

NONVERBAL BEHAVIOUR IN THE PROCESS OF THE THERAPEUTIC INTERVIEW
- AN ECOSYSTEMIC PERSPECTIVE

by

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SUMMARY

Communication can be divided into two broad areas namely, the verbal and nonverbal levels. While attention has been paid to nonverbal communication in the literature, few studies address the nonverbal communication that takes place in the natural setting of a therapeutic session. The present study provides such a naturalistic study, where the verbal content of actual therapy sessions are integrated with the nonverbal content to yield a holistic view of the session. An ecosystemic epistemology is adopted in this study, and represents a move away from more traditional approaches to nonverbal behaviour which are largely confined to a positivistic framework of thought and design.

Symlog Interaction Scoring is employed as a practical method of assisting observers in distinguishing nonverbal behaviours, which are usually perceived unconsciously, and lifting them into consciousness, allowing this information to be integrated with the meanings and hypotheses generated during therapy. By deliberately including descriptions of nonverbal behaviour, the descriptions of therapy were broadened, thereby providing a more holistic approach to therapy.

KEY TERMS

Nonverbal communication; Therapeutic context; Ecosystemic approach; Symlog Interaction Scoring; Naturalistic setting; holistic view; Recursion; Pattern; Relationship between verbal and nonverbal communication.

CHAPTER 1

INTRODUCTION

"We respond to gestures with an extreme alertness and, we might also say, in accordance with an elaborate and secret code that is written nowhere, known by none, and understood by all "

Sapir (in Bahnsen, 1980, p.124)

The words of Sapir alert us to the almost mysterious, yet vital role that nonverbal behaviour plays in all our lives. While much attention has been given to research on nonverbal behaviour, it still remains an area that is far from understood in the broader field of human communication. In this study no effort will be made to write the "secret code" of nonverbal behaviour, nor will a complete understanding of it be attempted. Rather, an effort will be made to describe this aspect of communication in a therapeutic situation, within the embrace of an ecosystemic framework. The present chapter will serve to describe the need for such a study, and will demonstrate its contribution to an understanding of nonverbal behaviour in the naturalistic setting of actual therapeutic sessions. The aims and method of the study will be outlined and the theoretical framework of the study will be presented.

By its very nature, nonverbal behaviour is an aspect of communication which is less accessible to conscious control than is its verbal counterpart. As a

result of this, it is this author's opinion that less attention tends to be paid to the nonverbal than to the verbal parts of communication. This is especially true in the therapeutic encounter where much emphasis is placed on the verbal meanings that the client brings to therapy. For example, traditional psychodynamic therapies as well as the more modern narrative therapies both emphasise the individual's own meanings conveyed through words and the symbols associated with these words, which have evolved over the years of that person's lifetime. It is this author's opinion that the meanings conveyed by nonverbal communication can easily be overlooked and regarded as being of secondary importance to the more verbal aspects of communication. The integration of the verbally conveyed meanings with nonverbal communication can contribute towards enriching the therapeutic context.

It is a common belief that man's verbal language evolved from the iconic codes of kinesics and paralanguage, which largely resemble those used by nonhuman mammals (Bateson, 1987). This belief would imply that verbal language is on a higher level of evolution than is the more iconic nonverbal communication. However, as Bateson points out, in the process of evolution, when one function takes over another, the first function generally falls into disuse and decay. Thus, if verbal language had replaced kinesics and paralanguage in communication, we could expect that such iconic systems would have undergone atrophy. Bateson notes that this is not the case. In fact the human has elaborated his iconic systems of communication as is evident in many complex art forms such as music, ballet, mime, and so forth. Iconic communication serves different functions from that of verbal language and thus, both must be considered to be of equivalent importance in any study of human communication. This study aims to address both aspects of communication.

Kiesler (in Davis, 1984) states that the most crucial point on which to describe the relationship between client and therapist in the therapeutic encounter

is the nonverbal behaviour that takes place in this interaction. Davis (1984) notes that although the quantity of research into nonverbal behaviour has exploded in the past four decades, the understanding of the place of nonverbal behaviour in complex processes such as therapy, has not been addressed adequately. She says although psychotherapy has been often quoted as the aim of some of these research endeavours, little has fed back from these studies to inform the therapist. According to Davis one suggestion for the limited use of nonverbal studies for therapists is based in the following three factors:

- research is based in the observations by observers who do not participate in the therapeutic interaction.
- research situations are contrived and cannot readily be applied to the actual therapeutic encounter.
- research judgements are based on a limited set of variables.

Davis (1984) goes on to suggest that the nonverbal studies that she has found to have the most clinical value are those which have not been experimentally rigorous, but which have leant towards naturalistic observation of the therapeutic situation. She suggests that such studies should look at the multivariable nature of nonverbal behaviour, yet should be practical, in that they should be of use to the therapist in application to the everyday therapeutic setting. Such an approach should reveal aspects of the therapist-client relationship and the nature of therapy. These aspects would feed back to influence current theories of such relationship (Davis, 1984). Kiesler (1982) notes that researchers can no longer afford to focus exclusively on the linguistic aspects of communication by using typescripts and audiotape recordings in their research, and advocates the movement to visual channels (such as videotaped recordings) in order to capture nonverbal messages which he says are crucial for understanding the communication of emotional and relational messages. This study employs the live observation of therapeutic sessions, as well as the

observation of videorecordings of these sessions for providing descriptions of nonverbal behaviours.

Kiesler (1982) notes that the vehicle for human transactions is communication and this includes what he terms linguistic and nonverbal messages, which make up a complex stimulus pattern. Kiesler contends that the way we feel about ourselves and each other and the kinds of relational claims we place on each other are communicated primarily through nonverbal messages. He notes that although linguistic and nonverbal messages can be consistent with each other, they can also show inconsistency or contradiction, or can be incongruent. He writes: "Interpersonal communication is inherently circular, incorporating the features of feedback, redundancy, and nonsummativity." (Kiesler, 1982, p. 11). Thus, it is necessary for a therapist to take into account the two levels of communication, and the recursive relationship between them if an understanding of the therapeutic process is to be gained, and an understanding of how this relationship between therapist and client is reciprocally defined by both the client and the therapist. It is therefore essential for a study of the therapeutic process to incorporate both levels of communication in the description of the interactions that occur between participants. This study addresses, directly, both levels of communication.

Focus of the Present Study

The present study employs the ecosystemic principle of recursion and the understanding of the relationship between the two kinds of communication. The use of this principle is necessary for a therapeutic study, as if this is not taken into account, the kind of relationships which are established nonverbally may be contradicted by the verbal relationship. This would mean that the problem

defined system, as described by Anderson and Goolishian (1988) will not be talking a co-created language in therapy. By taking into account the nonverbal messages conveyed by all members of the therapeutic system, the present study gives attention to both levels of communication and both levels are incorporated into the overall descriptions of therapy. A more detailed discussion of the two levels of communication is given in the paragraph entitled *Two Levels of Communication* (see p. 18).

The present study includes the naturalistic observation of actual therapeutic sessions only. The multivariate nature of nonverbal behaviour is recorded by live observation of client/s' and therapist's naturally occurring behaviours by a team of observers using a one-way mirror and video taped recordings of the sessions. Feedback given by the observers to the therapist plays a vital role in the subsequent therapy sessions, thus creating a recursive process between observation of nonverbal behaviour and subsequent therapeutic behaviours. Thus, the observers participate in the ongoing therapy sessions. As such, the criticisms listed above are eliminated, and thus the clinical usefulness of the study is enhanced.

The study is based on an ecosystemic epistemology which represents a different philosophical basis from that of most research on nonverbal behaviour recorded in the literature to date. In the ecosystemic approach, the emphasis lies on the patterned interaction that occurs between individuals and the meanings which are co-created between observers, rather than on the considerations of isolated variables as is found in most empirical studies. Thus, wholeness rather than reductionism is sought.

Aims of the Present Study

The initial aims of this study were formulated as follows:

- to broaden the description of a number of therapeutic sessions by providing a study of the reciprocal pattern of nonverbal behaviour between the therapist and client/s in the natural setting of actual therapy sessions, thereby providing interested therapists with a description of nonverbal behaviour which is directly applicable to their own therapeutic encounters.
- to take into account specifically descriptions of the nonverbal behaviours that form part of any therapeutic session and to use them recursively with the descriptions based on the verbal meanings created in language during the sessions, in order to include, in a purposeful way, both levels of communication in gaining an understanding of the therapeutic process and in formulating therapeutic interventions.
- to find a concise and practical means of recording actual moment to moment behaviours in an ongoing therapy session which will provide a relational picture of nonverbal behaviours. Employment of the Symlog Interaction Scoring procedures (discussed under *Measuring Instrument - Symlog*, p. 56) as defined by Bales (1979), is employed to this end.
- to provide a study that will be aimed largely at exploring the patterns of relationship between interactants that emerge through the generation of Symlog descriptions of nonverbal communication and on the employment of these descriptions in gaining an understanding of how the client/therapist system maintains its organisation. These descriptions will be used in gaining an understanding of the system and in formulating therapeutic interventions.
- to conduct a study wherein the researcher is included in both the researched therapy sessions and in the recording of such sessions. This will allow for

a self-referential view of therapy and the research outcomes, as posited by Keeney (1983), where the observer is in the observed. The coding of nonverbal behaviours will occur across more than one session in some cases. This will allow for the outcome of the coding procedures to be fed back into successive therapy sessions, providing the therapist with feedback which she could use to alter her position in future sessions. Thus, the therapist/observer is in the observed field. This view accords with what Sluzki (1985) terms a second order cybernetic view, which is essential to an ecosystemic understanding of therapy, and represents a move away from the research to date which can largely be said to be of a first order nature, where the observer remains outside the system she observes.

Method Used in the Present Study

The objectives of the study will be to focus on the nonverbal behaviours of both therapist and client/s, and allowing for the recording of such behaviours by a team of observers, using Symlog Interaction Scoring (described in detail in chapter 4) which is fed back to the therapist. Thus, descriptions of nonverbal behaviour are integrated with the usual descriptions of therapy, thus serving to broaden the descriptions of the process of therapy and to provide a picture of the patterned interaction between the client/s themselves and between client/s and therapist. In this way the therapist's awareness of the complementary patterns of nonverbal behaviours between herself and her client/s are used to effect change on the level of microprocess present in the therapy room. As stated by Keeney: "successful therapy requires the creation of alternative forms of feedback which will provide an avenue for appropriate change" (1983, p. 67). Thus, such feedback is used to effect change in the therapeutic encounter. In this way in addition to the verbal aspects of therapy, which are often the main

focus of attention in the therapeutic process, the effects of nonverbal behaviour will be used in the co-creation of therapeutic change.

An Overview of the Following Chapters

The following chapter will review the place of nonverbal behaviour in communication and will present a theory of communication. The principles underlying this theory will be employed in this study. Chapter 3 follows with an overview of the main tenets of an ecosystemic model and a comparison is made between these and the tenets of a Cartesian-Newtonian model. The application of an ecosystemic model to therapy is also described, together with a discussion of the method employed in the present study. Chapter 4 focuses on the research design of the present study with an outline of the methods and procedures used. Chapter 5 contains the descriptions of the therapy sessions used for study, together with the outcomes of the Symlog coding procedures employed for the recording of nonverbal behaviours. The final chapter contains a discussion of the study, including the outcome of the Symlog coding as well as a discussion of the fit of this method with an ecosystemic epistemology.

CHAPTER 2.

A THEORETICAL BACKGROUND AND LITERATURE STUDY

The Place of Nonverbal Behaviour in Communication

Many attempts have been made to bring order to the broad field of nonverbal behaviour by classifying and categorising different aspects of the field. Some authors begin by distinguishing between behaviour on the one hand and communication on the other, by describing the former as any action or reaction that an organism can perform, while the latter is taken to refer to a message of shared meaning which is transmitted from one person to another (Burgoon & Saine, 1978). Such methods of separating behaviour into what is communicative and what is not reflects a reductionistic frame of reference that is pervasive in the literature in studies of nonverbal communication. Scheflen (1980) avoided such distinctions by considering all behaviour as communication. This view is shared by Watzlawick and his co-authors, who stated "One cannot not communicate" (Watzlawick, Beavin & Jackson, 1967, p. 49). Scheflen (1980) provided a useful classification of behaviour, both verbal and nonverbal which will be briefly considered in order to indicate which aspects of behaviour will be given attention in this study.

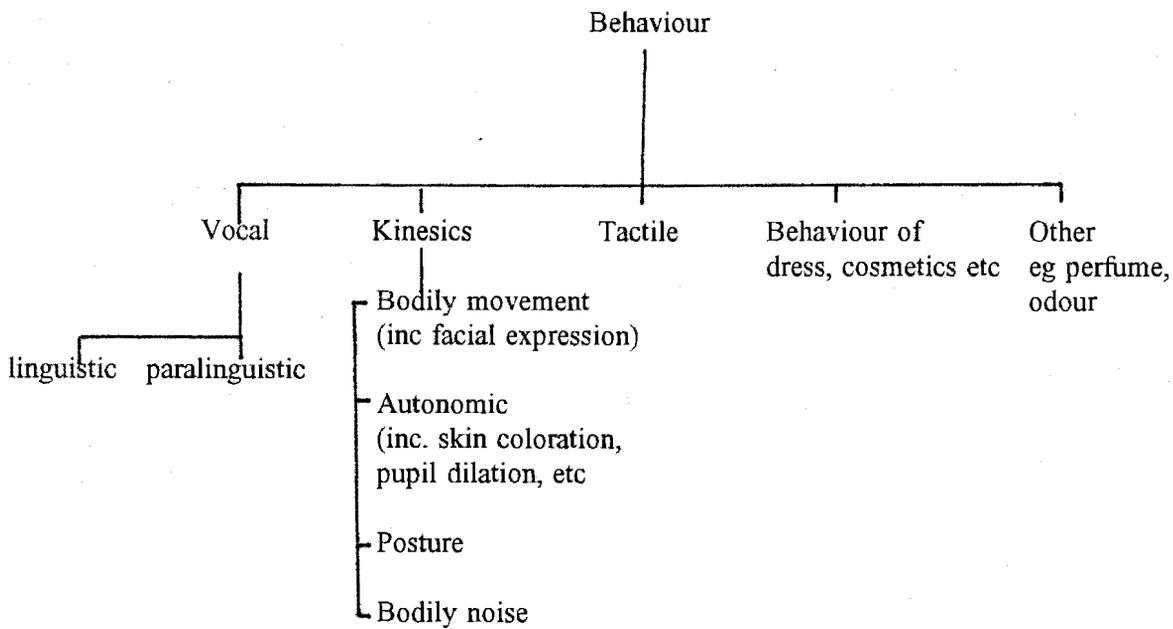


Figure 2.1 A Diagrammatic Representation of Schefflen's Classification of Behaviour (Schefflen, 1980).

The present study will cover the areas of paralinguistic behaviour, kinesics, tactile behaviour as well as behaviour of dress and cosmetic adornments as classified by Schefflen (1980). Thus, all observable behaviour will be taken into account and will be considered to be communicative, as all such behaviour can serve to qualify the verbal interchange that occurs between people. These behaviours will be discussed more fully in the paragraph entitled *Two Levels of Communication* (see p. 18).

An Historical Review of the Field of Nonverbal Behaviour

Interest in nonverbal behaviour is not confined to modern times. The study of nonverbal communication can be traced back to the Hellenic period with the works of Aristotle which reflect his study of the nonverbal communication of emotional states (Bahnsen, 1980). Bahnsen notes that philosophers such as Kant (in 1798) and Spinoza (in 1627) included nonverbal studies in communication of affect. It is apparent that throughout history man has been interested, not only in the meanings conveyed by his words, but also in the possible meanings conveyed by the nonverbal communications which form an integral part of his inborn means of communicating with others. The present study would be in line with the studies of old, in that a search for the meaning conveyed by nonverbal communication is sought. The present study will, however, attempt to go beyond the isolated exploration of either mode of communication, by attempting to describe the recursion between nonverbal and verbal meanings wherein each mode of communication qualifies the other. Should a person not understand a spoken word, she could consult a number of dictionaries. They would provide her with definitions of the unknown word, which are agreed upon by the scholars of language. This would help her to gain an understanding of the meaning connoted by the word (although the context in which the word is spoken would also need to be understood in order to understand the communicated message). However, a similar explanation of a gesture would not be as readily available. Gestures are perceived, and meanings attributed largely at an unconscious level as noted by Bateson (1987). Gestures (and other nonverbal communications) are seldom held up for scrutiny in the day to day process of communication, and hence their meanings are seldom sought in a conscious way. In order to understand meanings generated in a therapeutic context, it should be remembered that the meaning of verbal communication is always determined by the context in which the communication takes place. The meaning of each communication

is co-created between two people within the context of their relationship (see *Two Levels of Communication*, p. 18). Thus, the meaning of communication, as it is conveyed through words and through gesture, is dependent on the context of the relationship between the interactants and therefore cannot be reified. This study examines nonverbal communications in a deliberate way. An effort will be made to broaden the meanings generated in an ongoing therapy to include the patterns of nonverbal behaviours which occur between interacting persons which form such a context and which qualify verbal meanings.

Returning to the historical study of nonverbal communication, it can be seen that in more recent times studies of nonverbal behaviour became focused on various specific aspects of the nonverbal content of communication per se, while other studies compared the nonverbal with the verbal parts of communication (Bahnsen, 1980). With the increase in importance given to empirical science in the late nineteenth and twentieth centuries, the studies of nonverbal behaviour turned to the methods employed by empirical science to gain recognition. Schefflen (1980), in discussing the history of human communication, suggests three lines of development.

The first line of development he calls the "organismic" approach. In this approach the individual organism was seen as a communicating entity, and communication was explained in a reductionistic fashion, that is, the communicator was seen to emit signals or was seen as responding to a stimulus in a mechanistic fashion which relied on simple linear cause-effect actions. Following this trend, psychoanalysts saw communication as an expression of an instinct, drive or defense. For example, in studies by Deutsch, the postural behaviour of the patient was taken as a manifestation of his past recollections (Bahnsen, 1980).

Scheflen (1980) notes that in the 1950's there was a general move towards considering relationship and social phenomena in the related fields of ethology, social psychology, social psychiatry and family psychotherapy. The focus of studies moved from being on the individual to being on the social group of which the individual was a part. However, even then, the group was largely seen as a gathering of individual drives and motives, according to Scheflen. Many recent studies can be said to reflect such an organismic approach. In a study by Hall, Harrigan and Rosenthal (1995), nonverbal behaviour is considered to be the consequence of antecedents such as characteristics of the individual which can be used in predicting clinical effectiveness. A call is made by the authors for research in which nonverbals as antecedent variables will be manipulated to show cause and effect relationships. Davis and Hadiks (1994), in studying the nonverbal aspects of therapist attunement, state one of their aims as being to demonstrate the validity of nonverbal behaviour as a measure of state changes during therapy. Burton (1993) considers nonverbal behaviours to be a way of concealing conflict over aggressive impulses in the course of analysis. Burgoon and her co-authors used nonverbal cues as a means of indexing the presence of arousal in human interaction in a therapeutic setting with depressed patients (Burgoon, Le Poire, Beutler, Bergan, & Engle, 1993). Trubitsyna (1992) discusses the usefulness of nonverbal behaviour in diagnosing conditions of anxiety, depression, autism, schizophrenia and other conditions which are seen to reside in the individual. All of these studies view nonverbal behaviours as an expression of a "state" or "condition" arising from within the individual being investigated. Man is objectified and his emotions, impulses or personal characteristics are reified. Thus, these studies reflect a reified, a-contextual view of nonverbal behaviour.

A second line of development then emerged termed by Scheflen (1980) as the "social level" approach. This approach differed from the organismic approach in that the organisation of the group was taken into account. In this approach

group structure was seen to influence communication and the concept of feedback effects of communication within a group were first recognised. Thus, this approach showed a move away from the linear cause-effect determinism of earlier thought to an understanding of the interactive processes between the individual and the group of which he was a part. This approach is reflected in the numerous studies which consider nonverbal behaviours to be influenced by the culture of the wider social group. A study by Remland, Jones and Brinkman (1991) in which they compare the proxemic (distancing) and haptic (touching) behaviours of dyads from different cultures, shows how the social norms of the cultural group effect proxemic and haptic behaviours in interaction. Matsumoto and Assar (1992) studied the effect of language on judgements of facial expressions of emotion. They found that bilingual (English and Hindi speaking) college students recognised the expression of anger, fear and sadness more acutely in an English than a Hindi setting, thus demonstrating the mediation of language (which is related to a cultural group) on recognition of emotion through nonverbal displays. Matsumoto and Kudoh (1993) examined the differences that American and Japanese cultures have on the attribution of personality characteristics to individuals, based on smiling behaviour of the individuals observed. These studies all reflect the influence of the wider system on nonverbal behaviour, however, a linear approach is still adopted to these studies in that culture (and the wider social system) is seen to influence the behaviour of the individual in a unidirectional way. Man is seen to be the product of his culture, and the dynamic interchange between man and the group of which he is a part is not taken into account.

A third line of development, according to Schefflen (1980), then emerged wherein the content of communication became the focus, with importance being given to the behaviour of the communicators. This was his "third line" approach. The patterns of behaviour were seen as parts of a system, a view related to Von Bertalanffy's (in Schefflen, 1980) general systems theory. Systems theory included

the context of a system wherein the system and the environment were seen as interlaced with an open flow of information occurring between the two. Steele McCardle (1974) reports a multidisciplinary study of nonverbal communication conducted by Fromm-Reichmann and her associates in Palo Alto, which serves as an example of a systems approach to nonverbal communication wherein many aspects of interaction were studied. An attempt was made in this study to include the micro aspects of linguistic and kinesic behaviours in order to address the complexity of the communicative process through the eyes of psychologists, psychiatrists, anthropologists and linguists who participated in the study. The interrelation of all system levels were taken into account to yield a vision of the complexity of the communicational process. Later studies by Birdwhistell and Scheflen (in Steele McCardle, 1974) refined the systems approach by including cultural aspects in their descriptions. In these descriptions the concept of organisation within the parts of a system were described. Information from structural linguistics and kinesics were included as parts of the study of a total system of communication. Attention was paid to the way that constantly recurring units identified by kinesics (termed kinemes) and units identified by linguistics (termed morphemes, words, phrases and sentences) seemed to be organised into patterns of communication. Attention was also given to the interaction of the different levels of pattern, for example, the interaction between kinesic patterns and linguistic patterns of behaviour. Thus, in this approach, the complexity of communicative behaviour was acknowledged as well as the all important concept of the interaction between constantly recurring patterns of behaviour.

