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THE FACILITATING ROLE OF METAPHORS IN
PSYCHOTHERAPY WITH ADOLESCENTS: A CYBERNETIC
PERSPECTIVE

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**The facilitating role of metaphors in psychotherapy with
adolescents: A cybernetic perspective**

by

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Summary

The purpose of this study is to provide a descriptive account of the facilitating role of metaphors in psychotherapy with adolescents. The facilitating role played by the metaphor is understood from a cybernetic perspective within the framework of general systemic theory. The need for this research arose from the lack of published academic material documenting the facilitating role of metaphors from a cybernetic perspective.

The literature survey for this study is presented in two chapters. In the first theoretical review, the basic concepts of the cybernetic epistemology are investigated with particular attention being paid to the application of the epistemology to the process of psychotherapy. The second theoretical chapter explores contemporary theoretical literature regarding the use of metaphors in psychotherapy. This exploration of relevant literature is undertaken with a distinct cybernetic slant thus focussing on a second order understanding of metaphors. Both chapters make practical reference to the application of the theory in terms of the adolescent.

The cybernetic approach of this study necessitates the implementation of a research methodology which is consistent with, and applicable to this epistemology. Therefore cybernetic ethnography was the methodology that was selected. This scientific method of inquiry consists of providing the reader with transcripts of the therapeutic process, as well as the researcher's meta-level understanding of the facilitating role played by the metaphor. Thus the reader has access to both the research data and the researcher's meta-level constructs in analysing the data, and therefore can determine the research validity and legitimacy. The methodological implication of cybernetic ethnography is the presentation of five original

metaphors, the three clients with whom the metaphors co-evolved all having received psychotherapy from the researcher in a specialised adolescent unit at a state psychiatric hospital.

Following the meta-analysis of the research data, it was found that metaphors facilitate the definition and redefinition of systemic boundaries, break redundant negative feedback loops while initiating positive feedforward loops and constantly facilitating the languaging of experiences. It is therefore possible to draw a final conclusion regarding the role of metaphors in psychotherapy with adolescents. This conclusion seems to indicate that psychotherapeutic metaphors indeed play a facilitating role in psychotherapy with adolescents.

Key terminology

cybernetic epistemology; autopoietic systems; self-reference; recursion; linguistic system; differential discourse; cybernetic process; psychotherapeutic metaphors; co-evolved metaphors; cybernetic ethnography;

Opsomming

Die doel van die studie is om 'n beskrywing van die fasiliterende rol van metafore in psigoterapie met adolessente te gee. Die rol van die metafoor word vanuit die kubernetiese perspektief binne die raamwerk van die algemene sisteemteorie verken. Die behoefte vir hierdie studie het ontstaan weens die tekort aan gepubliseerde navorsing wat die fasiliterende rol van metafore vanuit 'n kubernetiese perspektief bestudeer.

Die literatuurstudie strek oor twee hoofstukke. Die eerste hoofstuk ondersoek die basiese konsepte van die kubernetiese epistemologie met spesifieke klem op die toepassing van psigoterapie. Die daaropvolgende hoofstuk eksplorieer kontemporêre teoretiese literatuur oor die gebruik van metafore in psigoterapie. Die bestudering van die betrokke literatuur word gedoen vanuit die kubernetiese oogpunt en fokus op die tweede-orde betekenis van metafore. Beide hoofstukke bied praktiese verwysings wat die toepassing van die teorie met die adolessent toelig.

Die kubernetiese aard van die studie noodsaak die implementering van 'n navorsingsmetodologie wat konsekwent is met, en van toepassing is op hierdie epistemologie. Die kubernetiese etnografie is die metodologie van keuse. Hierdie wetenskaplike navorsingsmetode voorsien die leser van die navorsingsdata asook die metavlakkonstrukte van die navorser aangaande die fasiliterende rol wat die metafoor vertolk, sodat hy of sy self die navorsing en legitimiteit van die data-analise kan bepaal. Die metodologiese implikasie van die kubernetiese etnografie behels vyf oorspronklike metafore wat ontwikkel is in samewerking met drie kliënte wat elk psigoterapie van die navorser ontvang het in die gespesialiseerde

adolessente eenheid van 'n psigiatriese staatshospitaal.

Daar is na afloop van die meta-analise van die navorsingsdata gevind dat die metafore die definiëring en herdefiniëring van sistemiese grense fasiliteer, negatiewe terugvoersiklusse versteur en terselfdertyd positiewe terugvoersiklusse inisieer. Verder word die verbalisering van ervarings deurgaans gefasiliteer. Hierdie navorsing dui daarop dat metafore wat in 'n psigoterapeutiese konteks met adolessente gebruik word wel 'n fasiliterende rol speel.

Sleutelbegrippe

kubernetiese epistemologie; selfregulerende sisteme; selfverwysing; rekursiwiteit; linguistiese sisteem; differensiële gesprekvoering; kubernetiese proses; psigoterapeutiese metafore; mede-ontwikkelde metafore; kubernetiese etnografie

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Chapter 1

1.1 Introduction

In order for psychology to make a valuable and worthwhile contribution to the quality of human existence, it needs to research relevant issues which will promote the heuristic quality of human living. On the eve of the twenty-first century, the art of psychotherapy is in danger of being left behind. Therefore, in order for psychology to continue to make a meaningful contribution well into the next millennium, therapists need to explore the boundaries of psychotherapy to prevent their becoming redundant in our ever-changing world.

1.2 The research challenge

Although cybernetic epistemology seems to be increasing in terms of its number of supporters, there is relatively little published material particularly in terms of its theoretical application to psychotherapy (Luhmann, 1995). Similarly, although metaphors are widely used and extensively commented on, their academic applicability to psychotherapy still remains somewhat questionable (Cox & Theilgaard, 1987). With this in mind the combination of cybernetic epistemology and psychotherapeutic metaphors is virtually non-existent. When these theoretical bases are applied to the adolescent in psychotherapy, one is venturing into virtually uncharted waters in terms of published academic material.

This study endeavours to explore the facilitating role of psychotherapeutic metaphors in psychotherapy with adolescents conducted within cybernetic epistemology.

1.3 Aim of the study

The capacity of psychotherapeutic metaphors to play a facilitating role in the process of psychotherapy with adolescents is the research question under investigation in this study. To determine whether this process-facilitating capacity exists, the researcher will describe various case studies to illustrate this occurrence. To this end and because of the lack of research in this area, the aim of this study is to determine the facilitating role of metaphor in psychotherapy with adolescents. To achieve this, the basic concepts of cybernetic epistemology are explored, as well as the psychotherapeutic use of metaphors. These theoretical constructs are then applied to the therapeutic case studies where the facilitating role of metaphors are described, thus satisfying the initial aim of this study.

It is important to remember that the aim of this study is not to provide guidelines for therapeutic interventions, nor is it to propose a new psychotherapeutic technique. Rather, the aim of this study is to describe the facilitating role played by metaphors in psychotherapy.

1.4 Method of inquiry employed for this study

As noted by Hoshmand (1989), the method of research inquiry employed in the study must be consistent with, and applicable to the epistemological base assumed by the researcher. As the aim of this study is to provide the reader with a descriptive account of the facilitating role of metaphors from a cybernetic perspective, the appropriate research paradigm which lends itself to the accomplishment of this aim is cybernetic ethnography. The rationale for this methodological choice, together with other pertinent aspects of research methodology are

discussed in Chapter 5. The important research issues which are highlighted include basic objections to the use of the positivistic research methodologies and motivations supporting a move towards alternative research methods which complement the more phenomenological forms of psychotherapy. The metaphors presented to the reader are based on data obtained as a result of the psychotherapeutic alliance between the client and the researcher.

Three adolescent clients were selected (two girls and one boy between the ages of fifteen and eighteen years). From these three clients, five co-evolved metaphors were selected and are presented. These presentations are based on detailed process notes and audiovisual recordings taken by the researcher. The therapeutic transcripts are then analysed at a meta-level by the researcher where the researcher's understanding of the facilitating role played by the metaphor in the process of psychotherapy is illustrated.

1.5 Structural outline of the study

The format of this study reflects cybernetic epistemology in that it seeks to provide the reader with a second order perspective in terms of reviewing the study. Chapter 2 introduces the reader to the basic concepts of cybernetic epistemology, while providing examples of its application to the adolescent. The examples are provided to ensure that the reader gains greater insight into what the researcher understands regarding cybernetic theory.

In Chapter 3 having gained a working knowledge of the epistemological basis, the reader is invited, to review contemporary theoretical ideas on the psychotherapeutic metaphor. This theoretical review maintains a distinct cybernetic stance and again provides examples

highlighting the researcher's practical understanding of the theoretical concepts.

