and social systems. Autopoiesis is applicable to all systems, but the single most important characteristic of social and psychic systems is that they are nonliving systems. Without going into detail, the system's ability to maintain closure and openness at the same time requires that these social systems be classified as nonliving (Luhmann, 1986a).

Self-reference is a process of autopoiesis that refers to something beyond itself and then returns to itself. Self-reference and external reference are examples of closed and open systems, respectively. The classical understanding of systems assumes the distinction between "closed" and "open." Luhmann replaced this notion with describing how self-referential closure creates openness while
remaining a closed system. The self-referential systems maintain closure with respect to communication (Luhmann, 1990a, p. 5). Because I am using the concept of self-reference in the context of an interaction rather than society at large, the distinction between interactive and social systems requires a refinement in definition. Social systems are all-inclusive; thus, "closure" becomes all encompassing. On the other hand, interactive systems are both open and closed to their environment. They are open in the sense that communication with the environment is acknowledged by "the fact that the persons who are present and participate in the interaction have other roles and other obligations within systems that cannot be controlled here and now" (Luhmann, 1990a, p. 5). Interactive systems are also closed "in the sense that their own communication can be motivated and understood only in the context of the system, and if somebody approaches the interactional space and begins to participate, he has to be introduced and the topics of conversation eventually have to be adapted to the new situation" (Luhmann, 1990a, p. 5). Therefore, the synthesis of information, utterance, and understanding causes the system to deal with resolution of the difference between closure and openness.

Figure 2 is complicated by the attempt to depict two processes functioning simultaneously -- differentiation and interpenetration. First, the oval depicts interpenetration which is an evolving relationship between circle A and circle B. Circle A encompasses the psychic systems of the participants in my example: the
physician’s psychic system and the patient’s psychic system plus anything else not defined as system. Circle B is the social system, the clinical encounter which identifies “illness” as its self-referencing landmark. Self-referencing refers to the functioning aspect of the clinical encounter. The clinical encounter is known only because of the difference between itself (circle B), and its environment (circle A). Communication results from that differentiation by delineating the parameters for the social system of “illness.” This relationship emerges as a social system of interpenetration where illness is its identifiable theme. The social system (illness) continues to communicate a specific theme through autopoietic means. As the sequence of events (utterances) unfolds, the circle labeled “Autopoietic Reproduction” establishes a relationship with what has remained efficient from the formation of the theme of illness. The social system develops or perishes through another tier of differentiation, between what has remained as the illness theme and the unfolding process of differentiation between the clinical encounter’s system and its participants - - patient and physician. The total process depicted in the illustration requires both “closeness,” as shown in the oval with circles A and B, and “openness,” represented by the large circle labeled “Autopoietic Reproduction.” This multifunctional schematic represents the evolution of a system of self-reference, the evolving of the theme (illness).
Figure 2. Illustration of differentiation and interpenetration.

Case Study Illustration

The language spoken during the clinical encounter provides partial evidence of a patient’s construct of “self.” Pursuant to Luhmann’s terminology, (without the notion of an efficient subject or actor), language provides evidence from the communicating social system of the knowledge we have of others and ourselves. The following case study illustrates a very small part of a patient’s construction of his system of illness. The patient’s personal system of illness is
only one of many systems of interpenetrations that contributes to the knowledge of self and contributes to society's knowledge of illness.

In order to set the stage, I need to identify what is environment and what constitutes the social system we are observing. The environment, using Luhmann's vocabulary, includes the psychic systems of the AIDS patient and the physician. The social system is the clinical encounter.

The emotion of anger, as it occurs in my case study, is easily identifiable. The dialogue permits identification of discernible landmarks for the presence of this emotion. The tracking of anger provides the opportunity to observe the results of interpenetration. Interpenetration is the relationship between the patient's consciousness and the encounter. Communication is a process resulting from the clinical encounter (social system) and not the act of the patient. Emotion is the "internal adaptation to internal problem situations of psychic systems" (Luhmann, 1995/1984, p. 559 fn. 26). (For further analysis of anger refer to the appendixes. Appendix A is the transcript for a segment of the case study I use for this illustration. Appendix B includes a more detailed analysis of this segment. When referring to the occurrence of anger in the dialogue, refer to line #029 and then to line #105 that marks the beginning of a flurry of anger statements.)