While many recent studies of nonverbal communication have attempted to incorporate the broader system of which the individual is a part (Kenner, 1993, Matsumoto & Kudoh, 1993, Remland, et al., 1991), the field of nonverbal study is still pervaded by empiricism with few studies reflecting Scheflen's (1980) "third line" approach. While the latter group of studies did endeavour to include

many levels of system and to examine the complexity of each system level, they were largely confined to the study of the interaction between system levels with the observer seen as on the outside of the system being observed. Thus a first order cybernetic view, as explained by Sluzki (1985), was reached in these studies. A second-order cybernetic view in which the interaction patterns of all levels of system, together with the reciprocal influence of the observer and the system she observes, was not included in these studies.

At the same time that Scheflen (1980) wrote of communication, Gregory Bateson and his colleagues (Bateson, Jackson, Haley & Weakland, 1956) in Palo Alto were involved in the field of family therapy. They evolved a theory of communication based on Russel's theory of logical types. They said that normal human communication involves multiple logical types, and that humans use different communicational modes in communication as can be seen in phenomena such as play, fantasy, sacrament and metaphor. Humans rely heavily on nonverbal behaviours to label the messages we transmit in these modes of communication and to define the relationship between communicants (Bateson et al., 1956). The role of nonverbal communication played an important role in the development of this theory. Bateson's theory of communication was later elaborated by Watzlawick (Watzlawick et al., 1967) and will be considered in the following section.

Another theory of communication in which nonverbal communication was given attention was in the interpersonal theory which was based on Sullivan's principles and elaborated by Kiesler (1982) and others. In this approach the focus of study moves from human behaviour in isolation to the behaviour of persons relating to and interacting in a system with other persons. Even the concept of self is seen in terms of interaction with others. A constructivist as well as a phenomenological position is held in which all human action (including verbal and nonverbal behaviour) is seen as linked to the behaviours of others in a

circular rather than a linear way.

Thus, several different theories of communication, all of which focused on the nonverbal aspects of communication, can be seen to have evolved from different perspectives and fields of endeavour and have all tended toward a systemic understanding of communication. However, most studies were confined to a first order cybernetic approach where the researcher or observer is kept outside of the system she observes, or as in von Foerster distinction (in Keeney, 1983), the studies are confined to cybernetics of the observed system representing a first order cybernetic view, rather than to cybernetics of observing systems representing a second order cybernetic view .

The influence of observer on the system she observes and the reciprocal influence of the observing system on the observer is largely omitted in these studies.

A Theory of Communication

As pointed out above, Watzlawick and his associates proposed a theory of communication, largely based on the principles put forward by Bateson (Watzlawick et al, 1967). As mentioned before, all behaviour is taken to be communicative. Even silence or the so-called absence of a behaviour can be taken to have message value. Bateson (1987) notes that the unsent tax return can, for example, convey a powerful message. Watzlawick notes that any communication "implies a commitment and thereby defines the relationship" (Watzlawick et al., 1967, p. 51).

Two Levels of Communication

Every communication can be thought of as containing two levels of message. Firstly, there is a content level through which the meaning of the communication is conveyed through words. This level, according to Watzlawick, (Watzlawick et al., 1967) is conveyed mainly through the process of digital communication, involving words which have an agreed upon meaning and follow the rules of logical syntax . Secondly, a relationship level is conveyed in every communication. This is conveyed mainly through analogic communication, and is less exact than digital communication, not sticking to the rules of logical syntax. This level involves nonverbal communication to a large extent. The relationship conveyed by the nonverbal communication establishes a context within which further communication can then occur. The same words may be used in a communication, while the nonverbal tone of voice for example may define a totally different relationship level which either allows for or blocks further communication. For example a mother may invite her busy colleague to "Have your tea now", which may convey concern for her colleague who is her equal in this context, to take a much needed break. They may then enjoy a conversation over a cup of tea. The same woman may instruct her three year old son to "Have your tea. NOW!!", in order to avoid a spillage of the beverage and hereby establish her authority over him by telling him what to do. The child may respond by quietly drinking his tea while avoiding his mother's gaze. The same words are used, but a different level of relationship is conveyed by the nonverbal level of communication, as well as by the relational context in which the communication occurs, and largely shapes the interactions that follow. The nonverbal level can be said to qualify the verbal level of communication.

Bateson spoke of this double level of communication as follows:

Whatever communication we consider, be it the transmission of impulses in a neural system or the transmission of words in a conversation, it is evident that every message in transit has two sorts of "meaning". On the one hand, the message is a statement or report about events at a previous moment, and on the other hand it is a command - a cause or stimulus for events at a later moment. (Ruesch & Bateson, 1968, p. 179)

Thus, Bateson's "report" aspect of communication can be compared with Watzlawick's "content" aspect, while the "command" level can be compared with the "relationship" level. Keeney and Ross (1992) make a two level distinction in their theory of communication by defining a semantic and a political level of communication, the former involving the meanings conveyed by the communication and the latter having to do with the cybernetic organisation of the communication in human relationship systems .

In terms of the approach of Keeney and Ross (1992), these two levels of communication should not be seen as diametric opposites. Rather, the two should be viewed as a dialectic, with each part informing and being informed by the other in a recursive manner within the broader process of communication. The relationship between the interactants establishes a context, giving meaning to what has passed before and what will follow in an interaction sequence. A healthy relationship is characterised by a balance and congruence between content and relationship. Pathology is evident when there is an overreliance on the relationship aspect in the pattern of communication (Watzlawick et al., 1967).

Patterns of Relationship in Communication

Looking at the relationship level of communication, Bateson (1987) noted that the communication between two or more people inevitable followed a pattern wherein sequences of behaviour tend towards a cumulative effect. He proposed two types of patterns seen in the interactions between individuals (Bateson, 1987). Firstly, symmetrical patterns, where the behaviours of two people are regarded as being of a similar type where more of the behaviour by one stimulates more of the same behaviour by another in a recursive way. Such behaviour can accumulate to the point where a climax is reached, called "schismogenesis" by Bateson (1987) which can lead to the dissolution of the system. Secondly, complementary patterns can exist, where the behaviours of two individuals are dissimilar, yet they fit in such a way that more of the behaviour of the one person leads to more of the complementary behaviour of the other person. For example in the case of a dominant man and a submissive wife, dominant behaviour of the husband elicits submissive behaviour of the wife and vice versa. Such a pattern also tends towards schismogenesis. It is desirable that in a healthy relationship, a balance be maintained between these patterns of interaction. That is, an individual should not be bound to one way of relating only. In a study of the Balinese culture, Bateson notes that in this society there exists a balance between symmetrical and complementary patterns of interaction at the cultural level and thus, the point of schismogenesis is never reached.

Levels of Abstraction in Communication

Bateson (1987) notes that human behaviour always operates at many contrasting levels of abstraction, for example, verbal behaviour operates at the denotative level (where a word is used to convey a conventional meaning), the metalinguistic level (where sounds and gestures, rather than words, are used to

convey a meaning) and the metacommunicational level (where communication about a communication takes place, for example in the animal kingdom, when a soft nip conveys the message "This is play"). He notes that in the evolution of communication, an important developmental stage was reached when the organism ceased responding solely to the mood signs of another and instead became able to recognise the sign as a sign. This was then followed by language. Metacommunication became possible with this development, that is, we were able to communicate about communication, which represents a different level of abstraction.

Watzlawick (Watzlawick et al., 1967) notes that Bateson's command aspect of communication is of a higher logical type than the report aspect and can be conveyed verbally (for example with the statement "I am only joking") or nonverbally (with for example, gestures or tone of voice). He says the relationship level of behaviour classifies the content level and as such is a metacommunication. Watzlawick notes that pathology arises from patterns of disturbed communication wherein the different levels of abstraction become distorted and confused. Bateson and his colleagues proposed a double bind theory of the development of schizophrenia wherein the schizophrenic person's communicative style can be seen to have developed in response to a pattern of communication in the family where the levels of abstraction are consistently confused (Bateson et al., 1956).

Implications for Therapy

The theories of communication discussed above have important implications for therapy. Both the content and the relationship parts of any communication, by the therapist or the client, must be attended to if the maximum benefit is to be gained from a therapeutic session. Patterns of relationship that the client forms

in the world outside the therapy room will be enacted to an extent with the therapist. For example a person who tends to be dependent in his relationships in general will tend to form a relationship with the therapist where he can maintain a dependent role while the therapist occupies a complementary role (for example by taking charge and making all the decisions in therapy).

Such patterns should be noted by the therapist so that she may change her style of interaction in therapy, and thus introduce an alternate context of relationship thereby opening up different patterns of interaction between herself and her client, which may free him to adopt a different role (Keeney & Ross, 1992). The recording of nonverbal behaviours of both herself and her client would greatly aid this process, as the relationship aspect of communication is largely conveyed nonverbally. For example, should a client remain quietly withdrawn in a session, while the therapist speaks a lot and takes up much of the interactional space, the therapist could help to create a space in the next session by remaining quieter. This would enable the client to interact more freely. By introducing a balance of interacting styles into the therapy, new ways of interacting can be experienced by the client which will represent change.

An Overview of the Chapter

Much can be gained from a historical study of nonverbal behaviour as well as from a study of the evolution of communications theory. The present study adopts many of the principles of communication that have been identified in earlier theories, but also makes an attempt to move away from the limitations seen in many first order studies. An ecosystemic model, which is adopted in the present study, includes the second order cybernetic concept of the observer being in the system that she observes, and thus enables the reciprocal influences between client and therapist to be included in the ongoing descriptions of the therapeutic process (Keeney, 1983).

The therapeutic context was chosen for the present study as ongoing therapies formed a vital part of this therapist's training. An interest in the nonverbal aspects of communication, together with the idea that much meaningful information is lost in the therapeutic context by a tendency by this therapist to neglect to describe fully the nonverbal aspect of therapeutic interaction, led this therapist to attempt to include nonverbal behavioural descriptions in the therapies of which she was a part in a meaning generated way. The ecosystemic approach was adopted in the training context of which this therapist had been a part, and was seen by this therapist to have the advantages of holistically including all systems levels in its approach as well as to consider the observer's role in the system which she observes. By including descriptions of her own nonverbal behaviours in the observed therapy sessions and using these descriptions to broaden the meaning generated regarding the session, this therapist has attempted to develop a second order cybernetic study of nonverbal communication which has not been recorded in the literature thus far.

Second order cybernetics forms an integral part of the understanding of an ecosystemic approach. The nature and merits of the ecosystemic approach will be discussed in greater detail in the chapter that follows.

CHAPTER 3

AN ECOSYSTEMIC PERSPECTIVE

Introduction

Nonverbal behaviour within a therapeutic context was chosen as the field of study. It was decided to describe this field in terms of an ecosystemic epistemology, as this therapist's understanding of the process of communication has largely evolved through similar stages of understanding as described in the previous chapter, culminating in a holistic understanding afforded by the ecosystemic approach. In light of this, the assumptions underlying an ecosystemic epistemology will be discussed and contrasted with the Cartesian-Newtonian epistemology, which was the first epistemology adopted by this therapist, and which still has a major influence for many nonverbal studies that are undertaken today. The basic principles of an ecosystemic epistemology will be applied to the therapeutic context, as this formed the major part of this therapist's training.

A Comparison of the Cartesian-Newtonian and Ecosystemic Models

An ecosystemic approach represents a paradigmatic shift in thinking from the traditional Cartesian-Newtonian model. This new approach offers a fundamentally different view of life, interactions and what constitutes problem behaviour from that of the Cartesian-Newtonian way of thinking. The two approaches will be briefly discussed and contrasted.

The Cartesian-Newtonian Approach

This approach is largely based on Newtonian physics and Cartesian thought, where the tenets of reductionistic thinking, the concept of linear causality and the idea of an objective reality form the hallmarks of this way of thinking. These tenets will be briefly discussed.

Reductionistic thinking

In this approach complex phenomena can be understood by breaking them down into their component parts. The literature of the field of nonverbal behaviour, shows many studies following such an approach. Such studies involve the measurement of nonverbal behaviour, usually out of the context in which it naturally occurs, using experimental procedures aimed at measuring discrete specific behaviours. The ways such behaviours might connect to form a larger pattern are generally not included in these studies. Articles appearing in The Journal of Nonverbal behaviour over the past five years were examined by this author in an attempt to classify each article in terms of the approach to study of adopted by the author/s. Such a perusal of issues of the Journal of Nonverbal Behaviour for the period 1991 to 1995 showed that of 61 articles submitted, 44

employed experimental techniques which can be considered to be reductionistic (that is 72%). This would indicate that the experimental method and reductionistic thinking predominates the field of nonverbal behavioural research. [For a list of the articles examined, see Appendix G.]

The Concept of Linear Causality

The idea of original causes is central to a Cartesian-Newtonian mode of thinking. Causality is said to follow in an A causes B causes C manner. Applied to the behavioural sciences, the search for the causes of behaviour is seen as being central to an eventual understanding of such behaviour. Many studies of nonverbal behaviour follow such an approach, and have as their basis the search for causes of nonverbal behaviour in a simplistic "A" causes "B" fashion. A study by Johnson and Edwards (1991) reflects such linear causal thinking. In this study the effect of gender on the perception of commitment between people as related to touching behaviour, is examined. Here, gender ("A") is seen to influence the perception of commitment as read from touching behaviour ("B") in a linear fashion. A more comprehensive listing of such linear thinking in the studies of nonverbal behaviour is beyond the scope of the present study, however the example cited serves to illustrate linear causal thinking which pervades much of the literature published in the last five years.

Absolute Reality

This approach is based on the belief in an objective reality which is independent of the observer and which can be accurately represented through stringent exertion of control of variables. This implies that there is one reality. Capra notes that in the Cartesian-Newtonian view of science reality is seen as

absolute, that is, by being objective and attempting to isolate all subjective impact from what is observed, the observer can obtain a true and accurate view of the one, absolute reality (Capra, 1983). The notion of relationship between variables and the patterns of recurring interaction between variables is not taken into account. This is reflected in an empirical approach to research wherein "nuisance" variables are controlled, while the observer observes only those variables which are pertinent to the study at hand. Variables are manipulated and the effect of such manipulations are carefully (and objectively) measured and recorded, while the effects of the manipulation itself are not included as variables. Studies are aimed at minimising the observer's biases in order to understand the universe "as it really is". Since the belief in one reality is held, findings are generalised beyond the context in which they are identified. As mentioned previously, experimental design is largely followed in the study of nonverbal behaviour. Such designs serve to observe nonverbal behaviour in settings contrived by the experimenter, and not in the context in which they naturally occur, so that nuisance variables can be controlled in the quest for obtaining an objective reality wherein observer bias is eliminated as far as possible.

Of the 61 articles mentioned in the paragraph entitled *Reductionistic Thinking* (see p. 26), only 7 (11,5 %) were conducted in a natural rather than an experimental setting, where room is made for the subjectivity of the observer. The reality which is seen to exist, is a reified reality in which words and concepts are materialised and taken as absolute. Thus, the idea of pursuing an external objective reality prevails in the study of nonverbal behaviour, while the patterns of interaction that evolve between the observer and the observed are not taken into account.

An Ecosystemic Model

Fourie and Lifschitz (1989) note that an ecosystemic epistemology adopts:

- an ecological rather than a reductionistic way of thinking,
- an acausal view of life and interaction, and
- a constructionistic view of reality.

This approach can be seen as differing from a Cartesian-Newtonian model. The basic tenets of an ecosystemic theory will be examined.

An ecological view

An Holistic perspective. In contrast to the method of breaking down entities into their component parts in order to understand them better (as is applied in the Cartesian-Newtonian approach), a holistic view is adopted in the ecological view and the notion of synergy is taken into account. That is, not only is the whole considered to be greater than the sum of its parts, but the relationship within and between different elements and levels of systems is given emphasis, which all work together towards achieving a common aim. Thus, an ecological approach to the study of nonverbal behaviour would aim at seeing the behaviour in the natural context in which such behaviour takes place. Also, the reciprocal relationship between the nonverbal behaviour and the verbal content would be taken into account where the nonverbal behavioural patterns that emerge in interaction would define the relationship between interactants and give meaning to the content of their verbal exchanges.

An acausal view

In an ecological approach, the idea of linear causality is replaced by the concepts of feedback and pattern, and of recursion and complementarity. These will be briefly discussed.

Feedback and pattern. The ecosystemic model includes the all important cybernetic principle of feedback. Keeney (1983) notes that a cybernetic epistemology proposes that we see both sides of any distinction drawn by the observer. For example where one might distinguish between the therapist and the client as separate entities, a cybernetic view looks for patterns (which may be redundant sequences of behaviour) between the two which connect them. The cybernetic view is one which focuses on such recursive sequences of interaction or "pattern" and the way in which such patterns form the basis of organisation in systems rather than on the parts which constitute them (Keeney, 1983).

All behaviour in a system is controlled by feedback mechanisms. Wiener (in Keeney, 1983) states that: "Feedback is a method of controlling a system by reinserting into it the results of its past performance" (p.66). Keeney says that what may appear to be linear cause-effect interactions might be seen as parts of a larger area of recursivity that occurs in all systems. Sluzki (1985) speaks of "first order cybernetics", which is concerned with the principles of regulation in living systems, or one can say, the observation of feedback in such systems. Understanding feedback mechanisms enables one to grasp how living systems maintain their organisation (through negative feedback) and how they undergo change (through positive feedback).

A further development in cybernetics took place, which has been referred to as the "new cybernetics" or "second order cybernetics" wherein the feedback of feedback was recognised (Sluzki, 1985). The observer's role in observing the

system is fed back into the system to become part of the very system under observation (Sluzki, 1985). Thus, a second order cybernetic view sees the treatment unit as consisting of the observer and the observed (Boscolo, Cecchin, Hoffman & Penn, 1987). The system under treatment is considered by these authors as: "a meaning system to which the treating professional is as active a contributor as anyone else." (p. 14). Here, a problem cannot exist independently of the "observing systems" (to use a term employed by Boscolo et al., 1987) that are defining the problem. In a second order cybernetic approach, the observer can no longer be thought of as controlling the system from the outside, as was the thought patterns associated with a first order cybernetic view. Rather, the observer can only perturb the system of which she is a part; the system will then react according to its own structure (Maturana & Varela, 1992).

Keeney, in describing second order feedback in therapy, states that a therapist needs more than a view of the simple cybernetic organisation of a system in order to bring about change in the system (Keeney & Ross, 1992). He says that in order to transform a troubled system a therapist needs direction for calibrating the feedback which exists in the system. He likens this to the need to include a description of a human being when discussing the calibration of a house thermostat (Keeney, 1983). The thermostat is governed by simple feedback when set to control the temperature of the house within certain specified parameters. This simple feedback is in turn calibrated by the person who adjusts the setting on the thermostat, constituting feedback of feedback or second order feedback. Relating this back to the therapeutic system, therapeutic change occurs through feedback of feedback in the therapeutic system (comprising the client/s and the therapist) and represents a higher order of feedback to that which occurs in the system on its own. Recognising both first order and second order cybernetic principles of feedback and pattern are essential to an ecosystemic model of therapy.

In applying the principle of feedback to the present study, descriptions of nonverbal behaviour in a therapeutic session are made using Symlog, (a method of coding behaviour, to be explained in the following chapter), which are fed back into a following session which is, in turn, described. Thus, spirals of feedback loops are described which define the evolutionary nature of the relationships between client/s and between client/s and the therapist.

Recursion and complementarity. Recursion can be seen as the relationship that exists between the two sides of any duality, where each side of the duality serves as a frame for the other. For example, when discussing the relationship between the content/report aspect and the relationship/command aspects of communication as mentioned in *Two Levels of Communication* (see p. 18), Keeney and Ross (1992) note that each aspect of communication forms a "frame" or "context" for the other. In this way the two aspects are recursively linked. One aspect is not seen to proceed from the other in a "before and after" way, but both are rather seen as co-recurring. Thus, the idea of recursion replaces the notion of linear causality and is a product of a cybernetic and circular view of living systems. The notion of recursion is closely linked to that of complementarity. Keeney and Ross note that many theoretical positions suggest experience to be structured in terms of pairs or dualities, and advocate instead viewing the higher order relationship that exist between the members of such apparent dualities so that the relationship between them, or the way they complement and fit with each other, becomes noticeable (Keeney & Ross, 1992). Relating this to an example from therapy, Keeney and Ross (1992) explain how a particular communication, for example a stated desire to be rid of depression, can be seen as half of a more encompassing duality, namely, the desire to maintain the positive social consequences that such a depressive episode provides. Thus, the desire to change and the desire to maintain stability can be seen to recursively complement each other.

Keeney notes that the idea of different orders of abstraction or logical types can give rise to the idea of a hierarchy of organisation in living systems (Keeney, 1983). He explains away this notion with an example of a multivolumed encyclopaedia, in which we can distinguish different books, and we can distinguish a book from a page. These distinctions can represent different orders of distinction. (eg. Encyclopedia = a metaframe, the books = a frame, pages = members). However, these items are not mutually exclusive but each part is contained in the other parts. So it is with the distinctions we draw when observing living systems. Each distinction is part of and is related to the other levels of distinction that we chose to draw.

A consideration of the constructivist and social constructionist positions

An ecosystemic perspective, in contrast to positivist empiricism, recognises the partial truth of a constructivist view of reality wherein each participant in an interaction is considered to have a unique experience of the interaction and is said to attach unique meanings to such experiences.

To Bateson, the basic epistemological act consists of drawing a distinction, or noting a difference between two entities through perception. Bateson says: "It takes two somethings to create a difference. To produce news of difference, i.e. information, there must be two entities (real or imagined) such that the difference between them can be immanent in their mutual relationship" (Bateson, 1980, p. 78). When a person draws a distinction she selects what she observes and passes over that which is not selected. This selection is done in accordance with each observer's own personal biases, assumptions, values and frames of reference. Thus all description is self-referential, that is, the description refers to the way the observer draws the distinction in her own way rather than to a representation of a static, unidimensional external reality. That which is selected

becomes the figure and has meaning, while that which is passed over becomes the ground and remains largely undefined. (Ruesch & Bateson, 1968). This selection of perception is termed the "punctuation" of a sequence of events by Watzlawick and his co-authors. (Watzlawick et al., 1967). Each person observing a sequence of events thus has a unique way of punctuating these events according to her own structure. Absolute objectivity is seen as impossible. A constructivistic view advocates reality as being in the eye of the observer. Thus, no perception is value free. All perception is "flavoured" by the one who is perceiving.

To Maturana (1975), a biologist, who studied the organisation of living systems through the phenomenon of perception, the nervous system is seen as a closed system. The nervous system's response to any external stimulus is determined by its own self referring organisation and structure, and not by the properties of the said stimulus. The neurones in the nervous system are organised to form a closed network which does not have input and output surfaces. An event external to the nervous system may perturb it, but what is perceived is an internally generated process defined by the structure of the nervous system itself. Our structure, rather than external reality determines our perception, or in Maturana's terms, we are "structure determined". Thus, there can be no direct transfer of images from the outside world to the brain, and hence, objective reality cannot be described. Thus, to Maturana, objectivity is placed in parenthesis. This would imply a constructivist perspective. When two organisms (for example humans) exist side by side, according to Maturana, they become structurally coupled through their interactions and they form a consensual domain of experience (Maturana & Varela, 1992). Two organisms form between them a linguistic domain, wherein they can share a common language about their worlds. It is only by languaging with another that we bring forth reality (Maturana, 1975).