The review of relevant literature having been accomplished, Chapter 4 draws the reader's attention to the method of inquiry used in this study. This chapter explores the need for the use of alternative research paradigms and describes the research design, data presentation and analysis, as well as the selection criteria of participants.

Chapter 5 is the culmination of the study. It provides the reader with non-verbatim transcripts of the psychotherapy sessions in which the co-evolved metaphor met the inclusion criteria. Following the presentation of each metaphor, a meta-level analysis illustrating the facilitating role of the metaphor is provided. Thus the reader has access to both the therapy transcripts and the researcher's epistemological understanding and can 're-search' the material provided.

The study concludes in Chapter 6 where the facilitating role of the metaphor is highlighted and discussed. Suggestions for further research elicited as a result of this study are also discussed, together with a critical evaluation of the study from the researcher's perspective.

Chapter 2

Theoretical model

This chapter attempts to provide a broad overview of the theory of cybernetics. Within the paradigm of cybernetics, the basic premises of 'knowing' will be individually explored in some detail. This is followed by an outline of the implications of a cybernetic epistemology for psychotherapy conducted within this framework. In the light of this epistemology, direct psychotherapeutic intervention strategies become redundant; as Maturana (1978) suggests the therapist does not and cannot directly change anyone. The cybernetically orientated therapist strives to relinquish the need to produce a mandate and predictable outcome, as structural changes within the system are always moving towards that which is not possible for the therapist to predict.

2.1 Introduction

The psychotherapeutic use of metaphors as a facilitator of process is understood from a cybernetic perspective within the framework of general systemic theory. Bale (1995) refers to Bateson's definition of cybernetic epistemology as a means of knowing what sort of world we live in, as well as the limitations which exist concerning our ability to know something of such matters. Cybernetic epistemology is thus human 'knowing,' and the knowing of 'knowing'. If this concept is taken a step further, cybernetic epistemology concerns itself with the knowing of that which is characteristic and governing of all living systems (Donaldson, 1992).

Interspersed among the theoretical presentation of cybernetic epistemology, is the researcher's understanding of the theory when applied to the adolescent and the adolescent in psychotherapy. The application of cybernetic epistemology in terms of the adolescent system is presented as the adolescent in psychotherapy and is central to this dissertation. The main concepts of cybernetic epistemology as applicable and applied to this research will be highlighted.

2.2 Cybernetic epistemology: basic concepts

The fundamental concepts upon which cybernetic epistemology is built are those of the

- * autopoietic system;
- * homeostasis;
- * self-reference;
- * morphogenesis.

2.2.1 Autopoietic systems

Autopoiesis refers to the self-creating characteristics of all living systems (Luhmann, 1995). Maturana and Valera (1980) define autopoietic organisation of living systems as the network of interrelated components producing processes such that the components, through their interaction, generate the same recursive networks of interrelated components which produced them.

An autopoietic system thus creates its own elements as well as its unity as a system, and its own structure. It can therefore be said that the autopoietic system does not consist of pre-existing elements, but rather reproduces itself by the production of new elements through the recursive network of elements (Thyssen, 1995). It is this circularity of operation within the system that maintains it as a living system. The capacity of the autopoietic system to maintain its identity in spite of the continuous replacement of components is indicative of the system's capacity to generate and maintain wholeness or homeostasis.

If Maturana and Valera's (1980) definition of autopoietic systems is applied to human systems or a psychotherapy client for example, the network of interrelated components are those cognitive and psychological elements within each client which define the client system as unique and individual. These unique elements or components are each person's basic thought construction, value system and goal-directed behaviour to name but a few. It is impossible for these elements to stop interacting within each person as it is exactly this interaction which defines the system as living. Through the continual interaction between the aforementioned components, new components are continually produced with the result that the system recreates itself. In effect then each person creates his own thought constructs not so much because of outside environmental influence, but through the interaction between all the components. It is through this self-recreation of our own components that our self-image and definition remains somewhat stable despite the replacement of these components. The human system thus creates its own spare parts.

2.2.2 Homeostasis

Autopoietic homeostasis is every system's resistance to change in order to preserve and maintain stability or balance. This phenomenon occurs through the self-regulating process of the system when there is an implied temporary loss of balance. According to Bale (1995) the term 'balance' is most significant. Balance underscores the contention that the system maintains itself in tension between opposing forces, namely, between the formation and the dissolution of its constituent parts. The system compensates for this 'loss of balance' by importing and processing energy from within the system, thereby undergoing internal structural changes and thus maintaining a steady balance, a dynamic equilibrium between its own improbable state and the environment (Bale, 1995). 'Therefore, an autopoietic machine is a homeostatic (or rather a relations-static) system which has its own organisation (defining network of relations) as the fundamental variable which it maintains constant' (Maturana & Varela, 1980, p.79).

If a person's systemic organisation or core self-concept defines him/her as essentially honest, then honesty contributes to system homeostasis and thus a dynamic state of balance. This state of balance is termed dynamic because for the system to remain honest, structural changes are constantly required to maintain it as such.

Maturana and Varela (1980) state that a distinction needs to be made between the organisation of the system and the structure of the system. The organisation of an autopoietic system are those characteristics which identify it as whole, recursive and informationally closed. If these defining organisational characteristics of an autopoietic system are individually investigated,

then the core self-concept and self-image of a specific person identifies that person as whole and individual. While the person's ability to analyse and change his/her own behaviour identifies them as recursive, and the person's ability to remain constant, despite continuous stimuli and information from the environment, identifies him/her as informationally closed.

The structure of the autopoietic system, on the other hand, refers to and suggests an investigation into the relationship among components of the system. These structural components refer to the person's emotions, values, goals, needs, fears and thoughts and so on. System structure can thus be seen as the process of interaction between the components, transformation of these components and the destruction of certain components as the person or system grows and changes. Structural change as a result of the interaction, transformation and destruction of components within an autopoietic system is, according to Maturana (1978), an ongoing process, changing from moment to moment and is therefore never complete or static but always 'in process'. Thus while the organisation of the system will rarely change, the structure will invariably change to accommodate the organisation (Keeney, 1983).

Autopoietic systems also tend to maintain homeostasis or self-stability based on their own internal structure which continually reproduces itself, and can therefore be viewed as informationally closed rather than open (Maturana & Valera, 1980). The system can thus be defined as autonomous and self-functioning as it subordinates all structural changes to the maintenance of its own organisation. In other words, the components which make up the person's structural composition, for example the person's affective state, will change not so much as a result of the person's interaction with the environment, therefore defining the person as informationally closed, but will change rather in an attempt to maintain the person's

organisation, thus defining the person as autonomous and self-functioning.

It is now possible as a result of this understanding to conclude that an autopoietic system will therefore adapt its internal structure to the contexts available to maintain homeostasis or alter the context to accommodate homeostasis (Andersen, 1994). Such circularity among structural components of a system suggests that change in one component of the system will have a reverberating effect on all other components within that system. Thus change (like psychotherapy) in any level of a system has the potential to affect all other levels of that system (Keeney, 1983). In other words, if the emotional component of the person's structure changes, it will have a reverberating effect on the person's goals or values, in fact on all the person's structural components.

This cybernetic concept of change in one component affecting all other components of the system's structure embraces the cybernetic notion of non summativity. The core of this conceptual idea contends that, since the organisation of any system is greater than the sum of the individual components or structures, it is not possible to examine these structures separately nor is it possible to group these individual structures together to understand the whole (Keeney, 1983). The very nature of autopoietic systems is dependent on 'the combined interaction of the system as a whole, and hence the system's true character is lost from view when its distinguishable components are investigated independently of each other' (Bale, 1995, p. 31). Accordingly, systems need to be studied and understood in the interactional contexts in which they occur. One cannot merely study a client's affective or emotional state and assume one can understand the client; the client as a whole within his/her context needs to be understood.

2.2.3 Self-reference: recursion

Having gained an understanding of what structural change entails, it is important to know how this change occurs within the autopoietic system. Structural change is possible as the system has the ability to self-refer. Self-reference is understood as the system's capacity to refer to its own patterns of communication and the ability therefore to reflect in language its own structural operation. Thyssen (1995) maintains that the capacity for self-reference is achieved through the process of recursive communicational loops which emerge as interactional patterns and thus supply the system with self-referring information.

Keeney (1983) defines this self-referring communication as recursive feed loops whereby output (that which comes out of the system or that which the person does) influences input (that which goes into the system or that which the person experiences) in such a way as to change future output. This process of feedback from the environment allows the person the opportunity to alter future behaviour in relation to the person's perceived goals. It is essential to understand the concept of 'feedback as we impinge on the environment through our behaviour and interaction. However, we have no way of assessing the impact of our impingement other than through what the environment feeds 'back' to us. As humans we are solely dependent on the 'feedback' of our environment for our survival, as feedback assures the continuation of the evolutionary process of humanity.