The expression of anger began after a short, rhetorical question by the physician about a previous theme. The physician's remark triggered the onset. At this juncture, the emotion of anger contributes significantly to the formation of a
new theme. The physician, by allowing the patient to continue, provides the opportunity for the patient to fully express himself. The physician gives the patient ample opportunity to change topics. The expression of anger is initially introduced by the patient in isolation from other anger references. Initially, I sought to identify the agent or cause of the anger portrayed through the patient's descriptions of his current state of being. The word "anger" drew attention because of its frequency in a word count of the dialogue; the patient used "anger" in one of its forms 12 times during his conversation. The "diagnosis" topic drew attention because of the variety of ways in which the patient talked about his diagnosis and how he expressed his eventual acceptance of the diagnosis of AIDS. Although the word "strength" only occurs twice in the patient's talk, it contributes a clue to eventual identification of the diagnosis theme. The term "space" (7 times) has significance because of the patient's association with a mental (emotional) safe space for retreat and renewal. The combination, "safe space" (4 times) identifies, in the patient's spacial jargon, a secure mental refuge from confrontations and anger. At one point, the patient refers to the safe space as "meditation."

The patient continues the conversation with occasional physician-assisted extensions of the patient's thought. The physician attempts to change topics, but the patient interrupts. The physician immediately asks a question to request an elaboration of what the patient was saying. The next two questions asked by the physician lead to what appears to be a therapeutic resolution for the patient.
The patient's awareness of his illness is reflected through self-observations. The very nature of the clinical encounter centers on the patient's illness. The definition of the clinical encounter establishes the boundaries of the social system. The theme of illness, therefore, is the only valid theme in the system's communicative process. It is not plausible nor necessary to have complete knowledge of the patient. Self-thematization (Luhmann, 1982, p. 327) makes the social system accessible to information pertaining to the patient's illness. "Self-thematization" is another term that Luhmann used to refer to the relationship a system establishes with itself. In other words, through the process of self-reference (reflection), the patient connects with the social system, that is, the clinical encounter. The patient is in a position of observation.

Metaphorically speaking, this type of language analysis might be compared to paleontology. Researchers have the fossilized bones, footprints, and eggs of the creatures called dinosaurs. They have never seen one, but they make the best informed guess about its habits and physical appearance. In the same sense, communication, according to Luhmann, cannot be observed, but residual data reveal that communication has occurred. The language exchanged in the clinical case study is the product created by the clinical encounter.

Interpenetration is the relationship between the AIDS patient's awareness of his illness and the theme of illness that is accessible through self-reference. The
selected fragment of my case study demonstrates evidence for differentiation between a psychic and social system.
CHAPTER FIVE

CREATIVE MISREADINGS

One of the problems with difficult theories is the possibility of misrepresentation. This chapter serves as a cautionary guide to those who want to avoid bending a theory to fit their own predispositions. From my experience in wrestling with the feasibility of using Luhmann's theory, I found myself unwittingly misreading the meaning of one of the key elements. Problems of how one conducts empirical research arise with Luhmann's self-referential systems theory. During my research, I discovered that I was not the only scholar who fell into a trap.

A model is an essential requirement for any utilization of theory. Without a model, theories are useless for practical application. Even when the essence of a theory is understood, problems arise in maintaining consistency between theory and model. For anyone developing a model from a theory, conformity of the model to the theory must be determined. The developer of the model asks, "How closely does this model adhere to the letter of the theory? How far can the model deviate from the theory?"

In some cases, theorists appropriate selected segments of existing theories. These disjointed parts are then tailored to fit into a proposed theory. When this happens, the appropriated segments are no longer consistent with the original
theory from which they were excised. Tinkering with a parent theory in this fashion has been termed "creative misreadings" (How, 1985).

I identify two types of creative misreadings. The first draws on segments of argument to support divergent views. The second type compromises the original theoretician's assumptions by attempting to unify divergent theories.