The implications of this theory for therapy is that no longer can the therapist search for the truth in the client's past or present framework, as absolute reality is elusive and confined to each individual's way of perceiving. The therapist cannot instructively interact with her client, as the client's responses to therapeutic perturbations are seen as being structurally determined. Maturana based his constructivist theory on the functioning of the individual nervous system and as Hoffman notes (1990), each individual can influence another only indirectly. Hoffman goes on to say that the constructivist position leaves man "stuck in a biological isolation booth" with meanings being "skull bound" (p. 3). Thus, while the uniqueness of each person's perspective is recognised, the ecosystemic approach moves beyond this to include the co-construction of meaning through a shared language.

Whereas the emphasis is on the neurologically based cognitions of the individual mind in constructivism, social construction theory by contrast, places emphasis on the constructions arising from a common language between individuals. Meaning is seen as intersubjectively co-constructed between individuals. This contrast is explained by Gergen and Gergen (1991) as follows: "The emphasis is thus not on the individual mind but on the meanings generated by people as they collectively generate descriptions and explanations in language" (p. 78). Thus, to social constructionists such as Gergen, reality is generated through shared meanings which occur in language. Social construction theory posits that all knowledge evolves in the space between people through their interactions in a common world (Hoffman, 1993). Through languaged interaction people co-create meanings about their world and experience. Social construction theory posits that what we know evolves not within the individual nervous system but in the languaged give-and-take between people (Hoffman, 1993). Thus, meaning is not encapsulated within the individual. Like constructivism, social construction theory also banishes the idea of an absolute reality, but emphasises the influence of language, family, culture and the broader

systems which form a context for each individual. Meaning is based on the intersubjective construction of reality rather than the biological workings of the nervous system. In the context of therapy, problems are viewed as: "stories that people have agreed to tell themselves" (Hoffman, 1990, p. 3). Therapy takes the form of conversations in which conceptions of the world can change through talking and through the co-creation of alternative meanings.

The present study adopts a social constructionist approach as the tenets of this approach formed part of this therapist's training and fitted with her constructions of reality. In the present study, the observers spent time together co-constructing (with the aid of Symlog Interaction Scoring) a coding system or "language" which they used to describe the nonverbal behaviours that they observed. The codes used are therefore not taken to reflect a reality external to the observers themselves, but are tools which are used to bring forth meaning on a different level to the therapeutic encounters which are observed. By studying and discussing the prescribed codes of the Symlog system, the observers formed a shared meaning regarding the coding system and used these meanings to organise their observations of the nonverbal behaviours which occurred in the observed therapy sessions. The Symlog coding system was used to add meanings, generated specifically by the nonverbal behaviours of client/s and therapist, in addition to the meanings usually generated in the therapeutic encounters in the training context. The nonverbal descriptions generated by the team of observers were used in conjunction with the meanings generated in language during the course of therapy and were not used in isolation. As such, the use of a coding system was not seen as delivering reified meanings, but as meanings complementary to those co-created in language.

The idea of complementarity. Drawing distinctions or noting differences could erroneously give rise to the idea of creating dichotomies. Bateson (1980) notes that our language tends to aid this dichotomy, as words tend to stress only

one side of any interaction. Thus, for example, we may use the word "domineering" to describe the behaviour of an individual implying that such an attribute has its existence within that individual. The constructionist position, emphasises the need to gain multiple descriptions of events or entities, so that various viewpoints can be juxtaposed to yield a higher order of description of relationship between such entities or events in the greater system. Thus, for example, an individual's behaviour could be described as becoming domineering in relation to another, whose behaviour is seen as more submissive, within the context of each others company. The domineering/submissive behaviour is not seen as a characteristic residing within the individual's make-up, but rather as a pattern of interaction that occurs between the two individuals in a given context. Bateson introduced the concept of double description into our way of thinking. He said when two eyes perceive, each in a two dimensional way, and these descriptions are juxtaposed, a third dimension namely depth, which can be interpreted as the relationship between entities being perceived, emerges (Bateson, 1980). Thus, double description yields information of a different logical type. Applied to the field of human interaction Bateson states that "relationship is always a product of double description." (p. 146). Going back to the example of the "domineering" man, if we describe the behaviour of the wife whom he dominates, juxtaposing this description with the description of his behaviour, we would obtain a picture of their relationship (a higher order of description), and of the patterned sequence of their interaction which is maintained by feedback mechanisms, rather than confining ourselves to the level of attributing single characteristics to individuals. Such a multiple-levelled description moves one from observing entities to observing the wider system of which each person is a part and in so doing, an understanding of the broader system emerges.

Thus, every distinction we make has a complementary side to which it is connected. An example used by Bateson is that every time we write the letter "k", we also in a complementary fashion exclude the 25 other letters of the

alphabet (Bateson, 1987). In a therapeutic context we must, for example, not only focus on the person presenting a symptom, but we must also give attention to the complement of this. For example, in a family where one member is considered to be an alcoholic, another member might pride herself on not abusing substances. The ongoing relationship between these behaviours creates a whole interactive system. By encouraging one member of a such a system to be less perfect, the symptom of alcoholism may be alleviated in another member. The entire system is thus considered to be the client in a therapeutic encounter. The idea of complementarity is central to an ecosystemic understanding of the therapeutic context.

In the present study, the observers apply codes to describe the behaviour of the individuals in therapy. The codes of each individual's nonverbal behaviour in a session are juxtaposed with the codes of the other individuals' behaviour, thus yielding a higher order of description, namely, the relationship between the two individuals over time.

Self-reference. The ecosystemic perspective places emphasis on self-reference or, the inclusion of self in the therapeutic system being observed. This satisfies the ideas put forth in a second order cybernetic description as mentioned under *Feedback and pattern* (see p. 30). A computerised encyclopaedia explains Heisenberg's uncertainty principle, which holds that it is impossible to specify simultaneously the position and momentum of a particle, which showed the world of physics that an observer always intrudes into that which he observes, and thus creates uncertainty regarding his observations (Encarta, 1994). Keeney (1983), in referring to a therapeutic context, notes that the observer is in the observed and therefore shapes what is observed and is in turn shaped by it. He states that one should examine the intentions that underlie our distinctions which we draw when making an observation, thus the idea of objectivity is replaced, not by subjectivity, but by responsibility for our distinctions (Keeney, 1983).

This would occur through a process of examination of one's own premises when drawing distinctions and taking into account one's own contribution to the changing processes that one observes.

Atkinson and Heath (1987), when referring to research, advocate that a researcher's choice of criteria for legitimizing her chosen theory rests on her own particular history, values and life situation and thus a researcher should make available to the reader the self referential methods of punctuation used in the research in order for the reader to determine for himself the usefulness of the said study. Anderson and Goolishian (1988), when discussing the world of human problems, advocate a movement from what they term a Parsonian sociology, which is committed to an objective view of human sciences and which sees problems as defined by social role and structure, to an understanding of problem behaviour as defined by meanings created intersubjectively by those who are in language about the problem behaviours. The observer of problem behaviours becomes part of the system about which she languages, where language is seen to include words, as well as nonverbal communications, which are used in recursion. Thus, the self of the therapist is part of the system with which she is dealing.

In the present study the therapist's nonverbal behaviour is monitored, described and fed back to the therapist, who will use this description to effect change through nonverbal as well as verbal channels. The descriptions created by the observers are not taken to reflect a reality that exists independently of the observers themselves. Codes applied to individuals during the sessions, are not taken to reflect personal traits permanently present in the individual. For example, an individual whose nonverbal behaviour is coded as "submissive" during a session is not taken to be "a submissive person". Rather, the term "submissive" in this context is taken to be a relational description that exists in the language system chosen by the researcher and says more about the researcher

and her way of thinking than it does about the individual whose behaviour is being observed (Keeney, 1983). Thus, self-reference implies that research is not value free. The therapist/researcher has to take responsibility for and define the distinctions she draws both in describing the research outcomes, and for the effects she has on the process of therapy. The usefulness of the study will not lie in pinning down an "out there" reality but in seeing how the consensual languaging about nonverbal behaviour can add to a description of the therapeutic process in a way which fits with what is being observed.

The idea of "fit" and patterned interaction. As explained under *The idea of complementarity* (see p. 36), behaviour that occurs between two interacting individuals is seen, within the ecosystemic frame, in terms of complementarity or of "fit" between those behaviours rather than attempting to see which behaviour caused another behaviour in a linear (or even circular) manner. Dell (1982) says: "fit simply posits that the behaviors occurring in the family system have a general complementarity; they fit together." (p. 21). What becomes important to the observer is not to decide which behaviour originally occurred and precipitated further behaviour, but how certain behaviours between individuals become linked over time and form a pattern. Thus, the idea of fit and patterned interactions replaces the idea of causality.

Applied to the study of nonverbal communication, the validity of a description lies in the fit between what is being observed and the descriptions that are generated by the observers of the behaviour, rather than in searching for an iconic match between knowledge and a so-called reality that exists independently of the observer.

An Ecosystemic Approach to Therapy

As the preceding discussion indicates, therapy differs from the more traditional approaches when viewed from an ecosystemic perspective. Fourie (1989) notes that the term "ecosystemic" refers to a way of thinking in psychotherapy and not necessarily to a way of working. While this is true, ecosystemic therapy does, however, imply the use of methods which differ from those used in more traditional psychotherapy. For example circular questioning, developed by the Milan associates and described by Penn (1982), is based on the notion of exploring feedback, relationship and circularity, and is a typical example of a cybernetic tool peculiar to a more ecosystemic therapy. While a thorough exploration of ecosystemic psychotherapy lies beyond the scope of the present study, the basic tenets of therapy, as it applies to this study, will be given.

Definition of the Therapeutic Problem

Fourie (1989) notes that in traditional psychotherapy, problems were seen as residing in the individual. This is an approach that is typified by the medical model of conceptualising psychological problems which makes use of the DSM-IV system of classifying mental disorders. In contrast to this approach, the ecosystemic model views problems as being sited in language. Efran and Lukens (1985) state that "all problems are in language. Until 'languaged' a problem does not exist" (p. 28). This has important implications for therapy. Anderson and Goolishian (1988) advocate that the problem should be seen as creating the system, rather than viewing the system as containing or creating the problem. Thus, the decision as to whom to include in the therapeutic session is determined by those who are in language about the problem rather than by the system which

is defined by social organisation, for example, the family. Ecosystemic therapy cannot, therefore, be considered to be family therapy or individual therapy in the traditional sense, but may be conducted with individuals, families, or may include anyone in the broader system (such as referring agents, teachers, psychiatrists) depending on who is thinking of or speaking about the problem. Boscolo et al. (1987) speak of the "significant system" in this regard where "The significant system includes all those units (persons or institutions) that are activated in the attempt to alleviate problems brought to professionals for a solution." (p. 23). In ecosystemic therapy, therefore, the problem is seen in terms of the ideas about the difficulty rather than in terms of behaviours which are located inside persons or families which are thought to be dysfunctional (Boscolo et al., 1987).

Definition of Health and Pathology

Keeney (1990) notes that individuals and families maintain themselves through a complementary process of change and stability. On an individual level a healthy person has a repertoire of complex behaviours and emotions, which change over time. If one juxtaposes these divergent emotions and behaviours over time, various ecologies of emotions and behaviours appear which balance each other, thus characterising a balanced process of change which leads to stability or autonomy of a healthy personality system (Keeney, 1990). Another way of achieving systemic organisation is to escalate a particular behaviour or emotion. In a family system, Keeney notes that the escalated or extreme behaviour of one individual can be balanced by the extreme behaviour of another. Thus, the complementary behaviours of the interactants become patterned over time. For example, a husband's extreme "depression" can be balanced by a wife's extreme "cheerfulness". Such complementary sets of behaviour and/or emotions in a family (or other) system create a whole interactive system. Keeney refers to Whitakers "white knight" in the family,

whose constant so-called positive behaviour can be considered to be as pathological as behaviour which is traditionally recognised as negative and therefore more readily considered pathological. A symptom can be considered to be a recursive cycle of escalated behaviour. Or as Keeney says "From the level of social interaction, an individual's symptomatic behavior marks a particular kind of choreographed relationship with others" (p. 27). Thus, in the ecosystemic approach, the focus for a therapeutic intervention moves from focusing on the identified patient's individual behaviour to focusing on the way each person's behaviour fits into, and forms a pattern together with that of the other persons in the system. Symptoms are considered to be metaphors of interpersonal relationship (Keeney, 1990).

A healthy system is seen to constitute a vital balance of diverse forms of experience and behaviours. The task of therapy is seen by Keeney (1990) to be one in which novel sequences of experience, behaviour and interaction are initiated and integrated into a whole.

The Therapist's Role

The therapist's role is seen by Anderson and Goolishian (1988) to be one of the "participant manager of conversation" (p. 384). The therapist opens up space for conversation between the participants, helping them to explore new meanings and to explore new narratives. Anderson and Goolishian (1988) speak of an exploration of the "unsaid" in therapy. That is, any communication is thought to hold unspoken meanings and has possibilities for new interpretations. While Anderson and Goolishian largely confined the unsaid to words not spoken, this author has extended this to both the unspoken words as well as the nonverbal communication, which is seldom overtly mentioned. For example, an adolescent who is accustomed to taking a submissive stance in the presence of

a parent may be able to explore a more egalitarian stance towards the parent in a new way in a therapeutic session, where more open communication is encouraged.

The therapist cannot be solely responsible for the direction of change that occurs in the therapeutic session, as she is part of the system she observes and therefore is not able to control interaction in a unilateral manner. Going back to the ideas of Maturana discussed under *A consideration of the constructivist and social construction positions* (see p. 33), individuals are seen as structure determined and can change only in accordance with their own structure and not according to an external stimulus. Furthermore, if we accept that objectivity is impossible, and thus that all views are equally valid, Maturana states that we must lose the "passion" to change the other, that is, we no longer can impose our view of reality on another (Simon, 1985). The therapist is no longer in the position of the expert who diagnoses the problem with reference to an external reality, but rather takes responsibility for her own descriptions of the problem, which are co-created in language with other members of the languaging community.

A team is often used, who generate descriptions of the processes that are taking place in the room and these are fed to the therapist who benefits from the double description (that is, her own, and the team's description) giving her a perspective of her own contributions as part of the system with which she interacts. The therapist is seen as a conversationalist who perturbs others with whom she comes into contact through the therapeutic encounter. By joining with the family (individual or group), she fits with them and creates a domain of common language in which meanings and ideas can be explored. The narrative therapy of White and Epston (1990) has as its goal to identify or generate new or alternate stories that enable the client to explore new meanings which are experienced as more helpful, satisfying and open ended. Anderson and Goolishian (1988) pursue the goal of opening up alternatives in language during

the therapy. The problems which have their origin in a languaging system and which are presented by the client in therapy, are given new meaning and are eventually "dis-solved" (to use Anderson and Goolishians' term) in the languaging system present in the therapy session (Anderson & Goolishian, 1988).

Keeney (1990) notes that the therapist affects and is affected by the system he treats. He quotes Bateson as follows: "when the investigator starts to probe unknown areas of the universe, the back end of the probe is always driven into his own vital parts" (p. 30). The therapist is not seen as controlling the system. Rather, she is considered as a part of the system with which she interacts and therefore her behaviours affect and are affected by the behaviours of the other members of the system. Therapist and clients organise their behaviour around each other to form a new system, comprised of therapist and client/s.

In such a circuit the most a therapist can do is vary his behavior, recognise the consequences in the behavior of those in the social field surrounding him and modify his reactions to their reactions. If the effects of his behavior on others is used to change the therapist's consequent behavior, a feedback loop has been established. The therapist is not controlling their behavior, but is recognizing the response of their behaviour to his and the response of his behaviour to theirs. (Keeney 1990, p.33)

Keeney (1990) notes that an ecological epistemology suggests that the idea of the therapist and the clients as being separate is a false dualism, rather the two should be considered as a suprasystem.

The Use of Symlog Within an Ecosystemic Epistemology

One of the major difficulties in conducting a nonverbal study of communication is to find a way of explicating the nonverbal behaviours which usually perceived at an unconscious level. A means of holding such behaviours up for scrutiny needs to be found. Symlog Interaction Scoring was chosen as a method for describing specifically the nonverbal behaviours observed in the ongoing therapy sessions which formed part of the present study. This was chosen as it comprised a well defined system of languaging about nonverbal behaviour that was relatively easy to learn. By learning the Symlog codes, observers could learn to punctuate nonverbal behaviours in a certain prescribed way, which served to lift them from an unconscious level of observation to a more conscious level. That is, by using prescribed codes, the observers could name the behaviours they perceived, and the naming of such behaviours enhanced the conscious perception of the nonverbal content of interaction.

Symlog coding makes use of specified codes of behaviour (such as "dominant", "submissive", "friendly", "unfriendly", "instrumentally controlled" and "emotionally expressive" - to be discussed in chapter 4) which could be taken to represent a reified reality, such as would be employed in a so-called linear model which is compatible with a more quantitative empirical method of study. In the present study, these descriptive codes are taken as descriptions of behaviour and are not considered to represent reified realities, but are used as punctuations in a stream of ongoing nonverbal events. The poles or dualities seen in the Symlog descriptions are used to describe the relative positions of the interactants along three dimensions of behaviour (for example, dominant - submissive behaviour), so that the relationship between the interactants along these dimensions can be juxtaposed and described in a complementary manner, hence, yielding a higher order of description, namely that of relationship. This

is in keeping with an ecosystemic model which rests largely on the concept of complementarity wherein part behaviours are considered to be the distinctions drawn, or punctuations made by the observer. These punctuations are not taken to be discrete units of reality, but are considered to be part descriptions of a larger stream of connected behaviours. As such, the usefulness of the distinctions made by the Symlog codes are used as part descriptions of a greater whole.

In a hypothetical discussion between a theorist and an epistemologist on the compatibility of lineal and non-lineal methods of thought, Keeney (1983) makes use of the concept of the "partial arc". In this discussion, Keeney describes a tennis court as being flat, or as being necessarily constructed with a flat earth hypothesis in mind. However, should one build a series of "flat" tennis courts adjacent to each other around the world, one would end up constructing a circle. Therefore, even though each tennis court could be punctuated as "lineal", the pattern that would connect all the tennis courts would be clearly "circular" (Keeney, 1983). Thus, the statement is made: "All lineal acts and notions are actually "partial arcs" to borrow an earlier phrase of Bateson's, of a more encompassing circular pattern" (p. 57). In the present study, each behavioural description employed by Symlog can be said to represent a partial arc of the whole circular and recursive interconnected pattern of behaviour which is described across a session.

Thus, a method that can be considered to be "lineal" can be employed in a broader ecological description of behaviour. Keeney (1983), in the ongoing discussion referred to above, has the epistemologist state the following: "It means that you do not have to throw away lineal interventions and lineal thinking, as long as you see them as approximations of more encompassing recursive patterns." (pp. 57/58). Keeney (1983) notes that the advantages of lineal punctuations are often pragmatic (as is the case in the present study); the danger of using a punctuation of a partial arc is that we may forget that they are

approximations of the whole pattern of the cybernetic process. In the present study an effort was made to use the partial arcs of Symlog codes only to understand the broader patterns of nonverbal interactions between interactants in the sessions.

A Summary with Reference to the Approach of the Present Study

The present study is conducted within the embrace of an ecosystemic approach, as discussed above. In this approach the reductionist thinking of a traditional Cartesian-Newtonian world view is discarded in favour of a constructionistic epistemology, where the therapist/researcher is seen as a part of the system she describes. This way of thinking fits with this therapist's view of the world, which has been shaped by the ecosystemic epistemology in which she was trained. In the ecosystemic approach to therapy, patterns of relationship between all interactants in the system are described, with an emphasis being placed on the deliberate inclusion of the nonverbal behaviours as part of the therapeutic process. The therapeutic approach has the following emphasis:

The Definition of the Therapeutic Problem

The focus is not on the identified patient, but rather on the client system, including all who are in language about the current problem. The behaviours of all interactants in the therapy sessions are the point of focus. The therapist-client system is treated as a suprasystem with the reciprocal nonverbal positioning of therapist and client/s being monitored by Symlog coding throughout the therapy sessions.

Therapeutic Interventions and the Therapist's Role

A description of the entire system will be obtained with a focus on how each member's behaviour fits with that of the other members of the system. A picture of each member's nonverbal behaviour in relation to the other members behaviour will be obtained from the Symlog Interaction Scoring which will expand this ecological description.

The focus of therapy will be on the generation of new meanings within the therapeutic sessions. Nonverbal communication is an important part of the languaging that goes on in therapy. As noted before, the nonverbal aspects of communication largely defines the relationships between the communicants, and in this study can be taken to be an important part of what Anderson and Goolishian (1988) refer to as the "unsaid". By examining in detail the nonverbal interactions between participants in the therapy session, this unsaid will become explored by the observing team who will generate a description with the aid of the Symlog coding procedures. This description will be fed back to the therapist and will be used in future sessions with the clients. The therapist, by observing her role within the therapeutic system through the aid of the descriptions generated by the team, will attempt to alter her behaviour within the system of which she is a part, thus providing for new feedback possibilities, enabling change to take place within the system. The systematic description of her nonverbal position in the system will broaden her understanding of her overall functioning in the system, as well as how her behaviours and the client/s' behaviours fit in a complementary fashion.

The procedures used and the methods followed in the present study will be discussed in the following chapter.

CHAPTER 4

RESEARCH DESIGN

Introduction

The design of the present study will be discussed with reference to the principles outlined in the previous chapter.

The Research Problem

As mentioned in chapter 3, recent literature into nonverbal behaviour has been shown to focus on isolated elements of nonverbal interactions in largely experimental settings. Much of the recent research is based on a Cartesian-Newtonian theoretical framework, with the emphasis being on experimental design where variables are manipulated by the researcher in a contrived setting. The recursive process of observing nonverbal behaviours in context and the description thereof is not taken into account sufficiently. A search for an objective reality that underlies specific nonverbal action or the effects thereof is sought without reference to the self-referential nature of the observer's description of the behaviours. Furthermore, scant attention has been paid to the description

of nonverbal behaviours in the actual therapeutic encounter. In the therapeutic training setting, nonverbal descriptions of ongoing therapy sessions are often included in the descriptions made by the observing team and in the working hypotheses generated during case management, in a perfunctory and non systematic manner only. While the emphasis of the training model of which this author was a part is on the meanings, languaging and narrative of the interactants in therapy, it is this author's opinion that more could be done to focus attention on the nonverbal parts of communication in such sessions. The verbal content of therapeutic interviews, which largely represents the report aspect of communication, is usually given greater attention and emphasis than the nonverbal content, which largely represents the command aspect, during the management of ongoing therapeutic sessions with the client system. As noted by Snyders, words often have little to do with the process of therapy, and can be deceptive (personal communication). When considering the process of a therapeutic encounter, nonverbal aspects of communication can serve to broaden the descriptions that are generated about the interaction of the persons in the therapy room. Studies focusing on nonverbal communication serving as part of the description of the therapeutic process are not given attention in the literature.