As human beings our dependency and need for consistent and accurate feedback from the environment is no more clearly apparent than in the development of the adolescent. Owing to the increase in the adolescents' cognitive ability, adolescents are afforded the opportunity to

reflect upon and integrate that which is experienced. This cognitive integration represents a quantum leap in their ability to self-refer. The increase in the adolescent's introspective capacity stems from the neurological sophistication and maturation which is characteristic of the physiological changes which occur during this phase of life. With this increased capacity to self-refer, the adolescent enters a phase of experimentation and change.

When adolescent change is viewed from a linear first order perspective, change may be categorised as the linear consequence of a developmental life stage like any other. However, when adolescent behavioural change is explored from a second order cybernetic perspective, this capacity to change is possible as the adolescent's involvement in the processes of feedback becomes more prevalent. The adolescent, constantly striving for an optimal degree of input satisfaction, manipulates environmental input to the system by changing behaviour until an optimal level of input is achieved. To achieve this optimal degree of input satisfaction, system modification and refinements are required. These input alterations will invariably result in overt behavioural changes. These refinements and modifications are commonly seen in the adolescent changing identity relatively often until a satisfactory input identity is formed (Vernon, 1993).

The process of cybernetic feedback loops described by Keeney (1983) can be divided into negative and positive recursive loops. A negative feedback loop signals that a discrepancy between selected behaviour and targeted goals has occurred in the system. The disturbance gives rise to a stabilising or discrepancy-reducing effort by the system. This is aimed at the point of disturbance in an attempt to regain system self-stabilisation or homeostasis, thus assisting the system to maintain itself within the medium to which it is coupled (Bale, 1995).

An illustrative example of a negative feedback loop may be an adolescent seeking attention from his psychotherapist in order to unbalance his homeostasis which he experiences as frustrating and not input satisfying. Through the process of introspection he becomes aware of the desired behaviour by which he will attempt to gain the therapist's attention (the targeted goal); he thus deliberately comes late for the therapy session (selected behaviour). However the adolescent finds that the therapist still fails to pay attention to him (feedback from the environment informs him that a discrepancy has occurred between his behaviour and optimal input satisfaction). Due to the process of feedback the adolescent becomes aware that a gap in his perception of reality has occurred. The adolescent's behaviour has not unbalanced his homeostatic equilibrium as desired and in an attempt to destabilise himself he invests more energy aimed at achieving his perceived reality which is to gain attention from his therapist. A recursive loop thus develops where the adolescent's output (an awareness of desired behaviour and overt behaviour) is changed as a result of unsatisfactory input (feedback informing the system that a gap in perceived reality has occurred). The recursive loop is seen as negative in the sense that it is destructive for the person by not allowing the person to grow, change or differentiate.

A positive feedforward loop, on the other hand, signals that a mismatch between the system's behaviour and its intended performance has occurred. An example of a positive feedforward loop may be the client, whose intended performance is not to give expression to certain anxiety-producing experiences. However, through the introduction of a metaphor, the client finds him/herself languaging the experience nonetheless. There is thus a discrepancy between the client's intended performance and actual behaviour. This results in the initiation of a positive feedforward recursive loop which strengthens the behavioural deviations from the

client's intended performance (Bale, 1995). The increased deviation from intended performance may vary from barely being able to language the experience, to a cathartic and powerful experience.

The recursive loop is seen as positive as it aids in the development and differentiation of the system's inner structures. Constant positive feedforward loops through recursive operation challenge the system by allowing new experiences to occur, thus generating more varied information about the environment and allowing human interaction to filter through the system's structures. The structural elements within the system, as a result of the increase in information due to the positive recursion, allow a process of structural differentiation and informedness to occur. Hence, the system is able to grow and evolve creating the potential to modify the goal, as well as the aims of the system. Bale (1995) describes this modification as 'the system performs a "run-away" from previous states' (p. 34). A more appropriate description of this process would be that the system performs a 'run-towards' morphogenesis or change.

2.2.4 Morphogenesis

From the cybernetic perspective morphogenesis is the system's capacity to absorb input and information from the environment to bring about change. Although the system tends to submit structural change to maintain organisational consistency, thereby making the system inherently closed off from environmental input, the fact that the system remains structurally coupled to the medium or context in which it exists is influential. As a result of the continued coupling to the medium, the environment can interact with the whole of the system and therefore, to a

limited degree, open the system to outside influences. These outside influences on the system become manifest via the operation of triggers or perturbations.

Keeney (1983) defines system perturbation as external events which trigger the system to act, in either more or less adaptive ways. Any change which occurs in the system following a perturbation from the medium to which it is coupled will be determined not by the nature of the perturbation, but by the structural make-up of the system itself. If we return to the example of the adolescent and the psychotherapist, and assume that the adolescent is structurally coupled to the medium of a psychotherapeutic relationship, then interventions or perturbations by the therapist such as the introduction of a metaphor may well result in change. However the direction of this change will be more dependent on the client's structural composition than on the nature of the therapist's intervention or perturbation. It is thus not possible for therapists nor any one else for that matter, to predict this directional shift or change. From the client's perspective, psychotherapy is just one medium in which to pursue a particular kind of conversation to which the therapist is invited to co-engage (Efran & Lukens, 1985).

What makes human interaction so interesting from a cybernetic perspective is the idea that where two systems interact and become structurally coupled, such as the client and therapist, they constitute at best only part of the medium for each other. Accordingly Allan (1994) states 'they (systems) act in such a way as to be mutually perturbing. Through this coupling both systems undergo structural changes in relation to perturbations' (p. 8). Maturana and Valera (1980) refer to this ability of systems to change their internal structural components as a result of interactional perturbations or feedback loops as 'structural plasticity'. When the interaction of two systems increases in recurrence and stability, the systems can be described as

structurally coupled. From this perspective then, both the client and the therapist are structurally plastic, and by seeing each other on a regular basis they increase the recurrence and stability of their interaction. They can be defined as structurally coupled.

For this increase in recurrence and stability to occur between the client and therapist there must be an increase in the co-ordination of the actions of the both client and the therapist involved. On a very simplistic level, when both client and therapist seat themselves before speaking, there is a co-ordination of action thus increasing recurrence and stability. It stands to reason then that for behaviour to increase in co-ordination, the actions of the two systems must be consensual. By both client and therapist seating themselves before beginning the session, their behaviour can be defined as consensual. Maturana and Valera (1980) define this increase in consensual behaviour as the beginning of a linguistic domain.

2.3 The linguistic system

Maturana and Valera (1980) explain that the linguistic domain is a domain or area 'in which the coupled organisms orient each other in their internally determined behaviour through interactions that have been specified during the coupled ontogenies' (p. 136). Ontogeny refers to the history of the structural transformation and interaction of the system unity. Practically then, the linguistic domain is the space in which both the client and the therapist, through their co-ordinated interaction, offer each other the opportunity to explore and understand their structural interactions thus becoming increasingly structurally coupled to the interactional medium.

Although structurally coupled, for meaning to be generated within this consensual linguistic domain, language is a prerequisite. For Maturana and Valera language appears when ‘the operations in the linguistic domain result in co-ordination of actions about actions that pertain to the linguistic domain itself’ (1987, pp. 209-210). Language in the linguistic domain is thus established through the co-ordination of co-ordinated language (Allan, 1994). This process occurs when both client and therapist speak a language which can be co-ordinated or spoken by both members.

It is through the co-ordination of language usage that both client and therapist interact in a linguistic domain of descriptions. This domain according to Maturana and Valera (1980) is both bounded and infinite, ‘bounded because everything we say is a description, and infinite because every description constitutes in us the basis for new orientating interactions, and hence for new descriptions’ (p. 50). Language therefore provides the domain with the bounded tool of description in that a describing domain is all it consists of, yet paradoxically it offers the infinite tool of creating an endless array of new descriptions.

It is precisely as a result of the process of recursive application of description that objects exist. Prior to a description in language no objects or problems exist. Therefore if not described in the form of a co-ordination of language, a problem cannot exist in the linguistic domain in so far as it is not languaged. The client’s problem can only exist in the reality of the linguistic domain once it is languaged; prior to this it does not exist for the linguistic domain. It thus stands to reason that only once the problem is languaged within the domain, can it be resolved in and through descriptions in language. The concept of language and languaging is vital and central to cybernetic epistemology in that the linguistic system of client and therapist only exists in and

through language.

The importance of languaging is most prominently highlighted when working with adolescent clients. Adolescents often find it extremely difficult to language emotional feeling states or they refuse to allow themselves to language their experiences. One of the contributing factors to this difficulty in languaging is the adolescent's perception that no one understands them. This sense of being 'mis-understood' stems from their need to stabilise a satisfactory input from the environment. This results in the experimentation of self-referring behaviour. It is this behaviour and interaction which is often misunderstood, by adults in particular who in turn express their disapproval through criticism, hence the adolescent feels misunderstood (Vernon, 1993).