Interpretation attempts to discover the author's intent. Creative misreading tailors another person's concepts to purposes not necessarily consistent with the author's intent. This practice might also uncover contradictory elements in the borrower's own work. According to How, creative misreadings distort the reality of ideas in a particular way for the specific purpose of furthering one's own project (How, 1985). This particular form of distorted communication is not related to the practice of critique which examines a theory for contradictions.

The expression used by How, "creative misreading," originally referred to Habermas' habit of incorporating other theoreticians' concepts into the construction of his conceptual developments (La Capra, 1977; Canovan, 1983; How, 1985). I discuss the problem of creative misreading in order to eventually develop a model to test the validity of Luhmann's theory. I have to know to what extent I can stretch concepts without breaking the connection and displacing the idea from its context.
Illustration of Two Types of Creative Misreadings

Fragmenting Misreadings

My illustration for the first type of creative misreading is from Habermas' interpretation of Luhmann's concept of system. Habermas does not accept Luhmann's concept of the distinction between environment and system (Holub, 1991). Habermas evaluates Luhmann's theory of differentiation in the context of the philosophical discussion of the "death of the subject." Habermas' interpretation insists that Luhmann's approach replaces "subject" with "system," "object" with "environment" (Habermas, 1984).

Luhmann clearly spelled out how the subject is no longer relevant to the description of the modern age (Luhmann, 1991). The subject is fundamental to the way in which the world is perceived. The substance from which Luhmann formulates theory is "complexity," transcending the perceptions of the physical.

Habermas' creative misreading of Luhmann is not in the disagreement between the two theorists but in the intrusion of one's frame of reference into another's theory. Habermas critiqued Luhmann's definition of differentiation without any consideration for the argument that the subject is no longer appropriate to modern society.
Compromising Misreading

The second type of creative misreading consists of difficulties encountered when a synthesis is sought between variant theories. The reason for succumbing to this type of creative misreading is that models are difficult to develop. Theory is often compromised in the pursuit of a practical model. Anecdotal accounts of problems encountered while reading theory suggest that practical expectations are not met by theory.

"Compromising creative misreading" can either be false or accidental. My example of a false creative misreading is Felix Geyer's (1980) application of Luhmann's work through the development of alienation theory. The example of an accidental misreading comes from my initial attempt at illustrating Luhmann's theory of differentiation.

Geyer took Luhmann's analysis of internal complexity and used it to define alienation in a modern context. However, by adding preconditions to internal complexity, Geyer reverted back to the concept of the subject to develop an alienation model. The return to the concept of subject is a signal that a creative misreading of Luhmann's theoretic occurs. The apprehension that a creative misreading is taking place originates with the prior discovery of a "fragmenting creative misreading."

Expanding on a shift in Luhmann's thinking regarding complexity, Geyer elaborated on the development of the environment's internal complexity (1980).
The assertion Geyer made is that the internal complexity of a person is built up in the course of a lifetime. Geyer attempted to demonstrate that this accumulation is the result of the person’s goal-dependent efforts to reduce the complexity of his environment. Because of the preconditions Geyer delineated, the solution results in a reversion to the input/output model. Input/output models are the children of an equilibrium systems approach grounded on fluid dynamic principles. Geyer obviously drew heavily on Luhmann’s concept of internal complexity. Luhmann defined the input/output schema as a restrictive description on the relations between system and environment (personal communication, September 20, 1996). The restriction is limited to social systems that have fixed input and output goals. The problem I have with Geyer’s input/output model is that I do not believe the model meets the restricted qualifications.

I can only speculate that Geyer chose this path because of difficulties he found in the use of Luhmann’s concepts of elemental reproduction and self-identification. Since Luhmann’s subject-free concept eliminates any input/output models, this signal prompts an alert to a potential creative misreading.