This study focuses on the purposeful description of nonverbal behaviour within a therapeutic setting, with attention being paid to the constructionist nature of therapeutic description, rather than a search for an elusive objective reality which is often thought to underlie nonverbal action, thus offering an approach to nonverbal behaviour which has until the present time not been reported in the literature.

Aims of the Research

The aims listed in Chapter 1 will be restated in the light of the preceding discussion of the theoretical model which forms a basis for this study. Thus, the original aims with which this author set out initially, are elaborated and rewritten in the light of the theoretical understanding gained from an explication of theory.

Firstly, the aim of the present study would be to broaden the description of a number of therapeutic sessions which were conducted in the usual course of training, by including a systematic description of the nonverbal behaviours of the client/s and therapist. In this way a description of ongoing nonverbal behaviour, as it defines relationships, in an actual therapeutic session will be provided. This represents an ecological approach, which is directly applicable to the therapeutic situation.

Such a study would serve :

- to provide, through a description of the nonverbal as well as the verbal content of therapy sessions, a double description of the process of therapy as seen in the therapy room during the course of a session, or a number of sessions. This would assist an understanding of the therapeutic process and would aid in formulating appropriate interventions.
- to provide, through the use of Symlog Interaction Scoring (to be explained below), a means of measuring nonverbal behaviours which could be used in creating a common linguistic domain in which observers systematically describe the nonverbal behaviours of the therapist and client/s along the complementary relational dimensions of:
 - dominance - submission,
 - friendliness - unfriendliness, and
 - emotionally expressive behaviour - instrumentally controlled behaviour.

- to clarify the nonverbal aspects of the relationship between therapist and client/s as represented diagrammatically by the three dimensional Symlog space, either in a single session or as this relationship evolves over a number of sessions, since these: define relational issues, qualify verbal content and carry the "unsaid".
- by providing a description of the therapist's nonverbal position in the Symlog space, this information can be used as a source of feedback which would assist the therapist in becoming aware of her relationship positions in the therapeutic encounter (which are largely unconsciously adopted). Thus, a possibility of consciously altering her position in a self-referential manner in future sessions with the client system becomes available for the therapist, providing a field for change and a different kind of feedback structure.

Secondly, this study will combine the usefulness of a non-ecosystemic method of measurement with an ecosystemic framework of research. Symlog Interaction Scoring can be said to be a linear method which advocates the measurement of behaviours which are taken to represent an external objective reality. The legitimacy of this method lies in the measures of reliability and validity gauged by statistical methodology, which is typical of experimental design. In the present study, the Symlog coding system is employed as a means of languaging about behaviours in a systematic way. Thus a social construction of the nonverbal behaviours is obtained with the aid of a systematic "Symlog language". The systematic nature of the coding system aids in obtaining a domain of consensus among the observers, regarding the descriptions of the nonverbal behaviours observed. The legitimacy of the descriptions will be assessed using member checks, a method of establishing credibility suggested by Guba and Lincoln, wherein the experiences of the researcher are checked against the experiences and understanding of other members of the observing group (Guba & Lincoln, 1988).

Thus an acausal approach to the research is undertaken with the emphasis on the social construction of the realities observed.

Method

Subjects¹

Client Systems

Four different client systems with whom the author was conducting ongoing therapy at the time of this research were chosen for this study based on their availability, and on the fact of the author's immersion with the given systems. They comprised the following subjects:

System 1: Family S.

This family consisted of Cheryl, a divorced mother in her early twenties and Tommy, her 4 year old son. These were the only members of this system included in the therapy sessions.

System 2: Family G.

This family system comprised Loraine, a mother in her thirties and Olga, Loraine's daughter, aged 10 years. Both these family members were included in the therapy sessions. One session was conducted with an aunt with whom the

¹The names of all subjects have been changed to protect confidentiality

family lives. However, as she is a semi-invalid she was seen at her home where a video recording of the session could not be taken, hence this session was not included in the study.

System 3: Family E.

This family consisted of Dave and Sandy, the parents in their forties, and Will a son of 16 years. All the members of this system were seen during the initial session, while only Dave and Will were seen in the subsequent session recorded for the purposes of this study.

System 4: Family K.

This system was made up of Dora, a mother in her thirties and her two young children, Casey (4 years) and Nola (2 years) from her current marriage, and Dan (12 years), her son from a previous liaison. All the members of this system were seen at some sessions, while Daisy and Dan only were seen at others. Part of one recorded session included only Dan and the therapist.

Symlog coding of the sessions held with family S and family G were used only in the training of coders and in the establishment of a consensual domain. The sessions with family E and family K were used in the establishment of a consensual domain. Only families E and K were used in the actual research and therefore only these sessions are reported in detail in chapter 5.

Therapist

The author served as the therapist. The therapy sessions were part of the UNISA training programme for the MA Clinical Psychology degree.

The Team

The team consisted of three trainee therapists (including the author) who worked under the guidance of a senior therapist. Their task was to co-create an ecosystemic description of the ongoing therapy sessions, generating meaning and connecting this to the behaviour of the therapist/client system. The team were trained in the use of Symlog and coded the nonverbal behaviour seen in the therapy sessions.

Apparatus

All recordings were made on a videocamera and played back via a videorecorder to a monitor from which the Symlog coding was done.

Measuring Instrument - Symlog

In order to measure nonverbal behaviour in a systematic way, the Systematic Multiple Level Observation of Groups (Symlog), designed by Bales (1980) was used throughout this study. This is a set of methods for studying groups, especially small natural groups, where the relationships of the specific persons with each other are the focus of interest (Bales & Cohen, 1979). There are two methods of Symlog analysis. Firstly, an Adjective Rating method wherein a retrospective description is given of a group's interaction after a period of usual group activity. Secondly, an Interaction Scoring method is used for making detailed observations and descriptions of acts in an act-by-act fashion while the behaviour is being carried out. The observers write down observations while watching and listening to the live interaction of group members, or while watching videotaped recordings of such interaction. The latter method was used

in this study, as this method fits with an ecosystemic model, focusing on relationship and meaning. The scoring was done from videotaped therapy sessions. Bales notes that:

Learning to do the Interaction Scoring is a way of improving one's ability to observe and is also the basis of a detailed kind of feedback to group members that may be more helpful to them in pinpointing specific aspects of their behaviour, content, preoccupations and attitudes. (Bales & Cohen, 1979, p. 4).

In order to understand the punctuations of behaviour made by observers using this method of coding, it is necessary to understand the dimensions depicted in the three dimensional Symlog space, which can be diagrammatically illustrated as follows:

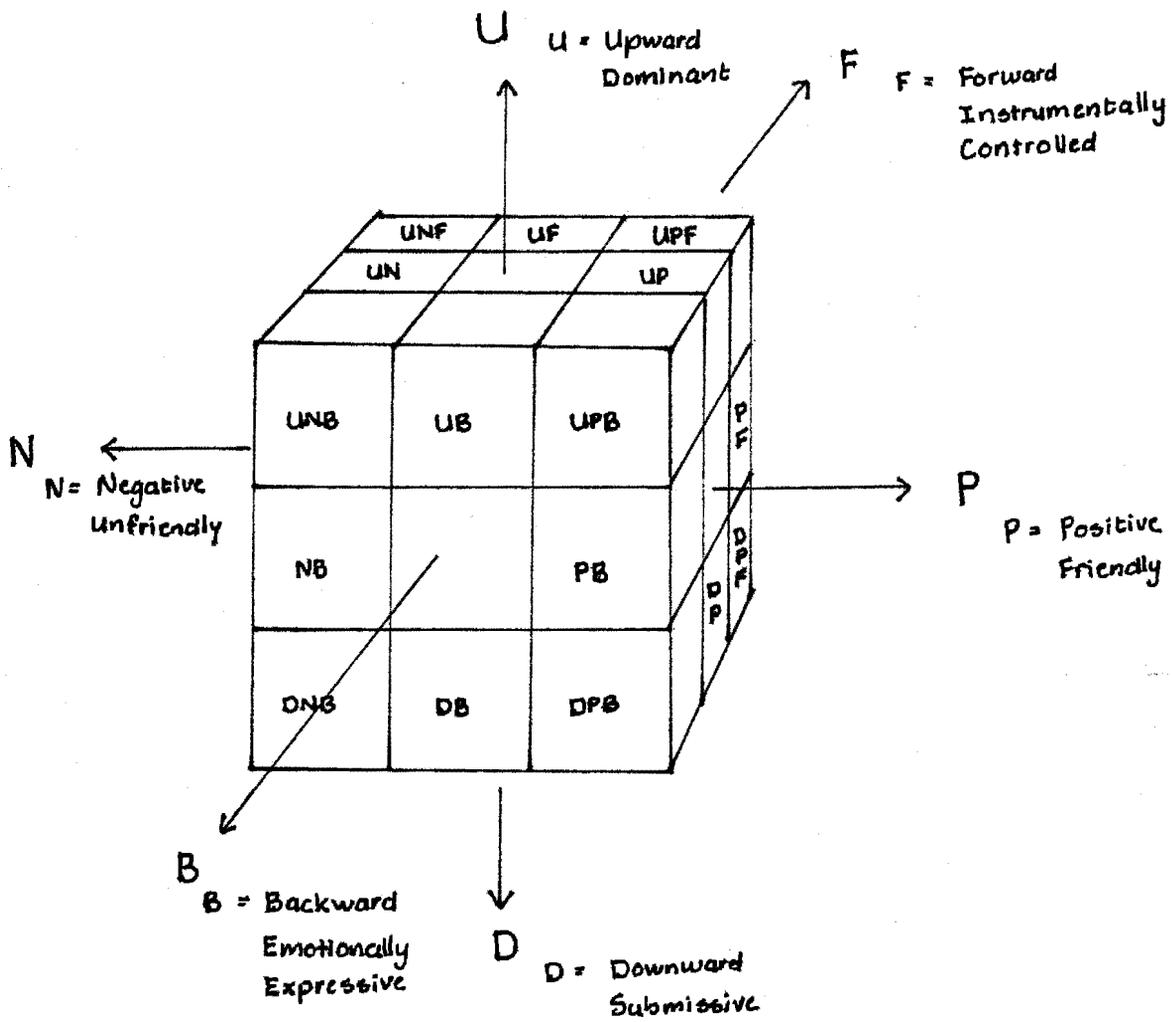


Figure 4.1 The Symlog three dimensional space (Bales & Cohen, 1979, p. 23)

As noted by Bales (1980), most people distinguish at least three distinct dimensions of behaviour, the three dimensional model of physical space is suited to represent the three dimensions of opposites that people most often perceive in observing behaviour.

Figure 4.1 shows a cube with three double-headed arrows representing the three dimensions of the Symlog space. The top arrow head is labelled "U" and stands for the "upward" direction from the centre of the cube. The opposite direction is labelled "D" and stands for the "downward" direction. The upward-downward dimension represents the dialectic of behaviour which flows along a dominant-submissive dimension (upward = dominant; downward = submissive). The arrow head pointing to the right of the illustration is labelled "P" and stands for the "positive" direction while the opposite direction is labelled "N", standing for the "negative" direction. The positive-negative dimension represents the dialectic of behaviour along a friendly-unfriendly dimension (positive = friendly; negative = unfriendly). The last dimension is represented by the arrows "F" and "B", "F" extending into the page and representing a "forward" direction while "B" extends out of the page, representing a "backward" direction. This represents the instrumentally controlled versus the emotionally expressive dialectic of behaviour. (forward = instrumentally controlled behaviour; backward = emotionally expressive behaviour).

The Symlog space can be seen as being divided into 27 blocks, each representing a specific position along the three dimensions. Behaviour can be coded simultaneously along these three dimensions by using the first letter of each dimension. For example, the code "UPF" would represent behaviour that is dominant, friendly and instrumentally controlled, while the code "DB" would represent behaviour that is submissive as well as emotionally expressive.

The Symlog Interaction Scoring method allows for multiple levels of

behaviour to be coded along the three dimensions. These levels are as follows:

- the ACT level, including overt acts and verbal communication
- the NON level, including nonverbal behaviour
- the SELF, OTHER and GROUP levels, including images of the self, others and the group
- the SIT level, including descriptions of the immediate environment
- the SOC level, including images of societal norms
- the FAN level, including images provided by the other levels of behaviour
- the PRO and CON levels, including attitudes about an image presented

For the purposes of this study, only the nonverbal level of behaviour was observed and coded during the Symlog study as this provided a simple and effective way of recording the nonverbal behaviours occurring in a session.

A detailed description of the nonverbal behaviours for each code is provided in Appendix A, Symlog Directional Definitions.

Procedure

Training of Observer/Coders

The three trainee therapists (including the author) who formed the therapy team during usual therapy sessions were chosen as observers and trained over a period of two weeks in the use of the Symlog Interactions scoring according to the principles suggested by Bales (Bales & Cohen, 1979). The Symlog Directional Definitions were handed to the observers for the purposes of studying the various behavioural descriptions given for each nonverbal code as listed in Appendix A. The prescribed behaviour for each code was discussed by the team,

with the observers co-creating through language, a consensus regarding the types of behaviour which would fit with each prescribed code. In this way a linguistic domain was created and shared by the observers regarding how the prescribed codes would be used as a means of recording nonverbal behaviours in a purposeful and convenient way. Videorecordings of an actual therapy sessions conducted with family S and family G in which the author was the therapist were coded by the observers. These served as a trial in which the observers had the opportunity to code behaviours, and become accustomed to applying the prescribed codes to observed behaviours. (The results of this initial session were not included in the descriptions in chapter 5). This experience was discussed among the observers who agreed that such a coding method, which implies a linear acceptance of an absolute reality, could be used effectively in describing and recording the nonverbal behaviours seen in a therapy session in a convenient way, which fits with an ecosystemic epistemology, adding meaning to the overall therapeutic description. The Symlog Interaction Scoring system therefore, served as a convenient lens through which to observe the nonverbal behaviours of the interactants in the therapy session. The Symlog scoring could be seen as a partial arc (Keeney, 1983) of the whole description in that it does not yield a fully systemic description of the processes which underlie the therapeutic interaction.

Conducting of Therapy Sessions

Therapy sessions were conducted with the client systems chosen for study over a period of three months. The author acted as the therapist in all these sessions, which were videotaped. The guidelines followed in the process of therapy included exploring the narrative of the client system around the problem in terms of each member's own ideas, beliefs, myths, values and perceptions. Circular questions were often used in order to gain a sense of the relationship between interactants (Penn, 1982). Hypotheses were generated around the

premise or organising principles which serve to hold the behaviours attached to the problem together. These were fed back to the family where appropriate, or were used by the team in gaining an understanding of the client system. If the organising principle changed or shifted, this was taken to affect areas of family behaviour, producing what the Mental Research Institute researchers have named as second order change (Boscolo et al., 1987). The observers served as a team during each therapy session, and generated hypotheses regarding the process of therapy, based upon their own social constructions. These hypotheses were fed to the therapist during and between sessions, thus influencing and being influenced by the therapist's own actions in, and hypotheses about the therapy, in a recursive manner. A co-constructed ecosystemic description of the therapeutic process emerged focusing on the pattern of the interactions of all members of the therapeutic system (including the therapist).

Coding

The videorecordings of the therapy sessions were played back to the team of observers (as a group) at a later stage. The observers coded sections of the recordings according to the Symlog Interaction Scoring method. Each coder selected significant segments of nonverbal behaviour according to her own punctuations of what constituted significant behaviour, yet which had been generated in terms of a consensus of meaning reached in Symlog training sessions. Each coder independently wrote down the following information on the Symlog Interaction Scoring form which was provided (for an example, see Appendix B):

- the time the behaviour occurred
- who acted at the time
- towards whom the behaviour was directed

- the appropriate code for the behaviour
- a brief description in words of each behavioural segment.

Further therapy sessions were conducted with some of the client systems after the coding of previous sessions had been done. The constructions of the team during successive therapy sessions thus included the results of the coding done of the nonverbal behaviours of preceding sessions. Thus, the descriptions of nonverbal behaviours broadened the descriptions and hypotheses generated in the following sessions. A comparison of the successive sessions was made using Symlog analysis.

Processing and Reporting of Symlog Coding Data

The processing of the data obtained through coding by the three scorers was conducted in the following way:

- a directional profile along the three dimensions was obtained for each subject in the therapy session, for each coder using an Interpersonal Matrix form designed for this purpose (see Appendix C). The totals for each dimension of behavioural acts were added up and subtracted from the opposite dimension to yield an overall position along each of the three dimensions.
- the totals along the three dimensions obtained by the three coders were added and averaged out to provide a position along the three dimensions for each subject in the therapy session.
- a Field Diagram was drawn (see Appendix D) depicting all the subjects of the therapy session in the three dimensional space, based on the group average obtained from the coders' scores.
- an expanded field diagram was drawn using an expansion multiplier, as

described by Bales, (see Appendix E) in order to provide a clearer picture of the relationships of the members to one another (Bales & Cohen, 1979, p. 434).

- the expanded field diagram was used by the therapist to assess her own position in the three dimensional space, and to assess her position in relationship to her clients along the three dimensions. The relevant dominance or submissiveness of each member was taken into account, the friendliness or unfriendliness of the behaviour was noted as well as the degree of instrumental control or emotional expressiveness of each behaviour. Furthermore, the relative "distance" of each interactant's position in the Symlog space was taken as a measure of metaphorical distancing of the interactants.
- the pictures obtained from the above mentioned field diagrams was used to obtain a description of the relationships between interactants along the three dimensions of nonverbal behaviour (these pictorial representations are presented within the study). Thus, a higher order, relational description was obtained based on the partial arcs of the linear codes. This was used in the description of the client system, and in formulating the following therapy session where appropriate.

The Symlog Interaction Scoring directional profile was not used strictly in accordance with the Symlog Rating Scale method, prescribed by Bales (1980), as the emphasis of this study was on obtaining double description of behaviours in therapy which this author obtained from the pictorial description provided by the Symlog directional profiles (see Figures 5.1, 5.2, 5.3, 5.4 and 5.5).

Creation of a Consensual Domain

Coding was done by three coders using Symlog Interaction Scoring over seven sessions with all four family groups discussed under *Client Systems* (see p. 54). In order to establish the creditability of the observations made in this study a member check was conducted wherein the observations or experiences of the researcher were checked against the experiences and understandings of the members of the observing group (Guba & Lincoln, 1988). In conducting such a check one could expect that, if a consensual domain had been created, the codes applied by the three coders (including the researcher) to each member of the interacting therapy group would accord with each other with regard to the measurement on the three Symlog dimensions. That is, that over an entire session, the three coders would rate each member's nonverbal behaviour on the same arm of the three dimensions depicted in Figure 4.1 (see p. 58). For example, on the Dominant (U)/ Submissive (D) dimension, one would expect that all three coders would rate a given member's overall nonverbal behaviour as for example "Dominant (U)". Should the opposite codes be recorded, where for example, one rater coded the member's nonverbal behaviour as "Dominant (U)" while another coder rated the behaviour as "Submissive (D)", this would call into question whether a consensual domain had been established.

The coding by the three coders over each session is shown in Appendix F, where the nonverbal behaviour of each member in each therapy session is described along each of the three Symlog dimensions. An Agreement Fraction is calculated (shown in Appendix F) by comparing the codes recorded by each coder for each member on the three dimension, with the codes of the other coders. If all three rated a behaviour on the same arm of a given Symlog dimension, this is counted as an agreement. Should there be disagreement

between the codes of the three coders (that is, opposite arms of the given dimensions are recorded) this is taken as a disagreement. The number of coding agreements for each member on each Symlog dimension is then calculated as a fraction of the sum of the coding taken on each dimension separately. The sum of the fractions for each dimension over all seven coding sessions is calculated to yield an overall percentage agreement for each dimension. These percentages are represented in Table 5.1.

[Note: a zero rating is measured as an agreement].

Table 5.1 Percentage Agreement of Coding over Seven Coding Sessions

Session	Agreement Fraction		
	U-D Dimension	P-N Dimension	F-B Dimension
1	3/3	2/3	3/3
2	3/3	2/3	3/3
3	3/4	4/4	3/4
4	2/3	3/3	3/3
5	3/3	2/3	2/3
6	3/3	1/3	3/3
7	2/3	1/3	2/3
Total Agreement Fraction	19/22	15/22	19/22
Percentage Agreement	86,4%	68,2%	86,4%

An average of agreement of the three Symlog dimensions can be calculated as follows:

$$\begin{aligned} \text{Average percentage agreement: } & (86,4\% + 68,2\% + 86,4\%) / 3 \\ & = 80,3\% \end{aligned}$$

An 80% agreement is reached between coders regarding the codes used to describe an individual's nonverbal behaviour along the Symlog dimensions across seven coding sessions. This form of a member check indicates that a consensual domain ad been reached among the three coders.

A Discussion by the Coders of the Coding

A discussion was held by the three observers (including the author) in which the experience of being an observer and coding according to the Symlog system was discussed. A videorecording was made of this discussion and observed by the author. This enabled the author to gain a description of how the coders had experienced the process of coding according to the Symlog system. The meanings generated in this discussion will be used to evaluate the usefulness of the study.

An Overview of the Research Design

The research was conducted solely within a naturalistic setting of actual therapy sessions. This represents a move away from the vast majority of studies of nonverbal behaviour, which employ experimental designs in contrived settings. In contrast to much experimental research, in this design did not entail a search

for an absolute reality which is often thought to underlie specific nonverbal behaviours. Rather, nonverbal behaviour was recorded and used together with other information, and served to broaden a description of the patterned interactions that occur between interactants during therapy sessions, thus adding to the meanings generated in these sessions, rather than looking for absolute representation of specific nonverbal acts. In this way the dialectic between the semantic and political frames of reference as delineated by Keeney and Ross (1992) was actualised. The nonverbal behaviours seen in these sessions largely represent the politics of communication, which is defined as the "who-does-what-to-whom" (Keeney & Ross, 1983, p 6) aspect of communication, whereas the verbal descriptions largely represent the semantics or "meaning" aspects of communication. As stated by Keeney and Ross, it is imperative for the therapist to understand the dialectic between these two level of communication, where each political aspect of communication frames and is framed by a semantic aspect, and vice versa. In the present study the nonverbal sequences of behaviour can be seen as a political frame which formed a dialectic with the verbal descriptions of meaning created during the session, which represent a semantic frame.