2.4 Implications for psychotherapy

The short overview of the basic concepts of cybernetic epistemology discussed above has various implications for the practice of psychotherapy when conducted from within this framework. The first implication which will be investigated is the redundancy of direct intervention strategies. This is followed by an understanding of the realm of differential discourse and concludes with an understanding of 'process' from within this epistemology.

2.4.1 Direct intervention strategies

Perhaps the most basic implication of the cybernetic epistemology on the practice of psychotherapy is the notion that direct psychotherapeutic intervention strategies are redundant.

Maturana (1978) suggests the therapist does not and cannot directly change anyone. Even when the client is susceptible to therapist-introduced perturbations, it is more the structural make-up of the client than the nature of the perturbation which will determine the direction and degree of change the client undergoes. It is for this reason that the cybernetically sensitive therapist relinquishes the need to produce a mandate and predictable outcome of the therapeutic process. In the light of this position then, the therapist should rather foster an ecology of non-attachment to a desired or predictable outcome, than try to predict and influence the client according to the therapist's epistemological position. The change of structural components within the client is always moving towards that which is not possible for the therapist to predict (Anderson & Goolishian, 1990).

Similarly from the client's perspective, psychotherapy is just one medium of structural coupling in which to pursue a particular kind of conversation in which the therapist is invited to co-engage (Efran & Lukens, 1985). Therefore, by allowing the client not to feel influenced by the therapist, the facilitation of movement or morphogenesis within the client system is made possible. Thus, cybernetic interventions make no direct attempts to change anyone or anything. Since the psychotherapeutic system is understood as a linguistic system, the real challenge of the psychotherapist lies in becoming a more active facilitator of language than a navigator of the client's directional change.

2.4.2 Differential discourse

With this in mind then, effective therapeutic interventions according to Efran and Lukens (1985) require a medium of a different kind, namely the domain of differential discourse. This is

significant in that such a domain rests upon the assumption that as systems employ language as a mode of meaning-based reproduction, language or discourse is able to activate or amplify the system's tendency towards self-observation, self-reflection or self-reference.

When psychotherapy is conducted from this perspective, the linguistic event of speaking takes place in what can be labelled the 'therapeutic conversation'. This therapeutic conversation involves the mutual search and exploration through language for new meaning and understanding. It is through the continual evolution of new meaning, as a result of the ability to language within the therapeutic conversation, that the 'dissolving' of problems, and thus ultimately the dissolving of the therapeutic system or termination of the system can occur. As no problem can exist within the linguistic domain until languaged, no problem can be 'dissolved' either, unless through language. The linguistic system comprising client and therapist can therefore be described as a languaging problem dissolving system (Anderson & Goolishian, 1990).

In psychotherapy based on the mutual search for new meaning and understanding, the therapist's aim is to influence the linguistic system of client and therapist towards the creation and facilitation of an intersubjective conversational process. This process of intersubjectivity can be described as the way that the individual members of the linguistic system engage in mutual dialogue through the co-ordination of language, which gives rise to shared, consensual meaning and understanding. It is through this process of languaging that healing and change can occur.

2.4.3 Cybernetic process

It is important to understand what is meant by the cybernetic concept of 'process', as it is this process which ultimately influences the linguistic system towards healing and growth.

According to cybernetic epistemology, process is the creation and facilitation of an intersubjective conversational procedure, through discourse which has a mutually co-evolved meaning for that specific system (Ingamells, 1993). Just as intersubjectivity is the responsibility of all members, so process is the shared responsibility of all members to understand.

Understanding thus becomes a function of both. The evolving system shares a co-developmental process. In effect then, members of the healing system generate a dialogically shared domain of meaning that belongs to the moment and in the therapeutic conversation.

In terms of the process of autopoiesis the cybernetic perspective comes to see the system's structural arrangements as able to ensure its capacity to language. By providing the linguistic system of client and therapist with a tool through which to language, autopoiesis affords the system the opportunity to adapt, change and exist. Language allows the linguistic system to adapt as boundaries can be discussed and changed, to change as both client and therapist are structurally plastic and mutually perturbing, and ultimately language allows the domain of client and therapist to exist and function. 'Process' therefore, is the generation of new meaning, ideas and understanding. Such a process can never remain static in dialogue.

The power of 'being in language' within the therapeutic conversation is that the client and therapist co-create and co-develop the systemic realities around which meaning and problems are based, and through which both client and therapist continually reorganise their mutual

living and self-description (Anderson & Goolishian, 1990). The client and therapist are thus mutually co-creating meaning, and a mutually intersubjective reality begins to emerge.

The client and therapist, through dialogue within the therapeutic conversation, generate a shared domain of meaning in which a new world of reality and narrative is created. The language best suited to this form of therapy is the ordinary explanation and self-descriptive narratives of the client. It is through this ability to language that the client comes into contact with a new vocabulary with which to express him/herself, thus creating a new reality in which new meaning can co-evolve. For the therapist, the task is to remain within the domain of mutual intersubjectivity, often losing the universal 'certainty' offered in the more usual methods of therapeutic inquiry, but always gaining an invitation by the client to co-engage in the domain of living experience within which healing can occur (Ingamells, 1993).

2.5 Summary

Cybernetic epistemology is concerned with the basic concepts of 'knowing' that which is characteristic of autopoietic systems and their interaction. It is through our 'knowing' based on this epistemology that the significance of human language comes to the fore, by allowing meaning to be changed, reality to be co-created and healing to occur. This cybernetic epistemology allows an in depth investigation into the human system, thus creating the potential for a second order of self-reference in terms of the research process.

Cybernetic epistemology comes to view the system as self-creating and maintaining, as well as homeostatically inclined with the ability to change behaviour as a result of the self-referring

capacity of the system. Through the process of recursion, change or morphogenesis is made possible. This change is particularly evident within the linguistic system of client and therapist. It is in this system of client and therapist that language creates a new reality of problems and similarly of problem 'dis-solution'. It is therefore seen as the therapist's task to promote the languaging of problems, thus enabling the languagable dissolution of problems to occur.

The next chapter will consider contemporary theories on metaphors with particular attention being focussed on their function from a distinctly cybernetically orientated stance. This stance is evident in a second order understanding of metaphors, hence its applicability to cybernetic epistemology.

Chapter 3

Metaphors: 'Patterns that connect'

This chapter covers a linear or first order explanation of metaphors, as well as a non-linear or second order understanding of them. This is followed by a review of Krippendorff's (1993) theory of metaphors which is grounded in the second order stance of metaphors. The chapter concludes with an investigation into the use of metaphors in psychotherapy. Special attention is paid to the language-facilitating role of metaphors as well as the potential of metaphors to foster a process of co-created meaning in the linguistic system.

3.1 Introduction

In order to remain epistemologically consistent with cybernetic theory, metaphors must be defined and understood from this perspective. An understanding of metaphors from the cybernetic perspective needs to move beyond a linear or first order understanding of metaphors towards a second order understanding. The first order perspective views metaphors as rhetorical formulations of comparisons or substitutions. This is in contrast to the second order understanding which comes to see metaphors as linguistic vehicles with the potential to carry meaning, create new realities and facilitate cybernetic process.

3.2 First order or linear understanding of metaphors

The word 'metaphor' is derived from the Greek phrase 'meta *pherein*' which means to carry over. Simply then, a metaphor is that which carries from one place to another. When one looks

at metaphor from a phenomenological perspective, metaphor is a persistent, habitual organisation of one or more of the following interrelated behaviours: images, symbols, words, emotions and physical actions (Atwood & Levine, 1990). From a traditional psychological perspective, metaphor is merely one mode of communication. Both these linear understandings of metaphors are logical by nature. The implication is that meaning is 'carried over', from one thing to another, not literally as this would imply that something actually is another, but rather figuratively or imaginatively. In order for such an understanding of something being understood in terms of another to exist, there must be a line of connection or shared similarity between the referent and its substitute for the metaphor to be applicable.

Within this linear epistemology of metaphors two main classical schools of thought exist regarding the functional use of metaphors, namely the substitution and the comparison view. From the substitution point of view, metaphors are seen as the replacing of some equivalent literal expression for aesthetic purposes or to fill a perceived gap in vocabulary (Atwood & Levine, 1990). The comparison view, by contrast, holds that metaphors are essentially comparative by nature thus highlighting a comparison between objects. This linear understanding of metaphor as a rhetorical tool which provides an avenue for meaning to be transferred from one thing to something else is totally inadequate from a cybernetic epistemological perspective.