At this juncture in my understanding of Luhmann, I label Geyer’s reading of Luhmann as an example of a false creative misreading. As the observer of this false misreading, I temper future judgment of Geyer’s application of Luhmann’s theory in the light of the possibility that Luhmann may acknowledge certain exceptions. In other words, at some point Luhmann might clarify with a response
to the question: In order to apply Luhmann's theory to a working model, what latitude can be given to the input/output schema? In this case, and in others similar, what is now a false misreading may lead to future resolutions. As such, the original misreading is transformed into a critique.

The next example illustrates how I acquired understanding of an element of Luhmann's conceptual world. The expression "accidental misreading" refers to my initial illustration of Luhmann's theory. The motivation for my initial reading of Luhmann came from a dissatisfaction with Habermas. Although Habermas' communicative action disappointed me, his influence continued to guide my interpretation of Luhmann's theory of differentiation. The difference between the two theorists that affected me most was Habermas' inability to accept Luhmann's ideas on the distinction made between environment and system.

My introduction to Luhmann occurred in the context of an immersion in the theory of communicative action. I started with a comparison of the two German sociologists, Habermas and Luhmann. Initially, I resolved Habermas' objections to the definition of differentiation by relegating "language" to the realm of what Luhmann defines as environment. Because of an interest in the dialogue and the interaction between conversationalists, I knew that Habermas saw language as the medium for reaching an understanding of one's lifeworld (Habermas, 1987). In an attempt to demonstrate the distinction made between environment and system and to be consistent with Habermas' lifeworld concept, I
inadvertently misread Luhmann. By falsely labeling "language" as environment, I violated the integrity of Luhmann's subject-free concept. The discovery of my accidental misreading followed further study into Luhmann's development of a subject-free concept of action.

These categories of creative misreadings are not necessarily permanent. As one continues to read theory and develop practical models based on those theories, knowledge evolves. The reader's perspective changes through perception of the difference between the theory read and the model in progress. In other words, the degree of integrity depends on the difference between the theory and the model developed for application. The recognition of the tendency to creatively misread theory is a step toward bridging the gap between theory and practical application.
CHAPTER SIX
POSTSCRIPT: PUTTING THE PIECES TOGETHER

At the beginning of this dissertation process, I intended to examine methods for analyzing chaotic and interactive patterning in conversation. The setting for this examination was the clinical encounter. I didn't accept standard explanations for what I saw in the dialogues of these encounters. Simple answers for complex social problems such as AIDS led me to conclude that social analysis required the study of complexity.

Using Niklas Luhmann's systems theory, the patient-physician dyad may be conceived in terms of a sociological structure or system. This approach allows for analysis that is not solely linguistic nor focused on the subjectivity of either of the participants.

This dissertation clarifies Luhmann's subject-free concept in a way that shows its value as a solution to the problem of the subject. The importance of studying a diverse body of literature became evident when I discovered that Luhmann's subject-free concept was essential for any potential methodological advancement on his theory of differentiation and for articulating his concepts with clarity and accuracy. Although this dissertation does not delve substantially into linguistics, my literature preparation encompassed the area of linguistics, conversational analysis, and discourse analysis. A Parsonian discussion of
theoretical sociology is pivotal. An extensive examination of the work of Habermas is included.

My approach illustrates Luhmann's theory of differentiation with: 1) a contextual discussion of postmodernism, 2) an explanation of a subject-free concept, 3) the use of a case study illustrating Luhmann's definition of differentiation, and 4) a discussion of problems inherent when modeling Luhmann's theory.

A postmodern world requires an approach to language that is sensitive to the increasing complexities of global social interaction. An initial step toward increasing sensitivity is to describe an alternate approach to language and social interaction. The postmodernist discussion around Luhmann's contribution to the sociology of modern society assists me to reassess and redefine old attitudes and biases.

I am more concerned with the way in which people interpret their world than personally reinvigorating my attempts to change it. Now, it is more important to understand how people come to conclusions about how things need to be changed. Today's world is a very complex environment; social systems need to reflect that complexity. Modern technology continues to create a plethora of tangled information sources. Postmodernism must develop the means to deal with the overload of information.
The explanation of a subject-free concept emerges in one form or another in philosophical discussions. Regardless of the viewpoint one espouses, the debate always returns to a rhetoric based on the ideology of subject. The alternative to outworn ideological dialogue is an analysis of healthcare policy, for example, conceived in terms of sociological structure or system. Niklas Luhmann insisted that society's problems be viewed from the perspective of the difference between the system and its environment. In other words, we, the observer, are part of the system of observation. That observation results in evidence of the difference between the subject discussed earlier, and everything that is its context.