Symlog Interaction Scoring was the chosen method of study since it provided a useful means of recording specifically nonverbal interactions among interactants along three dimensions, providing a picture of the complementarity that can exist between the interactants along these dimensions. This enabled a broadening of behavioural descriptions in a recordable way. Information obtained from each Symlog field diagram was fed back to the therapist, thereby changing her position in the interaction, and thus influencing, reciprocally the positions of the other members of the therapeutic system.

Subjects were selected on the basis of their presenting for therapy, and were not, chosen in a randomised way as is typical of an experimental design. The

coding done by the different coders could be compared in order to provide a measure of credibility, as defined by Guba and Lincoln (1988), to the recording of nonverbal behaviours in the study.

The legitimacy of the present study does not rest on an attempt to prove an accurate representation of an underlying objective reality relating to the nonverbal behaviours viewed in therapy sessions. Rather, the method of drawing distinctions is presented, as advised by Atkinson and Heath (1987), where the coding categories of actual sequences of behaviour is presented for scrutiny in Appendix A. While the actual nonverbal behavioural sequences are not presented for study, an intercoder agreement fraction is presented in Appendix F. The Symlog field diagrams are presented, with an accompanying description of how meanings were generated from each diagram. Thus, the reader is able to determine the legitimacy of these descriptions according to his or her own way of organizing experience.

This chapter served to delineate the research problem; to restate the aims in terms of the theoretical approach adopted by the study and explained in the preceding chapters; to explain the method of Symlog Interaction Scoring as defined by Bales and Cohen (1979), and to demonstrate how such data was used in the establishment of a consensual domain of meaning regarding nonverbal among the observers.

In the following chapter, a review of the therapy sessions used in this study will be presented. A description of each therapy session will be given and the results of the nonverbal coding of behaviour will be presented.

CHAPTER 5

NONVERBAL BEHAVIOUR IN THE THERAPEUTIC CONTEXT

Description of the Therapy Sessions

Successive descriptions of ongoing therapies with family E and family K, whose nonverbal behaviours were coded in a separate exercise over successive sessions, were considered for the impact of the nonverbal studies on the therapeutic process. Family E was examined using Symlog Interaction Scoring of nonverbal behaviour across two sessions of the ongoing therapy, while family K was similarly examined over three sessions. The sessions are examined and reported according to the descriptions generated by the therapist and the team during the actual therapeutic encounter. These descriptions have no special reference to nonverbal behaviours of the interactants. The nonverbal behaviours were given special attention during the Symlog coding sessions, taken from a playing back of the video-recordings of the sessions.

First Study - Family E

Session 1

The therapeutic problem. Sandy, the mother, and Dave, the father, of an Afrikaans-speaking family had brought Will, their son of 16 years to therapy as he was struggling in school. Will had passed each year in primary school with the exception of standard three, which he repeated. Will said that since being in high school his marks had declined. He was in standard eight at the time of therapy. In the previous term he had passed in languages, but had failed in technical subjects as well as Mathematics. Sandy explained the reason for bringing Will to therapy was that he would shortly be turning 17 and thus had to consider his future. Will seemed to be primarily concerned with his inability to do Mathematics, while Dave thought the crux of the problem was that Will was not applying himself sufficiently to his school work.

Will had left home in standard six to attend an agricultural boarding school, which was in line with his interests at the time. However, he did not stay there as he apparently could not adjust to hostel life. Dave explained Will's reason for leaving as being on account of the older boys who bullied him. Sandy said it was the hostel life that was too strict for him and he was not used to such restrictions in his home environment. Will showed some regret, in retrospect, that he had not stayed at the agricultural school.

Dave had, himself, succeeded in school as a young man and had entertained hopes of becoming a veterinarian when he left school. These hopes had been dashed by the untimely death of his father when Dave was 16 years old. As the family were not in the financial position to put him through university, he had to change his plans, accepting a bursary to study mining engineering. He said

that to this day he regretted not having fulfilled his dream of becoming a veterinarian. During the interaction in the therapy session, Will was asked what he would like to do when he left school. He began to explain how he would like to work for a rich farmer, at which stage Dave shook his head and showed strong negation of what Will was saying. Will quickly added that he might like to become a veterinarian, thus suggesting to the therapist that Will might feel pressured at some level, to fulfil his father's dreams for himself. A double message was thus being given to Will by his father: "I want you to succeed and be happy, but you must do it my way."

Sandy had done well at school and considered herself to be an academic. She was a third year psychology student at the time of the interview. She explained the reason for her studies being that she wanted to be a good mother to her children and hoped through her studies to gain a better understanding of her children and especially of Will's problems. Sandy constantly framed both her children as being "practical" by nature, while she saw herself as more academic. Thus, a double message could have been conveyed to Will by his mother: on the one hand a positive message of her care for him and understanding of him for what he was, while on the other hand, a more negative message was given, that he had not met her academic expectations and therefore needed help and repairing.

The E's had, in addition to Will, an older daughter who had left the home some years previously and had given birth to a daughter out of wedlock. She had since married. Her daughter, now aged two and a half years, had been adopted by the E's at birth. This child was living in the home with the E family.

Systemic hypotheses regarding the therapeutic problem. It was hypothesised that the organising principle in this family was one of a "distant belonging". Dave showed Will that he cared for him by doing masculine things with him,

such as taking him hunting, and enjoying outdoor life with him, while not showing him emotional closeness. For example, his concern for Will's need to succeed at school was expressed by saying that he thought Will needed more hidings. Sandy's care for Will was strongly shown, yet also in a distanced way. She expressed her concern by taking on the roles of "family psychologist" and "remedial teacher" rather than a mothering role.

It seemed to the therapist and team that there was a paucity of direct interaction between Dave and Sandy. They sat far apart from each other in the session, while their principle way of interacting with each other was through discussing Will and his difficulties. Dave and Sandy's parental roles seemed to have superseded their spousal roles at this point and it was speculated that this had become their pattern of interaction over the years. The therapeutic hypothesis was created, that through their parental roles, Sandy and Dave could meet each other and have something in common without the closeness connected with the spousal roles. It was thus possibly difficult for them to relinquish the parental roles, the marriage needing the presence of a child in order for them both to continue with their parental roles with which they were most comfortable, rather than to face each other as spouses. They had possibly found it difficult to let Will go from the family system for this reason. When he had left home in standard six they both expressed that they had missed him and that it had been difficult for them from a practical point of weekend transportation, as the school was far from the home. Will had possibly responded to the message that it was easier for his parents if he were home and could have found it more comfortable at the time to return to the family to which he belonged, rather than face being alone at boarding school. Will's apparent failure to achieve at school at the time of therapy could be linked to his part in maintaining the family by remaining in the dependent role and not achieving high school graduation and hence, a licence to leave the family.

The hypothesis was extended to include the idea that it was difficult to leave this family in a "legitimate" way (for example by growing up and individuating). Will's sister had found her way out "illegitimately" by having a child out of wedlock. It could be that this had been difficult for Sandy and Dave, who were now ambivalent about Will's leaving. On the one hand, Dave wanted Will to become a responsible adult as he himself had been forced to do at the age of 16, yet on the other hand, felt that he would like to give Will the opportunities that he himself had been denied. Sandy's ambivalence regarding Will's leaving centred around wanting him to be successful in his endeavours on the one hand, yet finding her role of having to remediate his inability to cope academically fulfilling for herself.

It was interesting to note that the E family had insured themselves against the complete loss of children from the system by adopting the daughter's child into the system.

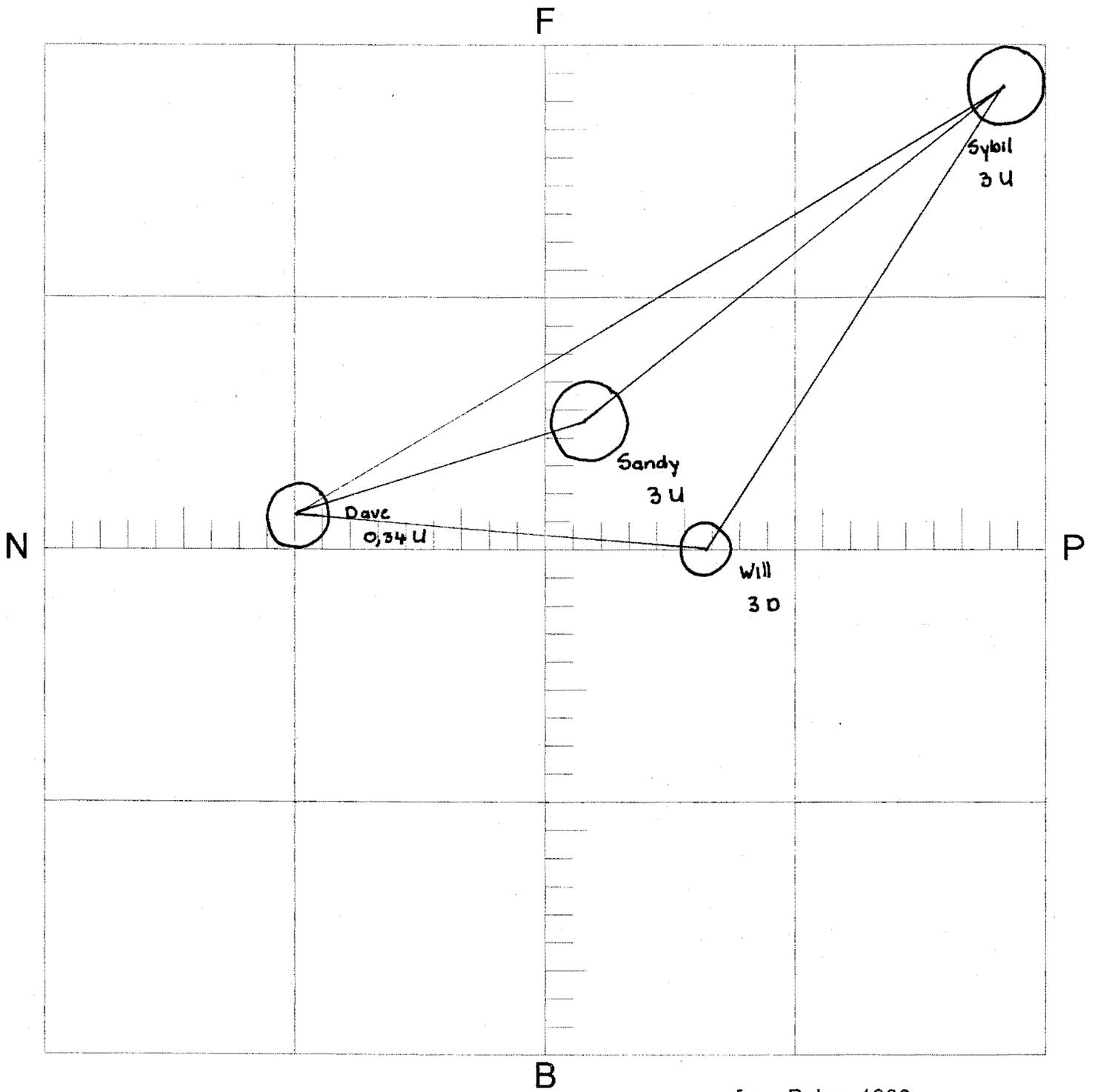
Symlog description of session 1. Symlog interaction scoring of the nonverbal behaviours of all members of the system revealed the following:

- Sandy and Sybil (the therapist) showed dominant (U) behaviour while Will, in contrast, showed submissive (D) behaviour. Dave's behaviour was neither dominant or submissive. A pattern of relationship emerged wherein it appeared that Sybil and Sandy's dominance in the session overshadowed Will and Dave's behavioural input.
- While Sandy and Sybil's showed strong friendly (P) behaviours, Dave's behaviour was coded as unfriendly (N). The emerging pattern showed that the more friendly and dominant the behaviours of Sandy and Sybil, the more unfriendly (N) Dave's behaviour became in a complementary fashion.
- Sandy and Sybil's behaviours were instrumentally controlled (F) (with Sybil's behaviour showing a strong loading on this dimension), while Dave's behaviour was weakly instrumentally controlled and Will's

behaviour was neutral for this dimension. It could be that Sandy and Sybil's efforts to work hard in the session were complemented by Will and Dave's neutrality.

- Sandy and Will's nonverbal behaviours lay closest to each other in the same quadrant of the Symlog Field Diagram, while Dave's nonverbal behaviours placed him on the periphery of the Symlog space (and in a separate quadrant from the other three interactants), possibly excluding him from the therapeutic relationship at this point (see Figure 5.1, p.77). A pattern of inclusion (of Sybil and Sandy) and exclusion (of Dave) could be observed.

Expansion multiplier: 4,47



from Bales, 1980

Figure 5.1 Symlog Field Diagram Family E Session 1

Systemic description generated by Symlog coding. On reflection of the descriptions generated through the Symlog scoring, it was hypothesised that a coalition could exist between Sandy and Will with Dave being in a peripheral position. Will could possibly be caught between his two parents, feeling loyal to his father (as expressed verbally during the session) yet being co-opted into his mother's way of being at the same time, which could be felt by him as disloyalty to his father.

The therapist's nonverbal behaviours placed her in a position far removed from the family's position, particularly that of Dave, and therefore, possibly in danger of not joining sufficiently with them on a nonverbal level.

Both Sandy and the therapist's behaviours showed a strong loading on the dominant (U) dimension, which suggested to the team that they had become "co-therapists" in the session, with Sandy acting as the spokesperson for the family in discussing Will's school difficulties and the possible solution to this problem, and the therapist joining her on this "expert" level.

The Symlog descriptions of the session were integrated with the hypotheses generated during the session in order to formulate ideas regarding the therapeutic interventions to be carried out with the family.

Therapeutic interventions. In order to join with the family's concerns over Will's school difficulties, it was agreed that an assessment of Will's aptitude and interests be conducted with him in a separate session before the family was seen again. The therapist thus took responsibility for assessing Will's difficulties, thus temporarily freeing Sandy of her "therapist" role and allowing her to resume the role of mother. If a need for remedial education was needed, the family was assured that an appropriate referral would be made.

In order to address the coalition between Will and Sandy (which was apparent after viewing the outcome of Symlog scoring), and to therapeutically legitimise independent action by Will, he was advised, after the assessment session with him alone, to explore the possibilities of a career in nature conservation, a field of study that he had said was of great interest to him. He was specifically instructed to do this without the help of his parents, thus drawing a line between his own concerns for his future and those of his mother, thereby allowing him to take responsibility for his own career choice.

While no special attempt was made to consciously adopt specific nonverbal behaviours in the next session, the therapist's awareness of her having distanced herself from Dave in the first session (a view generated by the observation of the Symlog drawing - Figure 5.1) led to a conscious decision to join more fully with Dave in the next session listening more to his and Will's descriptions rather than taking an "expert" stance.

Session 2

Therapeutic process. Only Dave and Will attended this session as Sandy was otherwise engaged and was unable to be present. Whereas in the previous session, Sandy had occupied most of the conversational space, tending to stand between the therapist's questions and Will or Dave, in this session both Will and Dave spoke freely and appeared to have more space in the therapeutic conversation. It was hypothesised in the first session that Sandy served as the spokesperson for the family, tending to strongly express their difficulties in terms of Will's "learning difficulties" (to use her term). Her strong verbal presence had, in a complementary fashion, allowed both Will and Dave to maintain their silence and relative non-participation in the initial session. In the second session, their voices were more strongly heard and it appeared that both Dave and Will

were more willing to put forward their points of view regarding their difficulties. The therapist was freed from the "co-therapist" position that she and Sandy had adopted in the first session, and found it easier to join with both Will and Dave. It could be hypothesised from this that in the E family it is difficult for strangers to enter the system when Sandy is present. Her role as spokesperson for the family could make it difficult for an outsider to enter and join with the other members of the family in her presence.

Will reported back on his investigation into his field of interest. It was apparent that he had pursued this activity with enthusiasm as he was able to give a detailed report about the study opportunities offered in this field. Dave was able to witness his son taking responsibility for his own future in a small way. It was felt that in this way Will had been allowed to individuate from his parents within the safe environment of the therapeutic setting, thus allowing a "legitimate" separation.

Feedback was given concerning the assessment procedures carried out with Will who was described as having an average intellectual capacity. His field of interest was described as largely undefined and framed as usual for a person in standard eight. It was suggested that his interests would develop in the next two years and could be pursued in the form of hobbies and pastimes in the meantime. The ambivalence in the family regarding Will's leaving and belonging was addressed in a new way. Will was reframed as average, and capable of graduating, yet was told at the same time not to make a decision regarding his future yet as it was not the right time for him to do so, even though his parents may be feeling the pressure for him to decide about his future imminently.

Will seemed to receive this information with a sense of relief, while Dave seemed to see it as confirming his idea that Will did not work hard enough at school and needed a firmer hand in discipline (thus indicating a decision to

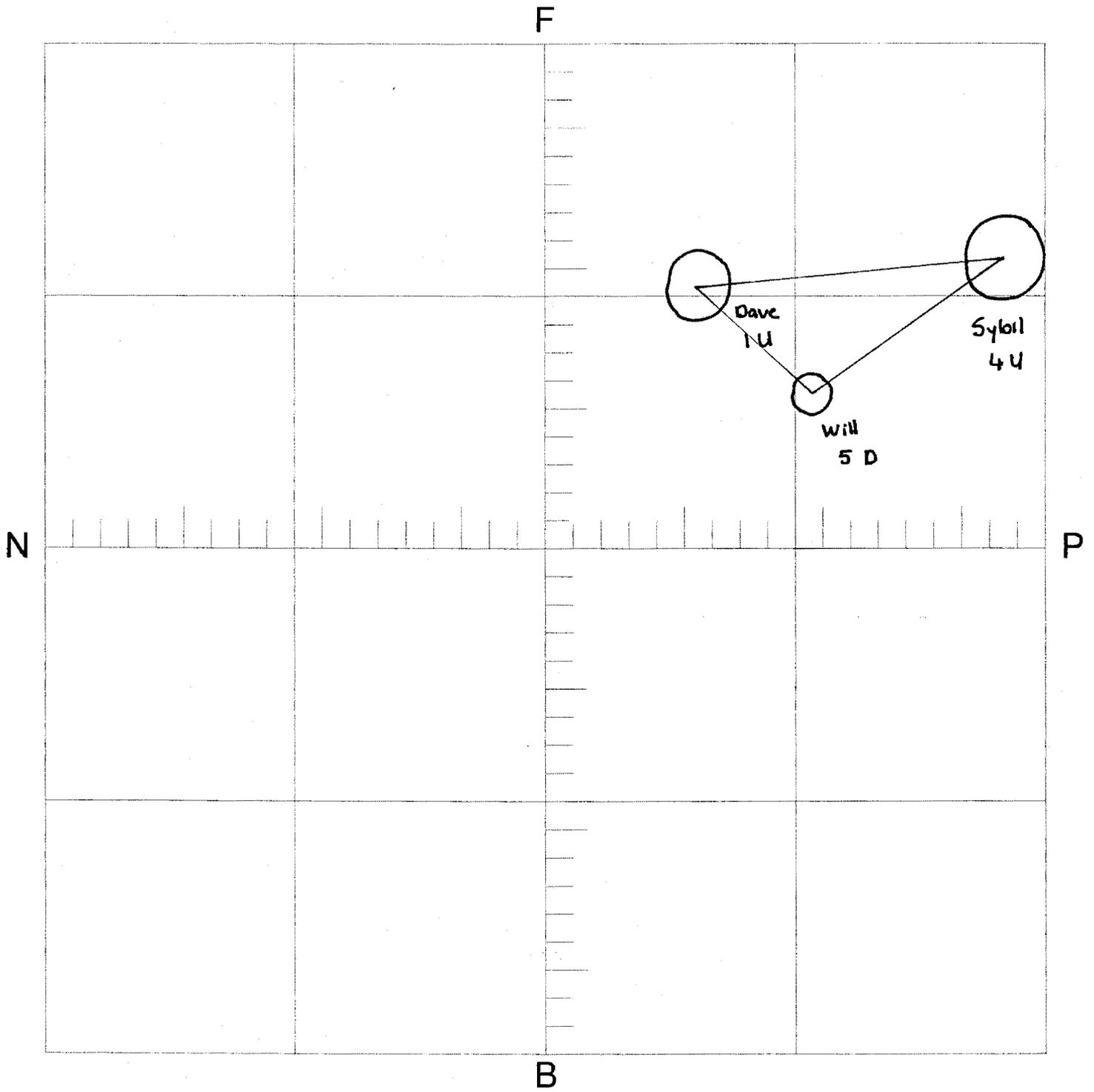
enhance his role as father).

Symlog description of session 2. The Symlog interaction scoring of this session revealed the following:

- Sybil's behaviour was still seen as more dominant (U) than that of Dave or Will.
- However, all three members of the group showed friendly (P) behaviour, which could indicate a better joining of the therapist with Will and Dave in this session compared with the previous session, and hence a more positive therapeutic relationship between all three interactants.
- All three showed instrumentally controlled (F) behaviour which could indicate a better working together on a common task than was seen in the previous session.
- The Symlog field diagram of the session showed Will, Dave and the therapist as being closer to each other in terms of their nonverbal behaviours (see Figure 5.2, p. 82). All three exhibited instrumentally controlled, friendly behaviours. However, Will remained in his somewhat submissive role relative to the other two interactants.

Systemic description generated by Symlog coding. The therapist appeared to have joined with both Dave and Will more successfully during this session. Their interaction was greatly task oriented, with all three interactants joining with each other on a nonverbal level. Will still retained his somewhat submissive behaviour which possibly reflected his need to adopt the role of a child in the presence of adults who could influence his future.

Expansion multiplier: 2,33



from Bales, 1980

Figure 5.2 Symlog Field Diagram Family E Session 2

Overview of the therapy sessions with family E

During these sessions, Will was seen in the role of the competent person who was of average intelligence and capable of taking decisions about his future on his own, independently of his parents. This was framed as positive move toward independence within the safe environment of the therapeutic setting. This could have served to address the coalition seen between Will and Sandy (highlighted by the Symlog coding of the first session), allowing for Will to operate independently of both parents. Sandy and Dave's ambivalence which manifested in the pressure for Will individuate on one hand, yet not to leave the family on the other, was relieved by granting Will permission to be undecided about his future at this point by naming this as normal for a boy of his age. The ambivalent organising principle which was hypothesised to be operating in this family, namely of a "distant belonging", was largely fed by the spouse's ambivalence regarding their childrens' leaving on the one hand, and staying in the family on the other. This was indirectly redressed by addressing the underlying ambivalence.

Symlog coding generated a description of the therapist's dominant, friendly and instrumentally controlled nonverbal behavioural pattern which was considered appropriate to the traditional role of an empathic therapist who is intent on dealing with the issues at hand, however, this therapeutic stance could have served to isolate Dave and Will in the first session. By taking note of the feedback generated by the Symlog coding in the first session, the therapist was able to use this information in a self-reflexive way, using it to make an effort to join more fully with Dave and Will in the next session. Sandy's absence in the second session changed the behavioural pattern, allowing Dave and Will more space to express themselves more freely and allowing for the therapist to join with them on the task at hand. The Symlog coding of the second session confirmed for the therapist that she had been able to join more closely with Dave

and Will on a nonverbal level during this session. This accorded with the descriptions generated by the team during the session.