3.3 Second order or non-linear understanding of metaphors

In search of a cybernetically congruent definition of metaphors, Bateson (1979) maintained that metaphor is the principle that connects - a pattern that characterises the evolution of all

living organisms. The pattern that connects can be seen as the resemblance of relations, patterns and organisations between two things of different sizes. Bateson (1979) makes a further distinction between first order and second order connection among all living organisms. First order connection can be seen as patterns that already exist within an individual organism, while second order connection occurs when the same patterns are found within different organisms. This second order connection is called ‘phylogenetic homology’, which can be defined as ‘a formal resemblance between two organisms such that the relationship between certain parts of A are similar to the relations between corresponding parts of B. Such formal resemblance is considered to be evidence of evolutionary relatedness’ (Bateson, 1979, p. 228). In this definition, the ‘pattern that connects’ is a non-linear resemblance of pattern and organisation between two things that are different when considered as discrete entities belonging to two different linear logical classes (Kopp, 1995).

3.4 A cybernetic theory of metaphors

Depending on the epistemology of choice, metaphors can be understood from a variety of theoretical perspectives. Cognitive theorists, for example, see metaphors as a means to by-pass the left analytical brain and directly influence the creative right brain (Cox & Theilgaard, 1987). Of particular importance here is that metaphors be understood from the cybernetic perspective as this is the defining epistemology.

According to Kopp (1995) this second order ‘pattern that connects’ the evolution of living organisms has the same structure as the mental processes of metaphoric language and metaphoric cognition. Lakoff and Johnson (1980) explore this point further and suggest that

metaphors are a part of everyday life, occurring not just 'in-language', but in thought and action as well. Our entire conceptual system according to these authors is fundamentally metaphoric in nature, and the only reason metaphors can be linguistically expressed at all is because they are such a large part of our conceptual system.

Accordingly Krippendorff (1993) ascertains the following:

- * All metaphors carry exploratory structures from the familiar domain of experiences into another domain in need of thought, understanding and restructuring. Metaphors thus 'carry over' knowledge or information from a specific area into the domain of human interactions.
- * In order for this shift towards the experiential domain to occur, members of the linguistic system are required to see some structural similarities between the two domains created by the metaphor, regardless of the imaginatory effort required to accomplish this.
- * Metaphors according to Lakoff and Johnson, (in Krippendorff, 1993), have entrainments for the target domain they therefore organise perception far beyond any initial structural similarities that may originally have existed.
- * Metaphors organise their user's perceptions and, when acted upon, have the potential to create new realities which may be experienced. In other words, metaphors can create reality for those who are engaged in the linguistic domain. In such a domain

where meaning is co-created and understanding consensual, the original or source domain of the metaphor becomes secondary to the point of recession, fading to the background of unrecognition. It becomes possible to hypothesise that ‘metaphors do not merely provide a comparison, but rather, out of the new comparison or construction and the new interaction of terms from different domains, something new is created’ (Berlin, Olson, Cano & Engel, 1991, p. 360). Metaphors within the linguistic domain thus become linguistic vehicles through which new meaning, understanding and ideas are co-constructed and co-created and are evidence of the ‘evolutionary relatedness’ and ontogeny of the domain.

‘Process’ from a cybernetic perspective is, in essence, the forward movement through language of the linguistic system towards new meaning, understanding and most of all freedom. It therefore appears feasible to assume that as metaphors have the potential to create movement and language within the system, metaphors can be seen as facilitators of process within the linguistic system.

3.5 Co-evolved metaphors in psychotherapy

It would appear that the function of metaphor in psychotherapy from a cybernetic perspective is twofold. On the one hand, metaphors facilitate languaging of the problem and therefore within language offer the possibility for problem ‘dissolution.’ On the other hand, metaphor facilitates ‘process’ as described and understood above.

Whether the metaphor is therapist or client introduced is of little importance from the

cybernetic perspective of metaphor use. However, what is of paramount importance is that languaging has occurred. It is through this process of languaging that the linguistic domain is offered a potential starting point from which a new reality can be co-created and problem dissolution can begin.

3.5.1 Metaphors as language facilitators

The primary aim of the cybernetically inclined therapist is to facilitate the process of languaging. This is particularly important when working in a therapeutic relationship with adolescents. Metaphors aid this process of languaging by allowing the client and therapist the opportunity to select metaphors that resonate with their own inner experiences of the world. When clients wish to describe their deepest experience for which ordinary descriptive vocabulary and language prove inadequate they must opt for metaphor (Cox & Theilgaard, 1987). Thus where ordinary language proves to be a disadvantage to the healing movement of the system by immobilising the process of languaging, metaphors provide a vehicle for languaging to continue, thus facilitating the system towards greater understanding and health. It is where metaphor creates a new vocabulary for the linguistic system from which to language experiences that the linguistic system is propelled to new heights of process where new meaning and problem dissolution peak.

A further implication of the improved facilitation of languaging as a result of the use of metaphor is the effect on our perception of reality. Our concept of reality is to a degree influenced by our ability to language, and our language is grounded in metaphor, therefore it is reasonable to assume that a metaphor can be understood as a model for changing the way we

look at the world or our basic life epistemology (Atwood & Levine, 1990). Just as metaphors allow people to perceive a different reality around their problems while still remaining in touch with their problems, metaphors also afford the opportunity to see a different reality for problem 'dis-solution'. We can thus say that metaphors create a new reality of a problem while allowing the client to experience a new reality of interpersonal relationship. Therefore, each metaphor used within the linguistic domain of client and therapist has the potential to propel a process which initiates the system to language both feeling states and imaginal emotion that can be explored and understood within the therapeutic context for each member.

3.5.2 Co-created meaning

The use of metaphors in psychotherapy affords the members of the linguistic system the opportunity to language inner experiences, hence creating the potential for a new reality of the problem to emerge. To allow for this the linguistic system needs to undergo a process of co-development and co-evolution. This implies the intersubjectivity of the process between client and therapist (Ingamells, 1993). When the client or therapist originates or offers a metaphor for scrutiny and interaction, each party offers the other permission for the co-existence of competing interests and thereby affords each other the opportunity to normalise the conflict experienced (Berlin et al., 1991). Interaction of this nature allows for the co-definition of the linguistic domain to a point where both therapist and client are comfortable and able to negotiate the development of their consensual behaviour, thus directing the process towards healing and improved mental health.

In order for the process of negotiation to occur, the therapist must be able to embrace the life

world of the client, and at the same time retain his/her own perceptual autonomy. The client usually senses this and 'invites the therapist into this inner world'. The embracing of the client's life world is essential when interacting with adolescent clients in a linguistic system (Kruger, 1979). By validating their behaviour the therapist allows the adolescent an accurate and encouraging self-referring mirror which interacts with honesty, appreciation and respect.

- Kopp (1995) suggests that when clients, in particular adolescent clients, are encouraged to remain within the context of their own metaphors, and the metaphor is given the space to expand, the process of co-evolution is then allowed to develop to the point where the meaning and insight clients gain is more profound than if the metaphor was talked about or analysed. It is thus the responsibility of both client and therapist to allow the metaphor to evolve to the point where healing can occur.

Through the evolution of the linguistic dyad, partly as a result of the co-evolution of metaphor within the system, a language unique to the system begins to emerge where traditional definitions of words and terms are replaced by meaning developed as a result of the consensuality of action within the system. The evolutionary process of the system, always in a state of growth, is marked by the increase in consensual behaviour and action (Sinai, 1997). Thus, when a metaphor is co-evolved, it can be viewed as evidence of the evolutionary interrelatedness of the linguistic domain. The system is thus in a process of evolution towards the creation of new meaning and understanding.

It is important to remember that it is impossible to predict the outcome of a metaphor, as it is not the nature of the metaphor but rather the structural make-up of the autopoietic system that

will determine the direction of change that will occur within the system. Shirley (1988) reminds therapists that metaphors should be used with care and respect and that there are 'no guarantees that circuits of transformation are necessarily healing; metaphors can just as well be a Pandora's box as a gift of healing' (p. 63).

3.6 Summary

In conclusion, this chapter has highlighted the role of metaphors as seen from a second order cybernetic understanding. Metaphors from this perspective are viewed as a vehicle for carrying, mobilising, languaging, expressing, and integrating affect, reality and cognition within the individual members and the linguistic system as a whole, thus furthering the therapeutic process. Metaphors also exert a mutative effect by energising alternative perspectival aspects of experience and reality. Metaphors thus have the potential to facilitate the process of the linguistic system by creating for the system a vocabulary from which to language experiences and dissolve problems, thereby guiding the system towards new understanding, new meaning and a new reality.

Therefore it is up to the therapist to create an environment where the adolescent client will invite the therapist to co-engage in a linguistic event. It is through language within the therapeutic conversation that feelings, thoughts and problems can be brought to the fore so that new understanding and new meaning can be co-discovered. It is the task of the therapist to facilitate a more effective form of languaging; it is exactly in-language and through the availability of a new vocabulary that the true power of metaphor lies. Failure by the therapist to take advantage of metaphor is disheartening and wasteful.