Communication is the medium from which social systems operate. When the patient (speaker) is talking about his illness, these utterances are evidence of a process of internal observation (self-observation). In reference to the experience of the patient's illness, the physician (receiver/participant) responds as an external observer of the illness. Pursuant to Luhmann's terminology, language provides evidence of the knowledge we have of others and ourselves from the communicating social system. The patient's personal system of illness is only one of many systems of interpenetration that contributes to the knowledge of self and contributes to society's knowledge of illness.

The most important lesson learned from Niklas Luhmann's theory is that no matter how vulnerable the postmodern world may be, the questions raised by the debate around postmodernity make us aware that there is no longer any chance
to create correct models of society. The challenge is not only one of addressing the variety of related disciplines but also setting the stage for critical analysis and theoretical advancement.

As one continues to read theory and develop practical models, knowledge evolves. The reader's perspective changes through perception of the difference between the theory read and the model in progress. In other words, the degree of integrity depends on the difference between the theory and the model developed for application. The recognition of the tendency to creatively misread is a step toward bridging the gap between theory and practical application.
REFERENCES


APPENDIX A

SEGMENT OF CASE STUDY DIALOGUE (TEXT)

The following partial transcript is courtesy of Marlene von Friederichs-Fitzwater, Ph. D., Director, Health Communication Research Institute, Inc., Sacramento, CA.

The following is approximately the first half of the Clinical Encounter (about 15 minutes).

Physician: 005 So, what's new?

Patient: 006 Well, I'm doin all right, physically,
007 I'm doin all right, mentally,
008 I've been through one of those periods.

Physician: 010 Period of what?

Patient: 011 Well, you remember I was assaulted.

Physician: 012 Right.

Patient: 012 Okay, right. Well, it's not that funny.
013

Physician: 014 Well, did you get him back?

Patient: 014 Well, actually . . .
Physician:
015 You were taking him to court, last I heard.

Patient:
016 We both were cited because there were no witnesses and he said that I hit him also.
017
018

Physician:
019 I didn't hear that part.

Patient:
019 Oh, yeah. So the DA threw it out because it was his word against mine, so I took him to small claims court, and an hour before small claims court started, he called the bailiff and said that I had threatened his life, so that threw the whole court into turmoil and caused all of us to be searched and um, in other words, angered the, he's not even a judge in small claims, they are attorneys. They're called commissioners, and commissioner is the head one, who's, I'm sure anti-gay, Catholic, which I was excommunicated from the Catholic church, and, and let's see, what else, let's see one more thing, oh anti-union, for the union. So, they were all against me, I lost.

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Physician:
041 I wonder why.
Patient:
041 I know. So that sort of like has
042 got me angry and now I have to
043 appeal to the Superior Court.
044 Something else, you know, and
045 also my mother, she's doing very
046 badly in terms of a lot of
047 different things, but then she is
048 focusing on this too.
049 So even though I'm detaching myself
050 from that sort of, it's
051 still difficult in the sense that
052 we're very close and
053 I'm sorry that she is sad and
054 unhappy about it, but that
055 affects me too. Not as much as it
056 might have in the past,
057 I think I've gotten some strength
058 from certain things that help me with
059 it, but still it does affect
060 me and so,
061 um, and I have just, as of
062 September 13th,
063 I was diagnosed a year ago,
064 which was nice for me,
065 I mean, a year, but the thing is,
066 and I plan on more,
067 but the thing is, so it was sort
068 of an odd couple of weeks,
069 the last couple of weeks.
070 I know that affects
071 my health too and
072 I do see this psychologist,
073 Joanne Morrow, who helps me
074 quite a bit.

Physician:
075 She probably helps you more
076 than we could help you at
077 this point.
Patient:
077    Well, I don't know.
078    I think everyone is pretty equal.