The descriptions of the nonverbal behaviours generated by the Symlog coding system and the more verbal descriptions which were generated by the team in the usual process of therapy could thus be seen to have complemented one another during the course of the therapy sessions with the E family. Each served to highlight aspects of the interaction that might have otherwise been overlooked. However, the two aspects could not be said to have been mutually exclusive, rather each added a dimension to that of the other with the two sources of description each contributing to a broader overall description of the therapeutic process.

Second Study - Family K

Session 1

[This session included Dora, Dan, Casey, Nola and Sybil, the therapist].

Family history. Dora, a mother in her thirties, and her family are Malawian immigrants who had been in South Africa for 18 months prior to therapy. Her husband was subsidised by the Malawian government to study at a university in South Africa. Dora worked as a nurse in Malawi, but had been unemployed since her arrival in South Africa. Although they received a monthly income from the Malawian government, they were experiencing financial difficulties.

Dan, Dora's eldest son was 12 years old at the time of therapy. He was the child of a previous relationship of Dora's. Dora had two daughters, Casey aged 4 and Nola aged 2, with her present husband. Before coming to South Africa, Dora and her children lived with her parents in Malawi for a year, while her husband moved to South Africa to commence his studies.

Therapeutic problem. Since starting school in South Africa, Dan had been showing behavioural problems at school and at home. He had stolen items from the other children at school and had lied to his mother about where he had obtained the items. The school had contacted Dora regarding Dan's misbehaviour. Dora complained that Dan was spending time away from the home without her permission, which was causing her great concern.

Dora mentioned that she and her husband had decided the previous Sunday to tell Dan that Dora's present husband was not his biological father. When seen alone for a short time with the therapist, Dan told her that he had already known this, as his grandfather had told him previously. He seemed upset by this information and wept when telling the therapist that he had never known his own father. His relationship with his maternal grandparents was described with fondness. Dan's relationship with his two half sisters appeared to be good, judged from his description and also from the positive interaction seen between Dan and the two little girls during the session.

Systemic hypotheses regarding the therapeutic problem. It was hypothesised that there were two families that could be described in the present system. Firstly, the "new" family consisting of Dora, her new husband and their two daughters. Dora seemed committed to her two younger girls and through her description of her struggle to keep the family together, seemed committed to making a life for her new family in South Africa with her husband. Secondly, the "old" family which had existed in Malawi, had consisted of Dora and Dan, supported by Dora's parents. In this family, Dan had felt at home and had apparently accepted the discipline of his maternal grandfather and had enjoyed growing up with the companionship of his cousins, who lived nearby. Dora was possibly struggling to maintain her new family with her present husband. She was attentive to the needs of the two girls during the therapy session which could reflect her devotion to her new family. Dora's position as an immigrant had

served to isolate her which could have led to a sense of insecurity. In order to cope with her sense of insecurity it was possible that she had made an attempt to separate her old from her new family, whose survival in a foreign country was important to her. This could be reflected in her decision to tell Dan that her present husband was not his father.

It was hypothesised that Dan was possibly aware of his position as an outsider to the new family before it became official. Dan had told a friend of Dora's that he was only nine years old. It could be supposed that Dan felt the need to be younger (like his two half sisters) in order to be a part of the new family. It could be hypothesised that his stealing behaviour could be an attempt to fend for himself and to establish an identity and a sense of belonging in his peer group as well, independently of the family to which he felt he belonged in a peripheral sense only. Because of their difficult financial situation, Dan said that he had no toys and did not have the things that his peers had. Dan had stolen music tapes from his stepfather and had given them to his friends at school. This could be seen as an attempt on Dan's behalf to "buy" his way into the peer group and hence attain a sense of belonging.

Symlog description of session 1. [Note: as Casey and Nola spent most of the session playing on the floor and out of the view of the video camera, their behaviour was not scored in this session]

As depicted in the Symlog field diagram, Figure 5.3 (p. 87), Sybil and Dora were joined together in Friendly (P), Instrumentally controlled (F) behaviours. Sybil's behaviour was seen as Dominant (scoring 9U), while Dora's behaviour in relation to Sybil's behaviour on this dimension was neither dominant nor submissive (scoring 0U). The pattern of behaviour between Sybil and Dora was thus one of Sybil's Dominance complemented by Dora's neutrality. Dan, on the other hand showed behaviour that was neither Friendly (P) nor Unfriendly (N),

Expansion multiplier: 1,58

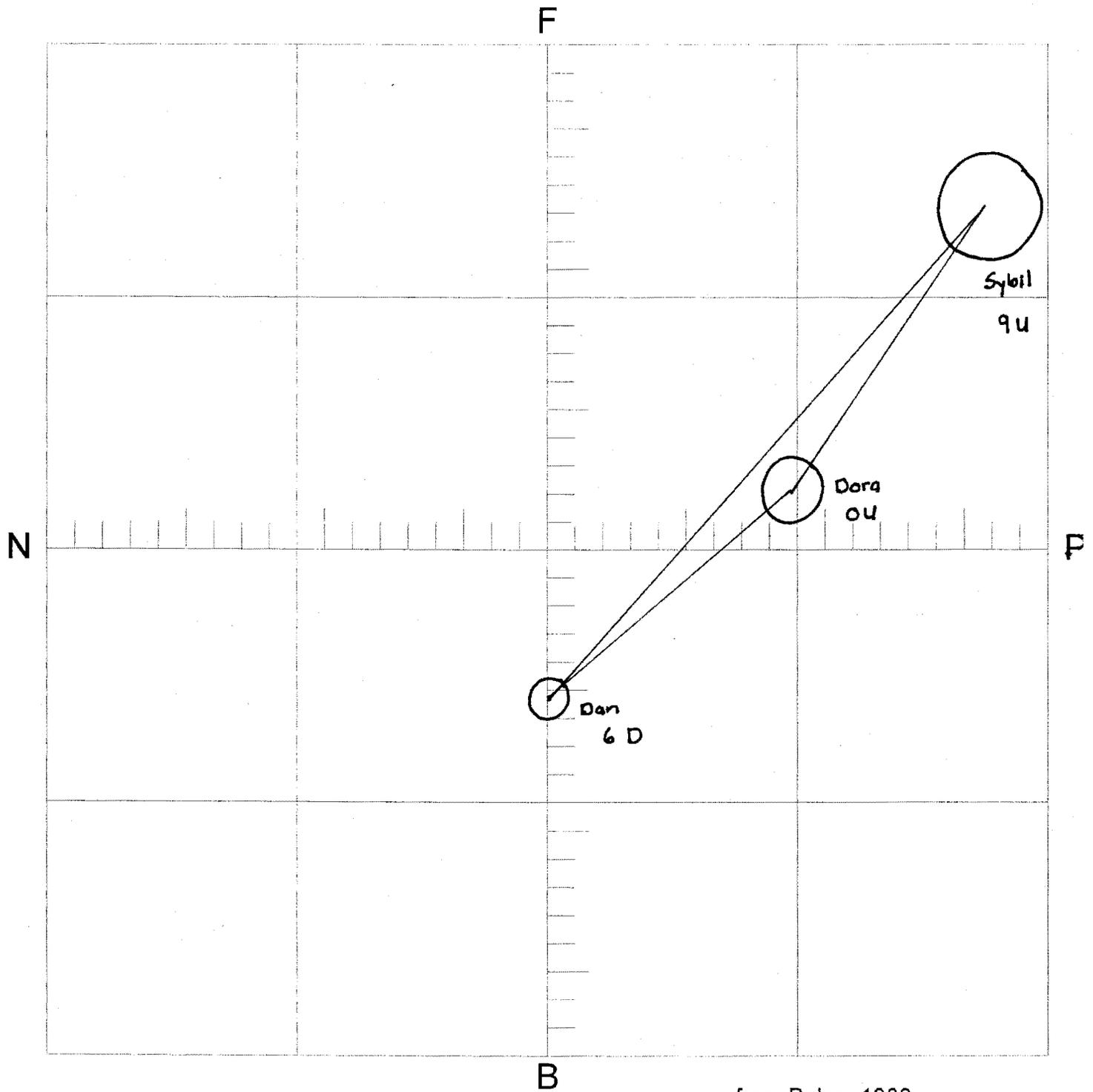


Figure 5.3 Symlog Field Diagram Family K Session 1

from Bales, 1980

(scoring 0 on the P-N dimension). However, he showed Emotionally expressive behaviour (B) in that he appeared to be upset and yet detached from the conversation that was going on chiefly between Dora and Sybil. He also seemed to be Submissive (D), in relation to Dora and Sybil (scoring 6D on this dimension). It would appear that the positive therapeutic relationship which was seen to be established between Sybil and Dora at this point, served to exclude Dan from the interaction.

Systemic description generated by the Symlog coding. Based on the Symlog description, further hypotheses regarding the therapeutic system including Dora, Dan and Sybil emerged as follows: It was hypothesised that while Sybil had appeared to join with Dora in the session, Dan was "left out in the cold", possibly feeling overwhelmed by Sybil and Dora's relative Dominance (U) thus choosing to sit quietly and detached, looking at a piece of paper he had brought into the room rather than joining in the ongoing conversation. His Emotional expressiveness (B) and Submissiveness (D) alerted the coders to the idea that he was feeling bad in the session and was possibly not being "heard" in comparison to Dora's more Instrumentally controlled (F) and Sybil's more Dominant (D) and Instrumentally controlled (F) behaviours.

Therapeutic interventions. Dan was framed as the family scout who was spending his time spying out the foreign territory for his family. Dora seemed to take up and share the idea of his quest to find roots outside the family. Dan appeared to enjoy this description of himself.

It was decided by the team that the therapist would work with the "old" family at first in order to allow Dan the space to be with his mother and to possibly hear more in narrative about his biological father from her in the next session. In this way Dan's identity with the old family would be accredited. Thereafter a blend between the "new" and "old" families would be addressed.

The therapist, having been alerted to the tendency for Dan to be isolated as shown in the Symlog coding, would make a conscious effort to join more with him in the subsequent sessions.

Session 2

This session included Dora, Dan and Sybil, the therapist

Therapeutic process. During this session, Dora's relationship with Fred, Dan's biological father was explored in Dan's presence. Dan was encouraged to join in the discussion of which characteristics he had inherited from each of his parents. Dora explained that she had left Fred soon after becoming pregnant with Dan, as Fred had been involved in crooked dealings and was seen by Dora and her own parents as a negative influence. This was framed by the therapist as an effort by Dora to protect Dan from negative influences in his life. The idea that Dora and Dan had kept secrets from each other regarding the knowledge of Dan's father was discussed. This was framed as an effort by each of them to protect the other from disturbing knowledge.

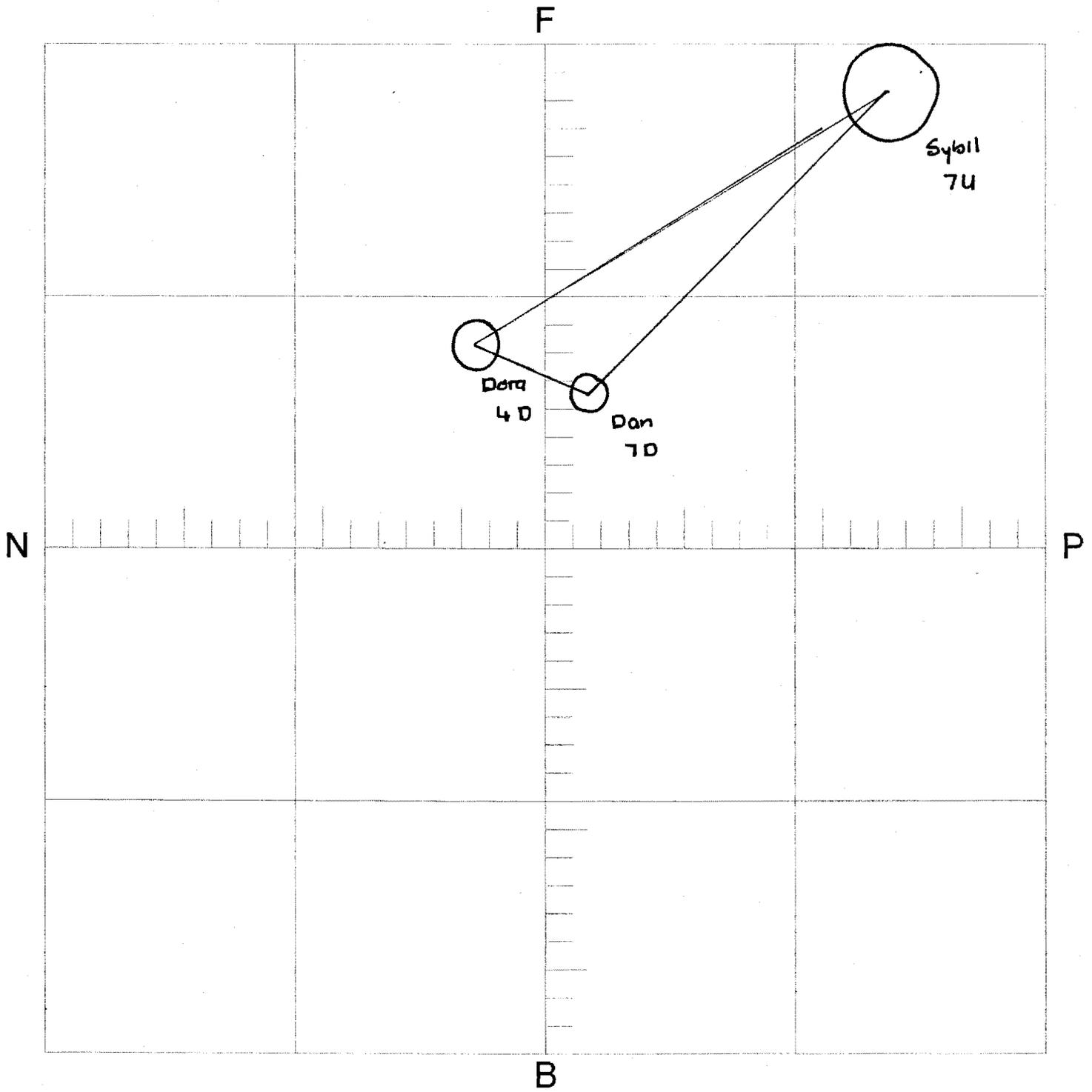
Dan had spent the first years of his life with his maternal grandparents. He described this as a happy time. Dan participated in drawing genograms of his old family, (which he saw as consisting of himself, Dora, his grandparents, his aunts and cousins) as well as his new family. The transition of Dora and Dan from the old to the new families was discussed. Dora spoke of her concern that Dan might not have been getting the attention that he was used to since the birth of her two daughters. The relationship between Dan and his stepfather was brought into the conversation and described by Dora as lacking in closeness.

Although Dora and Sybil spoke for the greater part of the session, Dan

participated in the interaction.

Symlog description of session 2. The Symlog Field Diagram of the coding for this session is shown in Figure 5.4 (p. 91). It was apparent from this diagram that the distance between the three interactants had decreased during this session. While Sybil remained in a Dominant (D), Friendly (P) and Instrumentally controlled (F) position, Dan had been included in the interaction, his behaviours becoming more Friendly (P) and Instrumentally controlled (F). It would appear that all three interactants were actively involved in a more positive therapeutic relationship at this point a pattern of inclusion was seen. Dora and Dan's nonverbal behaviours had become more similar. Some Unfriendly (N) behaviour had, however, been shown by Dora in that she had looked away and avoided eye contact while talking with Dan and Sybil, while Dan and Sybil's nonverbal behaviours had remained largely Friendly (P). All three interactants had been united in Instrumentally controlled (F) behaviour. A pattern of working together had been established. Sybil's Dominant (U) behaviour (scoring 7U) had decreased since the last session, but could possibly have threatened to overwhelm Dora and Dan's more Submissive (D) behaviours (scoring 4D and 7D respectively). A Dominant - Submissive pattern still existed in the interaction.

Expansion multiplier: 1,55



from Bales, 1980

Figure 5.4 Symlog Field Diagram Family K Session 2

Systemic descriptions generated by the Symlog coding. It was decided that through a discussion of the old family system, that Dan had been included more effectively in this session. There was a possibility however, that Dora had viewed the therapist's joining with her son negatively, as seen by her shift to a more negative pattern of nonverbal behaviour in session two (see Figure 5.4, p. 91).

Therapeutic interventions. It was decided that the next step in therapy was to work with the new family system and that an effort would be made to see all the members of the new system at the next session. Dora explained that this was not possible as her husband was writing exams at this time. Following from the Symlog observation an effort would be made to continue to join with Dora by addressing the importance of her new family as well as that of the old family. A further session was organised to include Dora and all the children in an effort to address the new family system.

Session 3

Dora, Dan, Casey, Nola and Sybil, the therapist were present at this session.

[Note: once again owing to Casey and Nola's movement about the room out of the view of the video camera, their behaviours could not be recorded.]

Therapeutic process. Dora told of Dan's increasing difficult behaviours both at school and at home since the last therapy session. Dan had been less controllable, spending nights away from home without his parents' permission and continuing to take things which did not belong to him. He had escaped punishment by lying to his parents. Dan spoke of his homesickness for Malawi and his longing to return to his grandparents there. He described his position as an outsider both in his home and at school and his desperate yet failed attempts to gain acceptance in both spheres of life. He had stolen goods from his stepfather and given them to the boys at school in order to gain acceptance. His

stepfather had beaten him for this.

Symlog description of session 3. As seen in the Symlog Field Diagram in Figure 5.5 (p. 94), Dan's nonverbal behaviour had become more Submissive (D) and more Unfriendly (N) in this session, while remaining Instrumentally controlled (F). Dora's nonverbal behaviour had increased slightly in Dominance (U), but remained similar to that of Dan. Dora and Dan's nonverbal behaviours continued to show a pattern of strong linkage as they had been shown to be in the previous session. This idea of their link was fed back to the family. Sybil's nonverbal behaviour remained in the Dominant (U), Friendly (P) Instrumentally controlled (F) area, showing a complementary pattern to that of Dora and Dan.

Expansion multiplier: 1,62

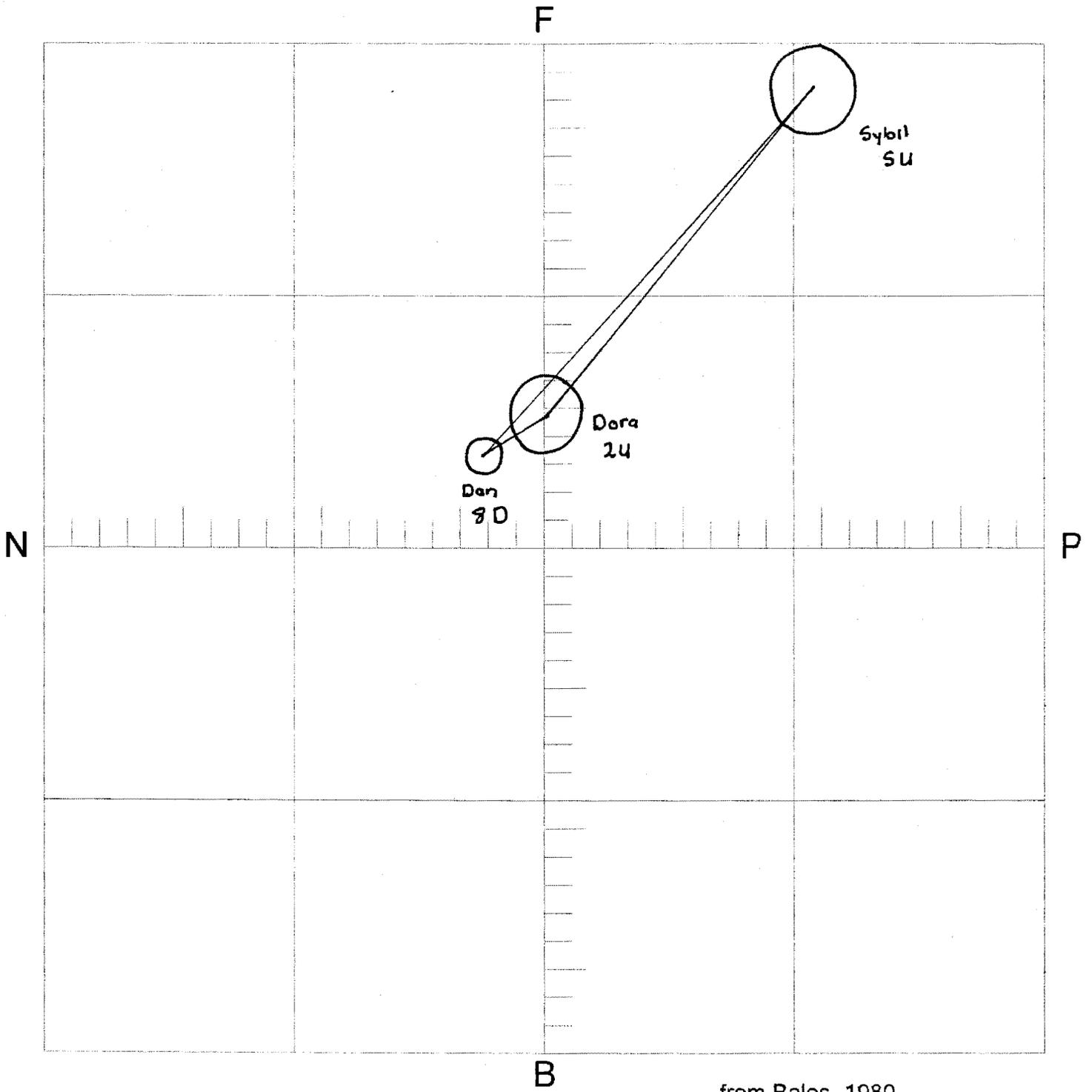


Figure 5.5 Symlog Field Diagram Family K Session 3

from Bales, 1980

Systemic description generated by the Symlog coding. Dora's nonverbal behaviour showed an increased dominance over the three sessions, possibly indicating a movement towards empowerment engendered by the therapeutic space over the weeks. Dan's nonverbal behaviours showed a strong negative and submissive content in relation to that of his mother and the therapist. It was speculated that his nonverbal behaviour reflected the sadness and discontent that he was feeling in his home life and at school which was being brought into the therapy room. His need to return to a happier time in his life where he felt he belonged was not being addressed in the therapy.

Therapeutic interventions. It was decided by the team that it was imperative to include Dora's husband in the sessions should the therapy continue, as he had a vital role to play in the dynamics of the new family. Dan's link to Dora was underlined and framed as his loyalty to the old family. It was suggested that Dan's difficulty in fitting into the new family, new school and new country were causing him more distress than had been acknowledged by Dora and hence the possibility of Dan returning to Malawi was introduced, but was framed as a matter that should be discussed by all the members of the new family.