Chapter 4

Empirical basis of inquiry

This chapter investigates the implications of clinical research conducted from a cybernetic perspective. In order to accomplish this, alternative research paradigms need to be studied and understood. This is followed by a review of pertinent research questions regarding validity, reliability and testability. The chapter then continues with a discussion of the participant criteria as well as the criteria upon which the psychotherapeutic metaphors were selected. The method of enquiry employed in this research dissertation, namely cybernetic ethnography, concludes the chapter.

4.1 Introduction

The humanities and the social sciences are cleft by a deep dichotomy which can best be labelled 'science versus experience'. The researcher working from a scientific-positivistic epistemology tries to put him/herself in the advantageous position of observer, seeking to discover regularities and laws which are objective and predictable. Objectivity in this positivistic context refers to observer discoveries that belong more to the environment than to the researcher and to researchers applying the same methods to the same material discovering the same patterns (Allan, 1994).

In contrast to this, the experiencing researcher, working from a phenomenological/cybernetic epistemology, claims that all knowledge is basically a subjective phenomenon. Knowledge presupposes a knower and since the knower is already immersed in the world he tries to

understand it is impossible to assume an objective observer position (Andersen, 1994). It is within this general school of thought that the cybernetic paradigm finds its niche.

4.2 An alternative to the positivistic research tradition

According to Keeney and Morris (1985a) cybernetic epistemology prescribes and necessitates a particular understanding of what is meant by empirical and theoretical principles. A universal systems theory, such as that of cybernetics, must have the capacity to develop a conceptual scheme sophisticated enough not only to observe its own style of observing, but also to take into consideration the role of the observer in observation. The epistemology must be able to deal with the research problems of self-reference.

It is with these issues in mind that Hoshmand (1989) presents a compelling argument urging a move away from the positivistic tradition of scientific research towards alternative research methods. She divides her argument into three groupings: (a) epistemological, (b) conceptual-empirical, and (c) ideological. The main impetus for the movement away from the positivistic tradition stems from basic epistemological arguments regarding cybernetic notions of objectivity.

Epistemological arguments against the assumption of objectivity adopted by the positivistic sciences are grounded in the basic criteria of human knowledge and the very nature of scientific inquiry itself. The positivistic notions of access to and discovery of objective realities existing independently of the observer, and the observer's methods of observation with a disregard of contextual factors is the main area of discrepancy distancing the two approaches

(Allan, 1994). It is the alternative conceptualisation of the 'experiencing' researcher regarding the context-boundedness of human inquiry and the theory ladenness of 'objective facts' that is clearly reflected in alternative research methods to the point of much controversy at times.

From an alternative research paradigm perspective, observation is itself a theory-laden undertaking with the result that an observer's observations are always the consequence of some epistemology. The move towards a cybernetic epistemology with regard to clinical research suggests that all observations are self-verifying, in other words, all that is observed is constructed to fit the epistemological frame of reference used by the observer (Keeney & Morris, 1985a). From this perspective then, it is accurate to say, that since observations are actively constructed and actively interpreted by the observer, the positivistic contention of the 'objectivity of observation' is seemingly rendered meaningless.

A further point of contention regarding positivistic epistemological differences is the assumption of this school regarding the objectivity and consistency of scientific measurement. Psychological phenomenon presents the very real problem of accessing and measuring the phenomenon as compared to solid physical objects (Huysamen, 1994). Not only is access to psychologic phenomenon extremely difficult, but owing to the dynamic nature of the autopoietic system which is constantly in a state of flux and therefore contextually unstable, meaningful objective interpretation is hampered by context inconsistency. It is for this reason, according to Hoshmand (1989), that perfect description by a scientific language relating to a stable reality context has been rejected as an impossible philosophical ideal when applied to human psychological phenomenon. To reduce human phenomenon and experience to isolated and linearly related factors by over-simplification and omission of contextual factors is to lose

the overall meaning and complexity of human experience and phenomenon.

Conceptual-empirical arguments are concerned with the limiting nature of positivistic methodology. The stringency with which quantitative standards of precision measurement and objectification of observations are pursued by the positivistic school have resulted in the narrowing and loss of important and applicable research questions which could be asked (Kruger, 1979). The result of such stringent qualitative methods of inquiry is the loss of meaning, as well as the use of methods of inquiry, which are unsuitable when investigating the complexities of human phenomenon (Keeney & Morris, 1985a).

The final objection Hoshmand (1989) brings to the fore concerning the positivistic tradition of inquiry is focussed at the basic differences in epistemological ideologies. The positivistic-reductionistic notion of human behaviour as predetermined is contrary to cybernetic beliefs in the self-determination and autonomy of autopoietic systems. When human agency becomes the centre of conceptual and methodological focus, a different image of humanity and professional inquiry is allowed to develop. The spirit with which such inquiry is pursued is one where the research subjects are allowed to determine the nature and future of their social realities. Further ideological points of contention revolve around the heuristic value of scientific research inquiry. It is felt from an alternative research paradigm that a more pragmatic human science is necessary to further social problem solving as opposed to research which leads to objective descriptions or facts of how the world is viewed from a particular research paradigm (Breakwell, Hammond & Fife-Schaw, 1997).

4.2.1 Methodological implications of the cybernetic epistemology

Perhaps the most obvious and specific methodological implication of the cybernetic paradigm on clinical research is that the researcher and the client are viewed as inseparable parts of the research process. The necessary inclusion of both the researcher and client into the linguistic system under inquiry is part of a process where two autopoietic systems interact and structural coupling occurs. They act in such a way as to be mutually perturbing (Allan, 1994). As a result of this both members of the linguistic system influence the phenomenon under investigation. Thus, rather than attempting to remove this dynamic variable, which is influential to human systems, it is included and embraced as a necessary and contributing element in the research of human communication, phenomenon and change.

A further methodological implication is that the evaluation procedure used to understand human change must possess the capacity to capture and contain the complexity of human systems. The actual choice of evaluation criteria and method must, according to Hoshmand (1989), reflect the researcher's epistemological understanding. With this in mind then, it is not possible for the cybernetic researcher to make any assumptions regarding uniformity of findings as required by the more traditional schools of scientific inquiry. As an alternative though, the cybernetic researcher needs to provide the reader with detailed documentation of the contributions of all participants in a given case (Keeney & Morris, 1985b). By so doing the researcher includes a much larger context in which the research is embedded.

4.3 Questions of legitimacy and validity

Although traditional methods of scientific inquiry focus a great deal of attention on stringent quantitative research methods and procedures, thus creating for these paradigms high standards of legitimacy, validity and re-testability, their applicability to alternative research paradigms remains questionable (Hoshmand, 1989). Still, the debate rages forth with both paradigms convinced of the correctness of their particular methodological approach, thus furthering the dichotomy between the humanities and the natural sciences.

As all scientific epistemologies prescribe a very particular manner of empirical observation and understanding, it seems illogical and impractical to apply the research methodologies of one epistemology to another and expect to attain the same degree of validity and legitimacy (Breakwell et al., 1997). The reason for this inapplicability of different scientific standards is that the criteria and standards which are ascribed to, established, approved and used hold true only insofar as those scientists who prescribe to that epistemology (Kenney & Morris, 1985b). It thus allows the statement to be made that what the correct scientific method of inquiry is — depends not so much on the methods the researcher employs, but rather on which epistemology he/she ascribes to as correct and valid.

Perhaps the most striking example of this inability to judge the validity and legitimacy of different methods of epistemological observations is the dichotomy between the positivistic tradition of inquiry and the social-science method of inquiry. The positivistic tradition focusses on quantitative statistical research designs to standardise, validify and legitimise their observations. Statistical analysis from this research paradigm is required to produce the

necessary levels of formal verification if data is to be attained. Only once such formal verification through the use of standardised statistical research methods has occurred is the human phenomenon under investigation considered 'discovered'. However, Keeney and Morris (1985c) argue against this point of view. Accordingly they state that there are a number of other formal methods of scientific inquiry which are accepted research methodologies. These focus no attention on quantitative statistical research procedures. Such statistically-free research methods include ethology, ethnography, cybernetics and content analysis to mention a few. Furthermore, for those researchers who prescribe to statistically-free research paradigms, these research methods are valid and legitimate. If this point of view is accepted, then there is no debate as to which methodology is more valid or correct, as what is assumed to be appropriate and what is deemed valid depends on who is observing and how (Thyssen, 1995).

4.4 Ethnographical research

Perhaps it is important to define and understand the term ethnography as it is assumed that the term cybernetics is well understood. Uzzell (1988) states that what distinguishes ethnographical research from other forms of scientific inquiry, is its purpose - namely to provide a cultural description. Since ethnography is being used as the means of research methodology in this dissertation, its primary purpose here is to describe the therapeutic culture.