Physician:
079    Yeah, your health has been
080    pretty good, knock on wood.

Patient:
081    It's been, it's been, it's been,
082    except for the two pneumonias,
         yeah it's been great.

Physician:
083    Yeah, yeah.

Patient:
083    And I was going to tell you also
084    that since it was my one-
085    year anniversary, I really
086    appreciate what you've done
087    for me, and
088    I am very grateful.

Physician:
089    My pleasure. Anyway, so you
090    think your main problem right
091    now is . . . .

Patient:
091    Mental.

Physician:
092    What kind of mental?

Patient:
092    Is that what you were
093    going to say?
Physician:
094 Well, I was going to let you
095 finish that.

Patient:
095 Uh, kind of, and I think
096 I would define that
097 as being angry,
098 I am angry. I don't know
099 whether I've gone through,
100 I've been diagnosed with
101 AIDS for a year so I
102 know Elizabeth Kuble-Ross and
103 all the different things.
104 I don't think
105 I'm in the anger stage because
106 I've gone through anger
107 a couple of times back,
108 but you can go in and out of
109 whatever, but I'm angry about
110 this Mr. [named] that assaulted
111 me, I'm angry at the judge
112 that threw this,
113 I mean the DA that threw
114 it out, I'm angry at those kind
115 and so I think mainly it's trying
116 to deal with this anger
117 and of course, live my life
118 despite the fact that I have
119 AIDS, and plus, my mother did
120 something to me. She called
121 a couple of my cousins.
122 I asked her not to tell them.
123 If the dissemination of information
124 is going to be done,
125 it's going to be by me and
126 that sort of angered me also,
127 so I'm sort of going through
128 an angry period.
Physician:
129 How are you dealing with all
130 this?

Patient:
130 Well, I don't know. The thing
131 with this, I was at Dr. Morrow's
132 today and I said,
133 How do I deal with it?
134 Well she said you see
135 I feel, and I feel fortunate,
136 I'm 34 years old.
137 I had a charmed life.
138 I lived in New York City,
139 I've been around the world,
140 I had money in the past and
141 I've had a very happy life.
142 And I think a lot of that has
143 to do with that I was in
144 this sort of, um space,
145 a safe space,
146 that I wasn't affected
147 by people like this
148 Mr. [named] or my mother or
149 things like that. So it's just
150 something that I have
151 to deal with, maybe put myself back
152 in that safe space, meditation,
153 whatever.
154

Physician:
155 How'd you get yourself in a
156 safe space like that?

Patient:
157 Well, it was because
158 I was a white male, gay,
159 living in the gay ghetto in
160 New York City, with a great
job with TWA, with lots
of money, um, having a great
time, attractive, witty,
you know in other words, um,
it's never been a problem
for me to have a good
time. So in other words, I
was just in that safe space,
in other words, I never had a,
I was never, I didn't have these
confrontations, I didn't, you
know, it was just, just that's
the way it was.

Physician:
173 I think I understand what
174 you're saying.

Patient:
174 But now I have to sort of,
you know, attempt to put myself
back in that space and part
of being, as the paper say,
terminally ill,
even though I don't feel that way,
sometimes I do and
sometimes I don't.
182 The fact that I don't have
anything to lose and so in the
sense that Mr. [named] can go to
court all he wants,
and myself, and my, I mean,
I've just, I don't know, you know.
It's been difficult, everything's
gone so great in the sense of
mentally for me, that I've had
some trouble, uh, this month

Physician:
192 Yeah.
Patient:
192 But you know I'm facing AIDS
193 and like I said, living my
194 life despite that, so I, uh, uh,
195 can, uh, certainly face
196 whatever else.

Physician:
197 You know these are problems
198 that you could have had even
199 if you never had AIDS.

Patient:
199 Oh, yeah.

Physician:
200 You know, you could have had,
201 you had a conflict with your
202 mother, not about this but
203 it could have been about
204 something else.

Patient:
204 Right.