Summary of the therapy with family K.

The therapeutic problem of Dan's unacceptable behaviour had been moved from being conceptualised as a problem with Dan, to being seen as a problem that occurred when the transition from an old family to a new family had occurred. Initially Dora had described herself as the one who was bearing the burden of Dan's behaviour. During the process of therapy the difficulty that Dan was experiencing in finding his identity in a new family and in a new country was addressed. Symlog scoring showed a pattern of Dan's exclusion from the interaction, indicating that Dan was not being heard in the first session. (This had not been noticed during the session prior to coding). An effort was made from

the second session to join more with Dan and to hear his story, wherein his strong desire to return to his old family became apparent. Dora was able to hear her son's point of view in the therapy session and was given the chance to share a part of her history with him about his father that she had never before shared with Dan. The pattern of closeness between Dan and his mother was highlighted by the Symlog coding in second and third sessions and fed back to the family as Dan's loyalty to the old family and used as an intervention, introducing the possibility of Dan returning to the old family.

With family K the Symlog coding served to highlight the nonverbal relationships between the interactants during the session that were not otherwise noticed during the ongoing therapeutic interactions. These relationships (for example, Dan being left out of the interaction at times) served as an important source of feedback for the therapist, who was able to make use of these descriptions in a self-reflexive way in the subsequent sessions.

Overview of the Coded Therapy Sessions

Broadening of the Therapeutic Descriptions

In the discussion of the sessions with both family systems, Symlog coding served to broaden the descriptions of the families that were generated during the usual discourse around the sessions. These descriptions were fed back to the therapist and thus served to change her perceptions of the relationships within the client system and also her position with regard to the other interactants.

In the first session with family E, Symlog coding served to highlight the pattern of Sybil and Sandy's relative Dominance over Will and Dave's

behavioural input. Furthermore, the possible coalition between Will and Sandy was highlighted as well as Dave's possible peripheral position in the system. The therapist's relative distance from the other members of the family was also shown on the Symlog field diagram. These issues were included in the descriptions of the therapeutic process and were taken into account when designing therapeutic interventions. The pattern of coalition between Will and Sandy was addressed by having Will collect information about possible future career opportunities independently of Sandy. The therapist, by acknowledging the feedback from the Symlog coding regarding her distance from her clients and her possible dominance over Will and Dave, made an effort in future sessions to spend more time joining with them both. In the second session with family E, the therapist's nonverbal behaviour as depicted in the Symlog space had moved closer to that of both Will and Dave (see Figure 5.2, p. 82).

In the first session with family K, the Symlog field diagram suggested that while Sybil and Dora were joined in Friendly and Instrumentally Controlled nonverbal behaviours, Dan had been isolated from the ongoing therapeutic interaction (see Figure 5.3, p. 87). His Emotional Expressiveness and relative Submissiveness lead to the description that he was feeling bad and unheard by the other interactants. This was addressed in the next therapy session by including only Dan and Dora in the session and by the therapist leading the discussion around exploring the past which Dora and Dan had shared. The Symlog Field Diagram of the next session indicates that Dora and Dan's behaviours had moved closer together (see Figure 5.4, p. 91). This was framed as a closeness between them and a loyalty by Dan to the old family. The therapist's behaviour remained removed from that of Dora and Dan tending towards being Instrumentally Controlled, Friendly and Dominant. This possibly served to focus the task oriented nature of the therapeutic process while the therapist attempted to join with the family through Friendly nonverbal expression.

However, it could have overwhelmed both Dora and Dan's behaviours which were seen as Submissive by comparison.

The Therapist's Position

By examining her position as depicted in the Symlog Field Diagrams across the therapy sessions, the therapist was able to gain a descriptive picture of her own therapeutic style. She remained largely in the Friendly (P), Instrumentally Controlled (F) quadrant, showing Dominant (U) nonverbal behaviour in relation to her clients. Thus, it could be postulated that she adopted a leading role and was task oriented, keeping the therapeutic discussion focused. Her nonverbal behaviours remained positive and friendly towards her clients. While this nonverbal behaviour could serve to foster the therapeutic process and to join with the clients, it could also indicate a tendency to overwhelm the clients and possibly inhibit their behaviours. A tendency to work too hard in the session rather than allowing the therapeutic process to unfold at the clients' own tempo could be noted and used in future therapy sessions.

A Learning Process for the Team

The members of the team, including the therapist, held a discussion about the experience of coding therapy sessions of which they had been a part on the Symlog Interaction Scoring system (see *A Discussion by the Coders of the Coding*, p. 68). It was noted that the experience of coding had sensitised the members of the team to the impact of nonverbal behaviours in a therapeutic interaction. The team members reported that they had become more consciously aware of nonverbal behaviours of themselves and their clients in their own therapy sessions in which they were involved at the time of the conducting of the present study, and that they were inclined to give more time to describing

nonverbal behaviours in their descriptions of the therapeutic processes.

The team members noted that through coding they had become aware of the sequence of complementary behaviour between interactants along the Symlog dimensions. It was noted by the author that these sequences were not fully taken into account in the present study as only one Symlog Field Diagram was drawn for each session. Should many such diagrams be drawn at regular intervals during the sessions, the changing sequences would have been recorded. This would require a higher frequency of coding by the observers, a skill which, according to Bales and Cohen (1979), takes practice to acquire. Such a detailed study would be beyond the scope of the present study but may serve as a basis for future studies using Symlog Interaction Scoring. It is interesting to note that such sequences of interactions were noted in discussion among the observers.

The value of the descriptions gathered in the present chapter will be discussed with reference to the theoretical background and the stated aims of the present study, in the chapter which follows.

CHAPTER 6

DISCUSSION

The Achievement of Stated Aims

As noted by Guba (1978), a naturalistic study often develops as it proceeds, with the inquirer adopting an expansionistic stance, where she seeks a holistic view which will enable her to describe phenomena as wholes, rather than to seek only that information which will answer preformulated questions and hypotheses. In line with this way of thinking, while the present study has achieved many of the aims set out in chapters 1 and 4, it can be noted in the discussion which follows, that some of these previously stated aims were amplified as the study proceeded, while the emphasis originally placed on some of the aims shifted during the course of the study.

A study of nonverbal behaviour in a natural setting of actual therapy sessions was conducted, which could provide therapists with a description of nonverbal behaviour which is directly applicable to their own therapeutic endeavours. Thus, the study represents a contextualisation of nonverbal behaviour within a therapeutic setting. The study is furthermore focused on process. The necessity of taking process into account during an inquiry, and alternating this with a naming of the process, or a classification of form, was first noted by

Bateson (1980) and amplified by Keeney (1983). The present study focuses on the process of therapy, where simple actions are observed in the give and take of interaction and on the naming of these behavioural sequences through the employment of Symlog codes. The recursive alternation between description of process on the one hand and classification of form (or the naming of processes) on the other, is given attention in this study. By describing the simple nonverbal behaviour sequences of each interactant in the therapy session, and by juxtaposing these descriptions with those of the other interactants in the session, a higher order of description, namely that of relationship between the interactants was co-created. In like manner, the juxtaposition of nonverbal with verbal descriptions yielded a double description of the interactions ("double description" being a term used by Bateson and described under *The idea of complementarity*, pp. 36, 37), showing the relationship between verbal and nonverbal behaviours which were at times congruent and at other times, incongruent. This process of double description thus yielding a higher order of description.

This study represents an ecosystemic focus on nonverbal behaviour which represents a different focus from that of current studies. In keeping with ecosystemic principles, a movement beyond a first order view wherein the observer remains outside the system she observes, was attained. The researcher became part of the system under study, thus adopting a stance of a participant observer, which is in accordance with a second order cybernetic view which considers the observer to be an inseparable part of that which she observes (Sluzki, 1985, Keeney, 1983). The researcher served as the therapist in all therapy sessions and hence a description of her own nonverbal behaviour was obtained with the aid of Symlog Interaction Scoring. This description was fed back to the therapist and served as a basis for interventions and for changing process during successive sessions. The cybernetic principle of feedback was included in this study. Observations made by the team (of which the therapist was a part) were fed back to the therapist, who used these observations in further

therapeutic descriptions and interventions.

The study addressed the recursion that occurs between the political and semantic aspects of communication as delineated by Keeney and Ross (1992), or the report and command aspects of communication as outlined by Ruesch and Bateson (1968), which is akin to the content and relationship levels of Watzlawick et al (1967). As pointed out by Keeney and Ross (1992), it is not useful to analyze communication in terms of dualities, rather it is the recognition of the recursive relationship of each aspect to the other that is important in studying communication. In this study, nonverbal behaviours (which largely represent the political, relationship or command aspects of communication) framed and were in turn framed by the verbal behaviours of the interactants during the therapy sessions. For example, in session 1 with family E (see *Session 1*, p.72), Sandy and Sybil spent a large part of the session speaking about Will's difficulties. This could be taken to represent a the semantic, content or report aspect of the communications in the session. The Symlog coding highlighted the more political, relationship or command aspects of the communication, leading to the hypothesis that the two had formed a co-therapist coalition. The two aspects of communication were seen to form a dialectic, with each aspect informing and being informed by its counterpart. The meanings generated through both the nonverbal and verbal behaviours were included in the ongoing processes of therapy with attention being given to the patterns of interaction and the ongoing relationships that emerged between participants in the therapy sessions. Both aspects of behaviour formed the basis of therapeutic interventions, lending a holistic flavour to the therapy sessions.

A deliberate co-creation of meanings, generated through the active perception and discussion of both verbal and nonverbal behaviours, was attempted. The Symlog coding system was used as a means of finding a common domain of languaged description for nonverbal behaviours. The meanings created

during the therapy sessions were seen to be the co-constructions, created in language, of all the observers, and were not taken to reflect absolute realities existing independently of the observers. For example, in the sessions held with family K (see pp. 84 - 95), it was noted that Dan's nonverbal behaviours showed a strong negative and submissive content in relation to that of the therapist and his mother. The team used this to formulate the hypothesis that this was a reflection of the discontent he was feeling with his own life. This hypothesis was not taken to be the ultimate truth, but was used rather to formulate an intervention of verbalising Dan's need to return to his former life in Malawi, where he had been happier. The Symlog coding system served to broaden the languaged descriptions of the therapeutic process and were thus, at times, fed back in language to the participants in therapy. An exploration of the nonverbally presented "unsaid" was done where the Symlog coding highlighted this. Thus, in accordance with an ecosystemic model a constructionistic stance was maintained during the therapies studied.

Symlog Interaction Scoring provided a concise and practical method of scoring nonverbal behaviour. By focusing explicitly on the nonverbal aspects of behaviour, Symlog coding enabled the coders a time in which nonverbal behaviours, which are largely perceived only at an unconscious level, to be consciously noted, thereby increasing their influence on the therapeutic descriptions. By using this information recursively with the verbal aspects of communication the descriptions of the ongoing therapeutic sessions were broadened by providing a description of patterns of relationship between the interactants in these sessions. This fits with the ecosystemic view of therapy where the behaviours of all interactants in the therapy sessions are the point of focus, with the complementarity and fit of each member's behaviour within the system being given attention. For example, with family E it was hypothesised from the Symlog coding of session 1 (see *Symlog description of session 1*, p.75),

that Sandy and Sybil's strong friendly behaviours were complemented by Dave's unfriendly behaviour.

The nonverbal descriptions of behaviour contributed to an exploration of what Anderson and Goolishian (1988) refer to as the "unsaid" in therapy. By using the meanings generated from both the verbal and nonverbal behaviours the therapist could fulfil her role of assisting the clients in the exploration of new meaning.

By using the convenient punctuations of nonverbal behaviour provided by the Symlog Interaction Scoring system in order to co-create a set of meanings around the nonverbal behaviours viewed, a method which can be considered to be linear in nature, was employed within an ecosystem framework. This shows that it is possible to link the partial arcs of a linear method with ecosystemic thought processes as suggested by Keeney (1983).

The study served as a learning experience for the therapist in that she was able to view her nonverbal therapeutic style, which remained constant across several sessions. Furthermore, the members of the team found that, through their experience with Symlog coding of nonverbal behaviours, they had become more consciously aware of nonverbal behaviours of themselves and their clients in the therapy sessions in which they were involved, apart from the present study.

Limitations of the Present Study

Symlog Field Diagrams were drawn of each therapy session as a whole. Thus a global pattern of the nonverbal behaviour in each session was presented. A more detailed description of the interaction patterns within each session was not attempted, thus the finer interaction sequences occurring between the members of the therapeutic system were not depicted and could thus not be fed back to the therapist during the course of a session. Such a detailed description of the nonverbal interaction between members would be useful. However, the coding and resultant drawing of a Symlog Field Diagram is time consuming and would not be practically possible during the time constraint of the average therapy session.

The descriptions of nonverbal behaviour were co-created by the team with these informing the therapist only. A further study in which the relational position of the interactants, highlighted by the Symlog coding, could be fed back to the clients themselves would be useful. In this way the clients could have direct access to descriptions of their interactions which could be discussed with them with further meanings being created around this input. This would increase the transparency of the therapist's methods, a practice advocated by Hoffman (1993).

Conclusion

The present study presents a contextual study of nonverbal behaviour in the naturalistic setting of actual therapy sessions. An ecosystemic epistemology serves as a basis for the study and thus represents a move away from the more traditional approaches to nonverbal behaviour which are largely confined to a positivistic theoretical framework, employing experimental designs in contrived settings. By including descriptions of nonverbal behaviour as part of the discourse around the therapeutic process, the awareness of patterns of relationship between interactants was enhanced and could be included in the therapeutic process. The present study serves to provide a practical means of enhancing the awareness of nonverbal behaviour while retaining a holistic approach to therapy.

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APPENDIX A

SYMLOG DIRECTIONAL DEFINITIONS

Taken from Bales & Cohen, 1979, pp 355 - 386 (selected sections)

DIRECTION U

Behaviour

NON U Gives nonverbal signs that seem Dominant (Upward). Examples: moves strongly, rapidly, or expansively; sits or stands very straight; keeps very alert and active; keeps arms or legs in open posture; holds shoulders squarely back; holds chest high; holds elbows back with palms forward as if ready to grasp; holds wrists firm; or in standing, holds the knees firmly back or grips the ground with the toes.

DIRECTION UP

Behaviour

NON UP Gives nonverbal signs that seem Dominant (Upward) and Friendly (Positive). Examples: takes the initiative in exchanges of smiles or waves, shakes hands warmly, approaches closer to the other, place hands on the shoulders of others, claps others on the back, links arms, or put arms around the other; gives the other a seat, food or drink, physically demonstrates affection or good will.

DIRECTION UPF

Behaviour

NON UPF Gives nonverbal signs that seem Dominant (Upward), Friendly (Positive), and Instrumentally Controlled (Forward). Examples: takes a position in front of the group in the direction of attention or physical movement necessary for a group task; places the self between the group and some threatening location; sits in a prominent place in order to communicate with as many group members as possible about the task; demonstrates some form of task-oriented behaviour for others to perform; or tries to persuade others to perform work by work gestures.

DIRECTION UF

Behaviour

NON UF Gives nonverbal signs that seem Dominant (Upward), and Instrumentally Controlled (Forward). Examples: starts a new phase of activity prior to the others or goes first, maintains a facial appearance of confident dignity, impartiality, or self-control; or holds head well up, holds face composed. with wings of nose relaxed. Mouth and brow relaxed.

DIRECTION UNF

Behaviour

NON UNF Gives nonverbal signs that seem Dominant (Upward), Unfriendly (Negative), and Instrumentally Controlled (Forward). Examples: raises brows in disapproval, closes eyes as if giving up in disgust, or indicates hauteur by facial expression, e.g., shows fullness of throat below the jaw (suggesting a rising of the gorge), opens mouth slightly (as if about to gag), pushes the lower lip somewhat forward (as if in disdain), or constricts the nostrils (as if sampling an offensive odour).

DIRECTION UN

Behaviour

NON UN Gives nonverbal signs that seem Dominant (Upward) and Unfriendly (Negative). Examples: frowns, scowls, knits and lowers the brows, glares with rigidly open eyes, dilates the nostrils (as in anger), pushes the lower lip and lower jaw forward (as if about to bite), puffs out the upper lip and the cheeks with mouth pressed closed (as if barely containing rage), or physically attacks, propels, or restrain others.

DIRECTION UNB

Behaviour

NON UNB Gives nonverbal signs that seem Dominant (Upward), Unfriendly (Negative), and Emotionally Expressive (Backward). Examples: preens the self, displays the self through mannerisms; laughs derisively (with lower lip down and retiring, corners drawn down); mimics for effect the facial expressions of surprise, disgust, or vexation (e.g. depresses the inner brow as in aggression, raises the outer brows as in surprise, opens mouth in an angry position as if shouting, raises the wings of the nose as in anger, curls the upper lip as in anger, or depresses the corners of the mouth and pushes the lower lip forward as if "making a poor face" to ridicule submissive dependency).

DIRECTION UB

Behaviour

NON UB Gives nonverbal signs that seem Dominant (Upward), and Emotionally Expressive (Backward). Examples: physically dramatizes to entertain, strikes poses, or takes roles; mimics humorously the expressions, emotions, voice, manner, or bodily movement or attitudes of persons or animals in anecdotes; or exercises indirect suggestion on others by physical movement that initiates a change in mood toward greater emotional expression.

DIRECTION UPB

Behaviour

NON UPB Gives nonverbal signs that seem Dominant (Upward), Friendly (Positive), and Emotionally Expressive (Backward). Examples: gives emotional support by touching, feeding, protecting, or helping physically, or shows emotional warmth in facial expressions, e.g, smiles or laughs warmly and supportively (in a warm laugh, wrinkles are formed against and beneath the eyes as the lower eyelids are pushed up by the cheek muscles).

DIRECTION P

Behaviour

NON P Gives nonverbal signs that seem Friendly (Positive). Examples: pays attention to others with eyes, pays attention by turning to other, by approaching the other physically to a comfortable distance, or by listening carefully.

DIRECTION PF

Behaviour

NON PF Gives nonverbal signs that seem Friendly (Positive), and Instrumentally Controlled (Forward). Examples: shows interest in the content of the other's task-oriented communication, shows receptiveness to task-oriented communication by looking at the speaker, gives the speaker signs of recognition, shows one expects the other to speak, sits erect in a position to hear better, or nods head in agreement.

DIRECTION F

NON F Gives nonverbal signs that seem Instrumentally Controlled (Forward). Examples: keeps face alert, but impersonal in expression; keeps eyes active in instrumental observation (lids well open with jaws relaxed); performs work or keeps eyes on the work; or keeps attention focused on instrumental activity.

DIRECTION NF

NON NF Gives nonverbal signs that seem Unfriendly (Negative) and Instrumentally Controlled (Forward). Examples: tightens jaw muscles, tends to press lips together, keeps face set grimly, keeps minor signs of rejection patiently in check, or show occasional breakthrough of negative expression in tics or grimaces, blinks persistently, or rubs eyes to keep concentration focused.

DIRECTION N

Behaviour

NON N Gives nonverbal signs that seem Unfriendly (Negative). Examples: looks away, takes off glasses, raises one eyebrow sceptically, covers the mouth, or turns the face away; closes posture by placing arms or legs as if to block communication or approach of the other as if to protect the self; observes surreptitiously from the sides of the eyes; turns the back; or avoids turning towards the other.

DIRECTION NB

Behaviour

NON NB Gives nonverbal signs that seem Unfriendly (Negative) and Emotionally Expressive (Backward). Examples: jerks away or looks away when addressed; slouches; yawns, or closes eyes when addressed; shrugs shoulders; or ignores or shows contempt for the other, e.g. holds mouth closed and curled, holds corners of the lips pulled down, wrinkles the skin below the corners of the mouth, stretches the fold of the skin that comes from above the wing of the nose down around the mouth, appears as if preparing to spit something out, or lowers the mouth as if to disagree.

DIRECTION B

Behaviour

NON B Gives nonverbal signs that seem Emotionally Expressive (Backward). Examples: shows shifting and drifting of attention away from task, shows preoccupation with passing thoughts and feelings unconnected with the current communication of group members, shows occasional mixed expression - e.g., a smile tending to win over a frown of contempt, the raising of the brows in self-abnegation combined with the thrusting out of the lower lip and jaw as in aggression - or shows a blank look

DIRECTION PB

Behaviour

NON PB Gives nonverbal signs that seem Friendly (Positive) and Emotionally Expressive (Backward), Examples: listens attentively to some particular group member (but meanwhile ignores to some extent the whole group); shows a preference by posture, attention, or a stream of nonverbal communication for friendship with a particular person or subgroup, rather than a solidarity with the group as a whole, reminds a particular other of private jokes or outside contact by wink, grins, or changes of seating.

DIRECTION DP

Behaviour

NON DP Gives nonverbal signs that seem Submissive (Downward) and Friendly (Positive). Examples: imitates or mirrors the bodily attitudes or acts of one or more other members (apparently identifying the self with the other); smiles trustfully; shows open posture of arms, legs and feet in relation to the other, or shows an open, rapt gaze.

DIRECTION DPF

Behaviour

NON DPF Gives nonverbal signs that seem Submissive (Downward), Friendly (Positive) and Instrumentally Controlled (Forward). Examples: looks down, makes self small, minimizes bodily movement, moves carefully or gently, closes the posture but remains positive in orientation to the other, as if in petition, with knees bent, back bowed, head low, arms folded and held in front, or hands clasped or touching, as if to bow, pray to the other, or beg.

DIRECTION DF

Behaviour

NON DF Gives nonverbal signs that seem Submissive (Downward) and Instrumentally Controlled (Forward). Examples: turns to the leader to act first; sits in silent contemplation of the task or work, head bent down in thought, eyes looking forward or downward or eyes held fixed, unfocused, or unseeing; or makes work gestures repeatedly and compulsively.

DIRECTION DNF

Behaviour

NON DNF Gives nonverbal signs that seem Submissive (Downward), Unfriendly (Negative), and Instrumentally Controlled (Forward). Examples: shows a martyred expression, e.g. lower lip tending to protrude, lip perhaps quivering slightly as if about to cry, eyes tending to tears, brows elevated in self-abnegation, head turning from side to side as if in pain; or shows signs of anger toward the other, but in suppressed form, breaking out periodically.

DIRECTION DN

Behaviour

NON DN Gives nonverbal signs that seem Submissive (Downward) and Unfriendly (Negative). Examples: holds body rigid, restrained or silently rejecting, holds head down with brow knitted, lower lip protruding, eyes closed or averted, as if to suppress jealousy, envy, anger, or to ward off extraneous ideas and interruptions; or turns away, holds stomach, or closes posture.

DIRECTION DNB

Behaviour.