Ethnography is the art of description which must resemble the original reality context as closely as possible. Ethnographical accounts according to Goetz and LeCompte (1984) must

have the literary capacity to recreate for the reader the co-evolved beliefs, the co-created realities and the co-developed knowledge which occurred within the psychotherapy context. The authors further state that ethnography is a process of description that must as far as possible remain honest and accurate to the original reality as is possible.

Goetz and LeCompte (1984) state that ethnography as an alternative research paradigm has four basic characteristics. It is important to understand these characteristics as they form the basis of the method of inquiry employed in this study.

- Firstly, ethnography aims to elicit phenomenological data; in other words it aims to present an accurate re-presentation of the life-world of the individual it seeks to understand (Valle, King & Halling, 1989). The implication of this is twofold: firstly, it forces the researcher to investigate the participant's life-epistemology rather than to attempt to impose a theory in an attempt to understand the individual. The second implication of eliciting phenomenological data is that it encourages the researcher to take the social context into account as a crucial facet when conducting research from this perspective (Huysamen, 1994). The applicability of such phenomenological methods in terms of adolescent research is clear: by appreciating and respecting the adolescent's life-epistemology and not attempting to impose a foreign epistemology in an attempt to understand the client, the researcher fosters an ecology where languaging is encouraged and the adolescent client feels validated and understood.
- The second characteristic feature of ethnography is that the methodological techniques are empirical and almost always occur in a naturalistic setting. This is often a point of discrepancy between proponents of ethnography and positivistic researchers, with the latter feeling that

only reliable and valid research needs to be conducted in the controlled confines of a laboratory. Thirdly ethnography attempts to present the reader with the totality of the phenomenon under investigation (Huysamen, 1994). This is consistent with the cybernetic concept of nonsummativity in that it is deemed impossible to study a part of the whole. Similarly it is not possible to present part of the whole. It is here where the context in which the phenomenon occurs is just as important as the action or behaviour which take place.

Finally an important theme which runs through ethnographical methodology is the concept of change. A central goal according to Uzzel (1988) is to record the process of change not the process of stability. The link between a cybernetic understanding of system functioning and ethnography as a means to record this process of change is obvious. From both a cybernetic and ethnographical perspective the researcher is viewed as playing an active role in becoming an agent of change by supporting, encouraging and understanding human interaction and change in the light of therapeutic interventions. Uzzell (1988) provides a combined summary of the two perspectives by stating that an 'important point to make about the researcher's role as an agent of social change is that they are still a researcher, but a fully participating one' (p. 312).

By implication the applicability of traditional concepts of research regarding the objectivity of observation are contended by the ethnographical paradigm of research. The similarities and parallels between cybernetic epistemology and ethnographic methodology are clearly seen. Therefore Keeney and Morris (1985b) suggest cybernetic ethnography as the research method of choice as not only is it consistent with cybernetic thinking but it is also the most effective research method to describe and understand process within the therapeutic system.

4.5 Cybernetic ethnography

Cybernetic ethnography is a research methodology that consists of two basic methodological elements. The first of these is the necessity of providing the reader with the written transcripts of the therapeutic process. In so doing, it is important to remember that one of the characteristic features of ethnography is that the researcher provides the reader with transcriptual information which is as close to the original text as possible. The second basic element of cybernetic ethnography is then to provide the reader with further transcripts illustrating the researcher's conceptual organisation of the therapeutic process. By doing this, the researcher is able to provide the reader with an explanation of the research findings and conclusions by providing the epistemological base from which the conclusions and findings were originally derived (Allan, 1994).

The participant reader thus has access not only to the research transcripts of the therapeutic process but also to the epistemological basis from which the conclusions and assumptions were derived. This methodological idea therefore encourages the participant reader to re-examine or 're-search' the assumptions and conclusion made by the original 'searcher'. This is made possible as access to the necessary information is afforded to the reader. In this way any conclusions that are presented by the researcher can be re-examined as what has been described can be traced back to the epistemological recipe which is provided by the researcher (Keeney & Morris, 1985b). It is precisely because the reader has access to the information that the opportunity exists for the reader to determine the validity and legitimacy of the research him/herself as opposed to efforts on the part of the researcher to convince the reader of its validity.

4.6 Participant criteria for inclusion

The three clients selected for inclusion in the research dissertation met the following inclusion criteria:

- * They were between fifteen and eighteen years of age.
- * They received psychotherapy from the researcher in an adolescent unit at a state psychiatric hospital.
- * The linguistic system must have co-evolved over a minimum number of 5 individual psychotherapy sessions.

4.7 Metaphor criteria for inclusion

As a result of our natural metaphorical slant in cognition and perception, many metaphors were languaged over the minimum of the five therapy sessions. However, not all were included in the dissertation. The metaphors that were included were selected according to the following criteria:

- * The metaphor co-evolved in the sense that both client and therapist worked within the boundaries afforded by the metaphor.
- * The metaphor was seen as providing the linguistic system with a vocabulary from which to language experiences.
- * The metaphor facilitated the system's ability to language experiences, thus affording problem dissolution to occur and contributing to the facilitation of cybernetic process.

4.8 Method of inquiry employed by this study

The method of inquiry employed by the study is cybernetic ethnography. In keeping with the basic premises of ethnographical research, transcripts of psychotherapy sessions where the co-evolution of metaphors was used will be presented to the reader. The psychotherapy transcripts are based on detailed process notes, audio recordings and audiovisual recordings taken by the researcher. The metaphors are presented in a non-verbatim commentary style as experienced and understood by the researcher. Following the presentation of each transcript regarding the co-evolutional metaphor, a meta-level analysis regarding the facilitating role of the psychotherapeutic metaphor in the process of the psychotherapy is presented. The meta-level analysis derived from the researcher's epistemological understanding, illustrates how the use of co-evolutional psychotherapeutic metaphors within the healing linguistic system facilitated the psychotherapeutic process.

Transparency regarding the researcher's understanding of this process will be maintained by the reader having access to the theoretical chapter describing the researcher's epistemology, as well as access to meta-level descriptions and conclusions regarding the researcher's understanding of the process of psychotherapy from a cybernetic paradigm. When research is presented in this way, Keeney and Morris (1985c) state that the contentiousness surrounding the research criteria of 'objectivity' which is of utmost priority in the positivistic research paradigms, is side-stepped. Cybernetic ethnography creates a recursive loop between reader and researcher leading to a second order of observation: an observation of observation, a description of descriptions, and in doing so, the recursive procedures afford the reader the opportunity to prove valid or invalid the research presented (Luhmann, 1995).

4.9 Summary

The methodological grounding of this dissertation, presented in this chapter, has focussed the reader's attention on the need to use alternative research paradigms as a methodological base when a cybernetic/phenomenological epistemology is followed. The necessity of following an alternative research paradigm stems from basic and perhaps irreconcilable epistemological differences which exist between the experiencing researcher and the scientific researcher. Ethnography is one such alternate research paradigm which is consistent with the cybernetic epistemology and hence the research paradigm of choice in this dissertation.

The chapter also highlighted the criteria demanded of both clients and co-evolved metaphors for inclusion. The chapter concludes with a more detailed explanation of the process of cybernetic ethnography.

Chapter 5

Metaphors from the linguistic system

5.1 Introduction

The extracted metaphors from the healing linguistic system of client and therapist as well the researcher's meta-level understanding of the process are presented in this chapter. The metaphors are presented in a non-verbatim commentary style as close to the original therapeutic culture as possible. The names of the clients have been changed so as to ensure their anonymity. The metaphors are presented as experienced and understood by the researcher. Data included in the metaphorical transcripts centre around periods in the therapy sessions where metaphors were allowed to co-evolve to the point of facilitating the psychotherapeutic process. Although some metaphors evolved through a number of sessions, the sessions are linked together based on the progression of the metaphor and presented to the reader in the form of a single therapy session.

Each client is given a short introduction to enable the reader to become acquainted with the client and to acquire a basic 'feel' for the client before the metaphor is presented. Following the introduction of each client, a brief description of the initial or preceding therapeutic process is provided so that the reader is abreast of the system ontogeny. The psychotherapeutic metaphor is introduced along with the co-evolution of the metaphor and the metaphor's conclusion. A meta-level analysis is then presented illustrating how the co-evolution of the psychotherapeutic metaphor contributed to the facilitation process in therapy. These meta-level presentations are based on the researcher's understanding of the principles of

the cybernetic epistemology and metaphor as understood from a cybernetic second order perspective.