Physician:
205 And you could have gotten in
206 a punching match with somebody
207 else, I'm not saying you are a
208 puncher, you could have got hit
209 by somebody else instead of a
210 punching match.

Patient:
210 I mean I should have, that's how
211 I feel about it now.

Physician:
212 No, no.
Patient:
212  Let me tell you something.
213  First of all, one thing is that
214  I realize now, one thing, and
215  I said this to Dr. Morrow today,
216  also, I wish that I would have
217  had these extemporaneous sort of
difficulties when I had my health
219  fully. In other words, I would
220  have rather had the fun, party,
safe space now, and then have the
problems like that don't have to
deal with AIDS back then, but it
doesn't work that way.
225  You know what I mean?

Physician:
226  Uh huh.

Patient:
226  But also . . .

Physician:
227  Why? Do you think it would have
228  prepared you better for now,
or something? Or . . .

Patient:
229  I just think that it would
230  have been, in other words, I'd
231  rather be, yeah I think
232  that I'd rather have had like
233  of sort of not so
234  charmed or fabulous a good time
235  or good life for a number of
236  year in New York, and just sort
237  of normal, and maybe a couple of
238  confrontations or maybe some
239  problems that I had to deal with,
240  and then now have things easier.
241  I don't want to spend the rest
of my life in court.

Physician:
243 I don't think you will.
244 I think this is probably just
245 a period you're going through
246 right now. And chances are,
247 that as soon as you get
248 through it all, it just so
249 happened that you had these two
250 very emotionally traumatic things
251 happen at once. But, I don't
252 think there is any reason to
253 suspect that that's going to
254 continue. And hopefully things
255 aren't going to be terrible,
256 you know, are going to be bad
257 with you and your mom forever.
258 Hopefully . . . .

Patient:
258 Oh, no, they're not bad,
259 it's just that, you know, yeah.

Physician:
260 Hopefully things will
261 get back on an even keel.
262 You know, your life is going to
263 return to normal for you.

Patient:
263 I think so.

Physician:
264 I don't think this is like
265 the beginning of something.

Patient:
266 No I don't feel that way either.
267 In any event, even if it were,
I would definitely, I think,
still have the strength and
the energy to, um, to face it and,
um, and I really am a firm believer
in no matter what you're dealt,
that kind of hand you're dealt
in life, I have always felt
this way, you don't have a choice.
Some people think you do, cop out,
go to bed, kill yourself,
whatever, but I have always felt
that you just face these
things, you do the best you can,
and you go on. And you're better,
even if you've lost.

Physician:

Yeah. You gotta, you gotta have
that kind of attitude I think.
Because, you know bad things happen
to everyone, in her life, I'm sure
bad things happen in my life that
burn me out, happen in your life but
life keeps on going.

Patient:

I am very fortunate for this and
I am very fortunate for the
AZT and I'm fortunate
for Dr. Morrow.

Physician:

Okay, good. Any medical problems?
APPENDIX B

DETAILED ANALYSIS OF CASE STUDY SEGMENT

The topic is an important aspect of a study of the structure of discourse. Criteria used to identify and distinguish topics from one another are as follows: "1. Subject matter differences, 2. Prosodic differences from the previous topic, and 3. The internal cohesion of the topic" (Shuy, 1993, p. 21). I use Roger Shuy's criteria when I code dialogue for changes in topics (TPC). The use of the term "topic" should not be confused with the term "theme." Theme, as I use it, is more all-encompassing than topic. The tracking of topic changes is important to establishing system boundaries. The following example from my sample illustrates my use of topic changes in tracking theme development. (See Appendix C, Diagram B.) The clinical encounter begins with two topic changes initiated by the physician. The first starts the session, followed by another, prompting the patient to begin the first indications of a subtheme development. The subtheme eventually develops as an assault subtheme (T1). The patient introduces the next topic change, diverting the conversation from T1a to the start of a separate subtheme: diagnosis (T2). The next topic change is brought on by a physician's question requesting further elaboration of the nature of the "main problem." This triggers the patient to return to subtheme (T1), and T1b continues the development of the assault subtheme (T1). The diagnosis subtheme (T2a) continues concurrently and
to a point beyond the beginning and ending of thematic segments T1b, T1c, and T1d. There are no topic changes by either conversant until the physician ends the T2a section with a question. That question is approximately at the half-way point in the encounter and, due to its content, redirects the dialogue toward the topic of "medical problems." Tracking topic changes does not identify the boundaries around the commingling subthemes (T1b, T1c, & T1d within T2a). Themes are the result of differentiation.