NON DNB Gives nonverbal signs that seem Submissive (Downward), Unfriendly (Negative), and Emotionally Expressive (Backward). Examples: sits down without removing hat or coat; takes a seat nearest the door; indicates submissive restlessness, boredom, or disinterest; jiggles the foot, doodles, or reads a newspaper rather than joining the conversation; holds head in hands, turns to leave. Increases distance from others, looks repeatedly toward the door, looks repeatedly at the clock, gathers up things, puts on coat or hat before the end of the session, stands up, or leaves before the session is over.

DIRECTION DB

Behaviour

NON DB Gives nonverbal signs that seem Submissive (Downward) and Emotionally Expressive (Backward). Examples: shows nervous movements or signs of anxious emotionality; shows grooming, blushing, trembling, or sweating; shows signs of fright (e.g., eyes open wide, corners of mouth depressed, lower area of the face pulled down), shows signs of sorrow or grief (e.g., inner brows raised, forehead wrinkled horizontally, inner or middle part of upper brow raised, corners of mouth depressed, cheeks depressed, nose constricted); or laughs hysterically (muscles around the corners of the mouth tending to lead downward in a struggle with those pulling upward.)

DIRECTION DPB

Behaviour

NON DPB Gives nonverbal signs that seem Submissive (Downward), Friendly (Positive), and Emotionally Expressive (Backward). Examples: shows special signs of pleasure and expectancy in relationship to another; smiles, giggles, or grins with pleasure; beams and appears charmed in response to a more ascendant other person's stimulation and care; shows pupillary dilation in relation to that other, moves closer, or sits together with particular other liked person in the group apparently so as to increase the possibility of special communication with them holds on to other, or appears to seek protection or love.

DIRECTION D

Behaviour

NON D Gives nonverbal signs that seem Submissive (Downward). Examples: remains quiet and motionless or gives signs of utter resignation, e.g. brows raised, lower lip and jaw receding, eyes closed, nostrils constricted, or body bent upon itself in closed posture with tendency to curl up, shoulders forward, chest sunken, elbows coming forward, arms tending to fold inward across the body, wrists slack and closing inward, fingers tending to fold up or curl, knees bent and tending to come together, heels tending to turn outward and to separate, feet slack and closing inward.

**APPENDIX C
INTERPERSONAL MATRIX**

(Example)

	Cynthia		Sybil		Sandy		Will		Dave	
U	3		3		0		0			
D	0	3U	0	3U	3	3D	0	0		
P	3		2		2		0			
N	0	3P	1	1P	0	2P	2	2N		
F	3		2		1		1			
B	0	3F	0	2F	1	0	0	1F		

	Jodie		Sybil		Sandy		Will		Dave	
U	5		2		0		0			
D	0	5U	0	2U	3	3D	1	1D		
P	5		0		2		0			
N	0	5P	0	0	1	1P	1	1N		
F	5		2		1		0			
B	0	5F	0	2F	1	0	0	0		

	Sybil		Sandy		Will		Dave	
U	1		3		1		2	
D	0	1U	0	3U	3	2D	0	2U
P	3		0		1		0	
N	0	3P	0	0	0	1P	3	3N
F	4		1		0		0	
B	1	3F	2	1B	0	0	0	0

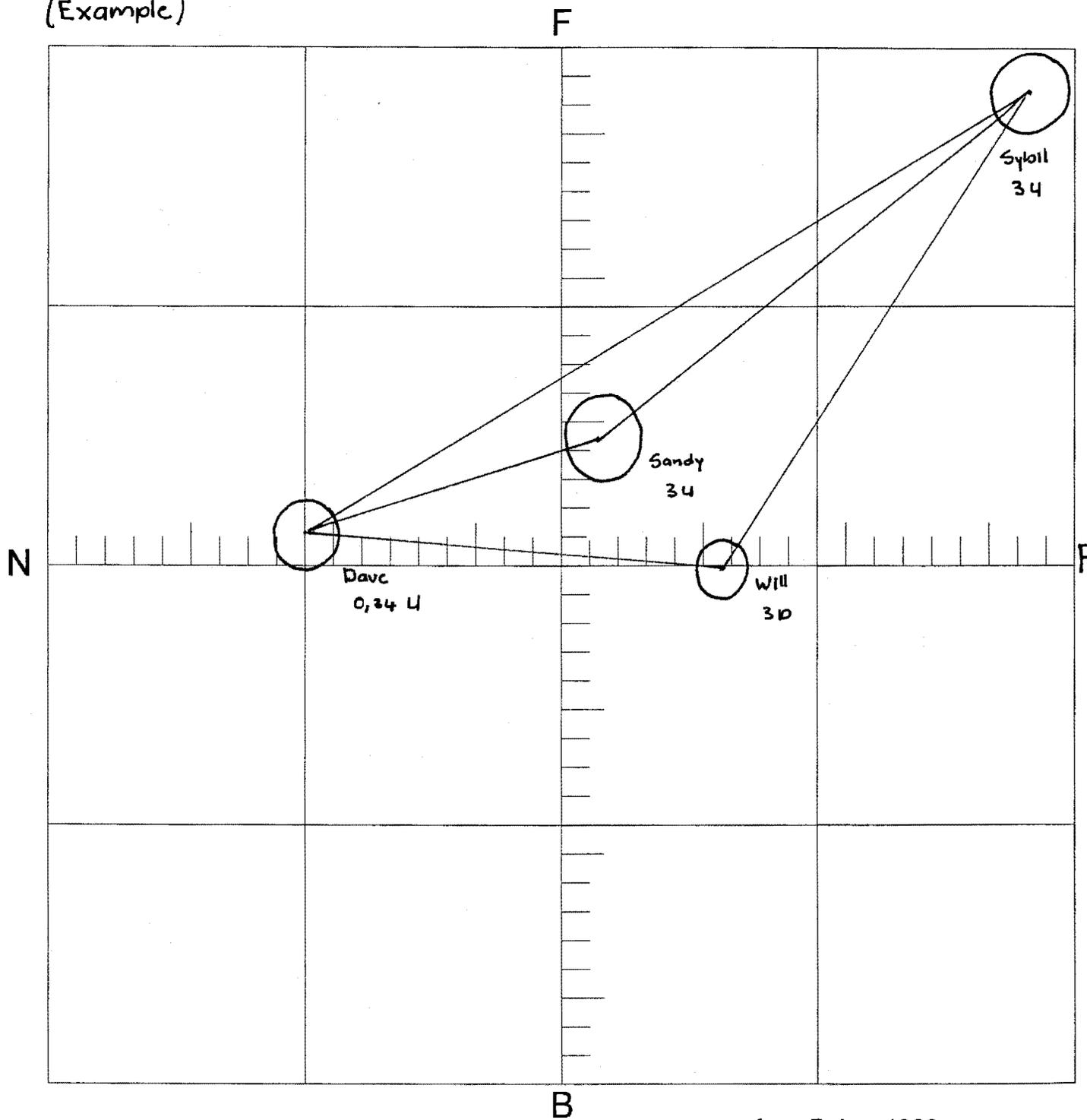
Group Average	Sybil		Sandy		Will		Dave	
U	3		2,67		0,33		0,67	
D	0	3U	0	2,67U	3	2,67D	0,33	0,34U
P	3,67		0,67		1,67		0	
N	0	3,67P	0,33	0,34P	0,33	1,34P	2	2N
F	4		1,67		0,67		0,33	
B	0,33	3,67F	0,67	1F	0,67	0	0	0,33F

taken from Bales, 1980

APPENDIX D

Expansion multiplier: 4,47

(Example)



from Bales, 1980

Figure 5.1 Symlog Field Diagram Family E Session 1

APPENDIX E

Formula for the expansion multiplier:

$$\frac{18 - \text{U-D Circle Radius}}{\text{Original centre point location}} = \text{Expansion Multiplier}$$

Original centre point location

Bales & Cohen, 1979, pp 434

Size of the radius of each size of U-D circle in field diagram:

18U = 4.5	9U = 2.16	1D = 1.22	10D = 0.70
17U = 4.13	8U = 2.06	2D = 1.13	11D = 0.66
16U = 3.75	7U = 1.97	3D = 1.03	12D = 0.61
15U = 3.38	6U = 1.88	4D = 0.98	13D = 0.56
14U = 3.00	5U = 1.78	5D = 0.94	14D = 0.52
13U = 2.81	4U = 1.69	6D = 0.89	15D = 0.47
12U = 2.63	3U = 1.59	7D = 0.84	16D = 0.42
11U = 2.44	2U = 1.50	8D = 0.80	17D = 0.38
10U = 2.25	1U = 1.41	9D = 0.75	18D = 0.33
	00 = 1.31		

Bales & Cohen, 1979, pp 435.

APPENDIX F

Session 1		U-D Dimension		
Coder\Member	Sybil	Loraine	Olga	Agreement Fraction: 3/3
Sybil	1U	5U	3D	
Cynthia	4U	4U	0	
Jodi	5U	4U	5D	

Session 1		P-N Dimension		
Coder/Member	Sybil	Loraine	Olga	Agreement Fraction:2/3
Sybil	4P	5P	2N	
Cynthia	5P	2P	2P	
Jodi	5P	7P	1P	

Session 1		F-B Dimension		
Coder/Member	Sybil	Loraine	Olga	Agreement Fraction: 3/3
Sybil	5F	8F	6B	
Cynthia	7F	1F	2B	
Jodi	6F	8F	1B	

Session 2		U-D Dimension		
Coder/Member	Sybil	Cheryl	Tommy	Agreement Fraction: 3/3
Sybil	2U	4U	0	
Cynthia	2U	3U	0	
Jodi	4U	4U	0	

Session 2		P-N Dimension		
Coder/Member	Sybil	Cheryl	Tommy	Agreement Fraction: 2/3
Sybil	2P	1N	1P	
Cynthia	3P	0	1P	
Jodi	5P	2P	3P	

Session 2		F-B Dimension		
Coder/Member	Sybil	Cheryl	Tommy	Agreement Fraction:3/3
Sybil	8F	3F	1B	
Cynthia	3F	3F	1B	
Jodi	4F	0	2B	

Session 3		U-D Dimension			
Coder/Member	Sybil	Sandy	Will	Dave	Agreement Fraction:3/4
Sybil	1U	3U	2D	2U	
Cynthia	3U	3U	3D	0	
Jodi	5U	2U	3D	1D	

Session 3		P-N Dimension			
Coder/Member	Sybil	Sandy	Will	Dave	Agreement Fraction: 4/4
Sybil	3P	0	1P	3N	
Cynthia	3P	1P	2P	2N	
Jodi	5P	0	1P	1N	

Session 3		F-B Dimension			Agreement Fraction: 3/4
Coder/Member	Sybil	Sandy	Will	Dave	
Sybil	3F	1B	0	0	
Cynthia	3F	2F	0	1F	
Jodi	5F	2F	0	0	

Session 4		U-D Dimension			Agreement Fraction: 2/3
Coder/Member	Sybil	Will	Dave		
Sybil	2U	7D	2U		
Cynthia	3U	5D	1U		
Jodi	5U	4D	1D		

Session 4		P-N Dimension			Agreement Fraction: 3/3
Coder/Member	Sybil	Will	Dave		
Sybil	6P	2P	2P		
Cynthia	7P	5P	1P		
Jodi	8P	5P	4P		

Session 4		F-B Dimension			Agreement Fraction: 3/3
Coder/Member	Sybil	Will	Dave		
Sybil	0	3F	5F		
Cynthia	5F	1F	4F		
Jodi	8F	3F	3F		

Session 5		U-D Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction: 3/3
Sybil	9U	0	6D	
Cynthia	8U	0	5D	
Jodi	10U	1U	6D	

Session 5		P-N Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction: 2/3
Sybil	9P	5P	1N	
Cynthia	10P	5P	0	
Jodi	11P	7P	1P	

Session 5		F-B Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction: 2/3
Sybil	6F	2F	2B	
Cynthia	6F	3B	5B	
Jodi	11F	5F	3B	

Session 6		U-D Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction: 3/3
Sybil	4U	5D	8D	
Cynthia	8U	8D	5D	
Jodi	9U	0	7D	

Session 6		P-N Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction: 1/3
Sybil	4P	5N	1N	
Cynthia	9P	4N	0	
Jodi	11P	4P	4P	

Session 6		F-B Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction: 3/3
Sybil	8F	5F	6F	
Cynthia	12F	3F	4F	
Jodi	11F	6F	1F	

Session 7		U-D Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction: 2/3
Sybil	3U	2D	6D	
Cynthia	6U	3U	9D	
Jodi	7U	4U	9D	

Session 7		P-N Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction: 1/3
Sybil	7P	1N	5N	
Cynthia	11P	1P	4N	
Jodi	9P	0	5P	

Session7		F-B Dimension		
Coder/Member	Sybil	Dora	Dan	Agreement Fraction:2/3
Sybil	8F	3F	3F	
Cynthia	14F	4F	4F	
Jodi	8F	2F	1B	

APPENDIX G

**LIST OF ARTICLES, WITH THEIR RESEARCH DESIGN, TAKEN FROM
THE JOURNAL OF NONVERBAL BEHAVIOUR**

YEAR	VOLUME	AUTHOR/S	TITLE OF ARTICLE	RESEARCH DESIGN
1991	15 (1)	Smith, H.J., Archer, D. & Costanzo, M.	"Just a hunch": accuracy and awareness in person perception	Experimental
1991	15 (1)	Mc Hugo, G.J., Lanzetta, J.T. & Bush, L.	The effect of attitudes on emotional reactions to expressive displays of political leaders	Experimental
1991	15 (1)	Johnson, K.L. & Edwards, R.	The effects of gender and type of romantic touch on perceptions of relational commitment	Experimental
1991	15 (1)	Burgoon, J.K. & Baesler, E.J.	Choosing between micro and macro nonverbal measurement: application to selected vocalic and kinesic indices	Experimental
1991	15 (2)	Berry, D.S., Kean, K.J., Misovich, S.J. & Baron, R.M.	Quantized displays of human movement: a methodological alternative to the point-light display	Experimental
1991	15 (2)	Kimble, C.E. & Seidel, S.D.	Vocal signs of confidence	Experimental
1991	15 (2)	Fernandes-Dols, J.-M., Wallbott, H & Sanchez, F.	Emotion category accessibility and the decoding of emotion from facial expression and context	Experimental
1991	15 (2)	Ekman, P., O'Sullivan, M., Friesen, W.V. & Scherer	Invited article: face, voice and body in detecting deceit	Experimental

YEAR	VOLUME	AUTHOR/S	TITLE OF ARTICLE	RESEARCH DESIGN
1991	15 (3)	Chovil, N.	Social determinants of facial displays	Experimental
1991	15 (3)	Buck, R.	Social factors in facial display and communication: a reply to Chovil and others	Theoretical
1991	15 (3)	Chovil, N. & Fridlund, A.J.	Why emotionality cannot equal sociality: reply to Buck	Theoretical
1991	15 (3)	Vrij, A. & Winkel, F.W.	Cultural patterns in Dutch and Surinam nonverbal behavior: an analysis of simulated police/citizen encounters	Experimental
1991	15 (3)	Schneider, K. & Josephs, I.	The expressive and communicative functions of preschool children's smiles in an achievement-situation	Experimental
1991	15 (4)	Wagner, H.L. & Smith, J.	Facial expression in the presence of friends and strangers	Experimental
1991	15 (4)	Remland, M.S., Jones, T.S. & Brinkman, H.	Proxemic and haptic behavior in three European countries	Naturalistic
1991	15 (4)	Burgoon, J.K.	Relational message interpretations of touch, conversational distance, and posture	Naturalistic
1991	15 (4)	Houle, R. & Feldman, R.S.	Emotional displays in children's television programming	Naturalistic

YEAR	VOLUME	AUTHOR/S	TITLE OF ARTICLE	RESEARCH DESIGN
1992	16 (1)	Wallbott, H.G.	Effects of distortion of spatial and temporal resolution of video stimuli on emotion attributions	Experimental
1992	16 (1)	Markham, R & Adams, K.	The effect of type of task on children's identification of facial expression	Experimental
1992	16 (1)	Berry, D.S.	Vocal types and stereotypes: joint effects of vocal attractiveness and vocal maturity on person perception	Experimental
1992	16 (1)	Willis, F.N. & Briggs, L.F.	Relationship and touch in public settings	Naturalistic
1992	16 (1)	Kaiser, S. & Wehrle, T.	Automated coding of facial behavior in human-computer interactions with faces	Experimental
1992	16 (2)	Matsumoto, D. & Assar, M.	The effects of language on judgments of universal facial expressions of emotion	Experimental
1992	16 (2)	Brownlow, S.	Seeing is believing: facial appearance, credibility and attitude change	Experimental
1992	16 (2)	Siegel, S.M., Friedlander, M.L. & Heatherington, L.	Nonverbal relational control in family communication	Experimental
1992	16 (3)	Zebrowitz, L.A., Brownlow, S. & Olson, K.	Baby talk to the babyfaced	Experimental

YEAR	VOLUME	AUTHOR/S	TITLE OF ARTICLE	RESEARCH DESIGN
1992	16 (3)	Burgoon, J.K., Le Poire, B.A.	Nonverbal behaviors as indices	Experimental
		Beutler, L.E., Bergan, J. &	of arousal: extensions to the	
		Engle, D.	psychotherapy context	
1992	16 (3)	Berenbaum, H. & Rotter, A.	The relationship between spon-	Experimental
			taneous facial expressions of	
			emotion and voluntary control	
			of facial muscles	
1992	16 (3)	Fridlund, A.J., Kenworthy,	Audience effects in affective	Experimental
		K.G. & Jaffey, A.K.	imagery: replication and ext-	
			ention to dysphoric imagery	
1992	16 (4)	Halberstadt, A.G.,	Children's abilities and strate-	Experimental
		Grotjohn, D.K., Johnson, C.A.	gies in managing the facial	
		Furth, M.S. & Greig, M.M.	display of affect	
1992	16 (4)	Hortacsu, N. & Ekinci, B.	Children's reliance on sit-	Experimental
			uational and vocal expression	
			of emotions: consistent and	
			conflicting cues	
1992	16 (4)	Roose, N.J., Olson, J.M.,	Same-sex touching behavior:	Naturalistic
		Borenstein, M.N., Martin, A.	the moderating role of homo-	
		& Shores, A.L.	phobic attitudes	
1993	17 (1)	Wagner, H.L.	On measuring performance in	Measurement
			category judgment studies of	
			nonverbal behavior	
1993	17 (1)	Wagner, H.L., Buck, R. &	Communication of specific	Experimental
		Winterbotham, M	emotions: gender differences	
			in sending accuracy and com-	
			munication measures	

YEAR	VOLUME	AUTHOR/S	TITLE OF ARTICLE	RESEARCH DESIGN
1993	17 (1)	Montepare, J.M. & Zebrowitz	A cross-cultural comparison of	Experimental
		L.A.	impressions created by age-	
			related variations in gait	
1993	17 (1)	Russell, R.L., Stokes, J.,	The role of nonverbal sen-	Experimental
		Jones, M.E., Czogalik, D &	sitivity in childhood psycho-	
		Rohleder, L.	pathology	
1993	17 (3)	Halberstadt, A.G.	Emotional experience and	Overview
			expression: an issue overview	
1993	17 (3)	Barrett, K.C.	The development of nonverbal	Theoretical
			communication of emotion: a	
			functionalist perspective	
1993	17 (3)	Camras, L.A., Sullivan, J. &	Do infants express discrete	Experimental
		Michel, G.	emotions? Adult judgments of	
			facial, vocal, and body actions	
1993	17 (3)	Stifter, C.A. & Grant, W.	Infant responses to frustration:	Experimental
			individual differences in the	
			expression of negative affect	
1993	17 (3)	Denham, S.A. & Grout, L.	Socialization of emotion: path-	Experimental
			way to preschoolers' emotional	
			and social competence	
1993	17 (4)	Matsumoto, D. & Kudoh, T.	American-Japanese cultural	Experimental
			differences in attributions of	
			personality based on smiles	
1993	17 (4)	Bond, M.H.	Emotions and their expression	Overview
			in Chinese culture	
1993	17 (4)	Kenner, A.N.	A cross-cultural study of body-	Experimental
			focused hand movement	

YEAR	VOLUME	AUTHOR/S	TITLE OF ARTICLE	RESEARCH DESIGN
1994	18 (1)	Nowicki, S. & Duke, M.P.	Individual differences in the nonverbal communication of affect: the diagnostic analysis of nonverbal accuracy scale	Measurement
1994	18 (1)	Boyatzis, C.J. & Satyaprasad, C.	Children's facial and gestural decoding and encoding: relations between skills and with popularity	Experimental
1994	18 (1)	Casey, R.J. & Fuller, L.L.	Maternal regulation of children's emotions	Measurement interviews
1994	18 (1)	Kahlbaugh, P.E. & Haviland, J.M.	Nonverbal communication between parents and adolescents: a study of approach and avoidance behaviors	Naturalistic
1994	18 (2)	Vrij, A.	The impact of information and setting on detection of deception by police detectives	Experimental
1994	18 (2)	Guerrero, L.K. & Andersen, P.A.	Patterns of matching and initiation: touch behavior and touch avoidance across romantic relationship stages	Naturalistic
1994	18 (2)	Burgoon, J.K. & Buller, D.B.	Interpersonal deception: 111. effects of deceit on perceived communication and nonverbal behavior dynamics	Experimental
1994	18 (3)	Berry, D.S., Hansen, J.S., Landry-Pester, J.C. & Meier, J.A.	Vocal determinants of first impressions of young children	Experimental

YEAR	VOLUME	AUTHOR/S	TITLE OF ARTICLE	RESEARCH DESIGN
1994	18 (3)	Noller, P. & Feeney, J.A.	Relationship satisfaction, attachment, and nonverbal accuracy in early marriage	Experimental
1994	18 (3)	Meiran, N., Netzer, T., Netzer, S., Itzak, D. & Rechnitz, O.	Do tests of nonverbal decoding ability measure sensitivity to nonverbal cues?	Experimental
1994	18 (3)	Hayduk, L.A.	Personal space: understanding the simplex model	Theoretical
1994	18 (4)	Kappas, A., Hess, U., Barr, C.L. & Kleck, R.E.	Angle of regard: the effect of vertical viewing angle on the perception of facial expressions	Experimental
1994	18 (4)	Carrera-Levillain, P. & Fernandez-Dols, J-M.	Neutral faces in context: their emotional meaning and their function	Experimental
1994	18 (4)	Josephs, I.E.	Display rule behavior and understanding in preschool children	Experimental
1995	19 (1)	Patterson, M.L.	Invited article: A parallel process model of nonverbal communication	Theoretical
1995	19 (1)	Montepare, J.M.	The impact of variations in height on young children's impressions of men and women	Experimental
1995	19 (1)	Briton, N.J. & Hall, J.A.	Gender-based expectancies and observer judgments of smiling	Experimental