To illustrate the process of differentiation, I will use the first half of the clinical encounter dialogue (A002) and concentrate on interpreting segment T2a of the diagnosis subtheme. The synthesis or differentiation results in the identification of distinct subthemes. Converging at this juncture is the expression of anger. The physician, by allowing the patient to continue, provides the opportunity for the patient to fully express himself. The physician gives the patient ample opportunity to change topics. The expression of anger is initially introduced by the patient in isolation from other anger references. The patient continues the conversation with occasional physician-assisted extensions of the patient's thought. In the middle of the subtheme segment (T2a), the physician attempts a topic change, but the patient interrupts. The physician immediately asks a question that requests an elaboration on what the patient was saying. The next two questions asked by the physician lead to what appears to be very therapeutic for the patient. My conclusion that the diagnosis subtheme segment T2a was therapeutic is a result of several factors.
First, the patient was given the opportunity for expression. Second, the physician directed appropriate queries that a) resulted in a request for further information on how the patient was dealing with an anger period, and b) requested further information about how the patient implemented the solution he mentioned just prior to the question.

I continue this analysis of the diagnosis subtheme segment T2a by returning to track the introduction of the subtheme. The initial topic change (TPC) made by the patient did not explicitly include the content unit, "diagnosis" (a2). The transition into the TPC is as follows: (see Appendix A)

Patient (PT) line #39  So, they were all against me, I lost.

Physician (PH) line #41  I wonder why.

PT line #41  I know. So that sort of like has got me angry and . . . .
The topic change is smooth, and the physician assists in extending the patient's thoughts with the rhetorical, "I wonder why." That comment by the physician is enough prompting for the patient to change topics. Initially, it would appear that an anger subtheme could develop at this point. The anger content unit does not return until the physician initiates the topic change in line #92 with a question. As the diagnosis subtheme develops, it becomes obvious that the patient has concerns about his diagnosis of AIDS. Since the patient in my sample has known about his diagnosis for some time, the diagnosis content unit represents any reference he makes about AIDS, however expressed. The initial reference to his AIDS is implied through the sentence: "My mother, she's doing very badly in terms of a lot of different things" (line #45). The implied reference to the AIDS syndrome is deciphered only after a complete study of the entire dialogue. The conclusion made for coding these implicit mentions of the diagnosis content unit (a2) are reached only after identifying all explicit a2 segments. The first explicit mention of a2 comes from the patient: "I was diagnosed a year ago," (line #63), although the substance AIDS remains silent. Later in exchange, the patient acknowledges his disease: "I've been diagnosed with AIDS for a year so . . . ." (line #100). The a2 content unit continues to be explicit until the conclusion of the assault subtheme segment, T1a. The concurrent subtheme, T1b, concludes with an change from an explicit a2 to an implicit a2. This portion of the transition is as follows:
PT line #118  "despite the fact that I have AIDS, and plus, my mother did something to me."
PT line #123  "If the dissemination of information is going to be done, it's going to be by me."

The fragment (in line #123), "dissemination of information," is a reference to knowledge of the patient's diagnosis discussed with others outside the clinical encounter.

Although this implicit to explicit change marks the conclusion of subtheme T1b, theme T2a continues. The continuance of the major thematic segment (T2a) parallels a series of anger content units (a3). These units, disappear from the conversation prior to the transition into the assault subtheme, T1c. The themematic section T2a concludes gradually for the patient, but the physician signals the end with a topic change at line #292.

The proceeding study demonstrates gradual introductions into explicit content units and abrupt changes from explicit to implicit units. The environmental dynamic only becomes active when the speaker begins to speak and the system of utterances combines with information to provide understanding.