5.2 Case study 1 : Enactments from the road

5.2.1 Client introduction

Judy is a seventeen year old female. For most of Judy's adolescent life she initiated a redundant recursive pattern of binge eating followed by a purging technique which usually induced vomiting. This recursive pattern continued intermittently for extended periods of time. The healing system of client and therapist had been operational for a period of four months with sessions held on a weekly basis. During this period the healing system had 'dis-solved' numerous problems which Judy had been able to language, and it appeared as if Judy's attachment to the system was relatively strong. Termination of the linguistic system was necessary for logistical reasons. Once system disintegration had been language'd by the therapist as a necessary part of the system's growth, various problems regarding previously undefined relationships began to re-emerge within the boundaries of the current system. Judy found the redefinition of the system from one of 'healing' to a definition of 'dis-solving' extremely difficult and rather traumatic. It is in the researcher's attempt to afford Judy the opportunity to dis-solve the system that the metaphor is presented to the reader.

5.2.2 Therapeutic process

Judy came into the office visibly sad and pale. As she took her chair opposite me she

mentioned that she had felt ill from the time she had woken up that morning and that she still felt really ill. When I enquired as to a possible reason for her feeling so poorly she looked blankly ahead and refused to volunteer a response. I then remarked on her very obvious sense of sadness and loss, to which she said that it felt as if she was saying goodbye to one of her best friends and that the reality of the situation was difficult to deal with. I asked her if she could describe some of the elements of the relationship which she would miss the most. Judy replied that the trust and confidentiality would be difficult to replace, and that the road we had walked together would be hard for her to walk alone. I then asked Judy how she thought we could best dis-solve the system. Again she refused to venture an answer.

I then recalled the metaphor Judy had mentioned previously, that 'we had walked a road together', which was significant for her. I invited her to show me the road we had walked together.

5.2.3 Co-evolution of metaphor

Judy began to describe the metaphor by saying that when the system had first begun she had felt really down and depressed. She demonstrated her depression by allowing her chest to drop slowly to her thighs where she remained motionless. She said that she had felt this low particularly during the first session of therapy when she had spoken about her traumatic relationship with her mother. The difficulties she was confronted with depressed her to the point where she actually felt a downward pressure on her which she said kept her feeling flat, low and trapped. Judy continued to say that during the following two sessions she began to feel progressively lighter, particularly after the cathartic second session. Judy began to lift her

head and slowly began to rise to a more upright sitting position. She then sat straight up with her head held high. From this position she stood up. Judy said that she began to feel better when she came to the realisation that she was allowed to be angry with her mother without overwhelming guilt feelings.

Judy then began to walk from her chair past me; she explained her journey as she walked. She said that the walk past the chairs represented the sessions in the middle of the journey where she had been allowed to explore and had been encouraged to question various difficulties in her life. Although I watched her walk, I did not guide her nor did I tell her what to do or explore. Judy progressed past me, behind my desk; she bent slowly and grasped the arms of the revolving chair behind the desk and stared at the seat in silence. She then placed one foot on the chair saying that to climb onto the chair was indicative of continued movement towards feeling better within herself and her relationships. When she had both feet on the chair she looked at me from a crouched position on the chair, and speaking aloud, said that she realised that she had been progressing and developing all the time. Judy stood up on the chair. It was here that the swivel chair began to rotate making it difficult for Judy to maintain her balance. Instinctively Judy attempted to stabilise herself to retain her balance; she clutched the curtain in her left hand and steadied herself against the wall with her right hand.

I asked Judy, who looked rather shaken and surprised, what she thought the revolving swivel chair might represent to her following her near fall. After a moment's thoughtful pause Judy replied that the moving chair was the session when I had brought up the issue of termination which she said had come as an awful shock to her. According to Judy, the rotation of the chair represented the ground moving under her feet and a world filled with uncertainty and

unpredictability. I then asked whether she could tell me who the wall under her right hand represented for her. After some thought, she said that it was her house mother. I asked her how she felt. Judy patted on the wall under her right hand as if to get a better understanding of its texture and quality. Finally she said that it felt solid and strong and that the wall was dependable and one was able to lean on it. I then asked who the curtain represented for her. Judy replied that the curtain was her boyfriend. Tugging at the curtain as if to test its strength and flexibility, she said that he was there for her but he lacked the solidity and sense of support offered to her by the wall.

Judy then dropped her arms to her side and stabilised herself on the swivel chair. Looking at the table in front of her, Judy stood motionless. I then invited Judy to take the final step and to actually climb on top of the table. Looking apprehensive, she wondered aloud whether the table would be strong enough to hold her weight without breaking.

She then stepped onto the table without reaching for support. Looking at me, Judy said that it felt wonderful to stand on the table. I remarked that it certainly appeared as if the desk was more than able to support her weight. She agreed. The desk she said felt solid and safe although she was still somewhat scared to be so high. I then asked her to explain why she did not find it necessary to hold onto the wall or the curtain for support even though she was now higher than the chair? Looking at me she replied that she felt that she did not need their support all the time, as long as they were close at hand should she require their help. I then motioned to Judy that she could step down from the desk when she felt she was ready to do so. Looking round the room for a final time, Judy slowly got off the desk and returned to her original chair where she sat down.

5.2.4 Conclusion of metaphor

Once seated Judy looked at me. Following a brief silence she stood up and faced the chair she had been sitting on. She then turned to me and said that she could no longer sit in that same chair as that was the chair where her old self sat and she was different now. Judy then sat in the chair next to me. Smiling she said that she was starting again. She thus ended the healing system.

5.2.5 A meta-level understanding of process facilitation

Owing to the strong structural coupling of the members of the healing linguistic system, the perturbation brought about as a result of the introduction of the system's suggested termination proved traumatic for the client. Because of the unpredictability of the client's reaction to the perturbation, it was impossible to predict the outcome thereof once introduced. The client's final reaction to the implied imbalance initiated by the perturbation was to present with feeling ill. By being ill the client created the possibility of the final session being postponed to the following week as she was unable to participate fully in the process. By forcing the system's existence to continue for one more week, she was able to maintain her homeostatic balance through the introduction of a negative feedback loop.

The negative feedback loop which the client introduced to the system occurred as a result of a perceived imbalance in the system. This perception in turn gave rise to a stabilising effort on the part of the client aimed at the point of disturbance, namely the finality of termination. Hence, by being sick the client would induce the members of the system to wait a week thus

providing her with a brief return to homeostasis.

Asking the client to describe what qualities she would miss most in the linguistic system was aimed at allowing her to language her feelings, thereby creating the potential for her to redefine the relationship as terminated. Although she attempted to language her feelings, she found it extremely difficult. This was seen in her inability to find suggestions as to how the members could end the system. However, what the client was able to do was to introduce a metaphor describing her experience of the healing linguistic domain. In so doing she transferred meaning and understanding from her everyday familiar domainal experience of walking, into the second order domain of human interaction. This transformation required of her extra thought, understanding and cognitive restructuring. By introducing the metaphor, the client afforded herself the opportunity to create a positive feedforward loop and an opportunity to 're-define' the linguistic domain as terminated.

The fact that the client chose to enact the metaphor purely on the therapist's invitation not suggestion to do so is evidence of the evolutionary history or ontogeny of the linguistic domain. In an atmosphere where co-ordination of language and behaviour exists, such as the one described, the result is that ideas and meaning become consensual and the client knows what is expected.

By the client accepting the invitation and beginning to enact the metaphor, an extremely significant step in the domain was taken. On the one hand it allowed the client the opportunity to language threatening inner material in the form of a non-threatening medium, namely in the form of a metaphor, and on the other hand it created a recursive feedforward loop. As a result

of the client's ability to self-refer, she was able to detect a mismatch between her behaviour, namely of being sick, and the intended reaction, to the behaviour namely to postpone the session a week thus deferring the termination of the system. The result of such positive recursion was an invitation extended to the client to engage in operational modification within the system in the form of enacting the metaphor. This had the effect of strengthening the deviation further away from being sick to actually becoming engrossed in the enactment of the metaphor. The effect of this positive recursion was the generation of new information within the client system. The client thus became more informed and differentiated as alternative recursive loops were being forged, thereby affording the client the opportunity to redefine her systemic goals and aims. In this case the client's goals changed from attempting to maintain homeostatic balance to embracing the redefinition of the linguistic system as terminated. Change had therefore occurred.

—Through the metaphor the client gave herself the opportunity to language her fears and feelings of sadness and loss surrounding the termination of a significant relationship. This was possible owing to the client's cognitive ability to allow the metaphor to flourish and expand to the point that realisation and utilisation of the pattern that connects two different concepts was clearly evident in the client's enactment of the process. Although one could investigate all the nuances imbedded within the metaphor, it is the conclusion of the session which the researcher finds most significant in terms of the facilitating role the metaphor played.

The implication of the client feeling that she could no longer sit in the chair which for her had been the most comfortable throughout the ontogeny of the linguistic domain is extremely significant. The positive recursive feedforward loop in the form of the client's introduced

metaphor encouraged the client to language her experiences of the therapeutic process. The result was that new meaning and understanding of a redefined system could occur. In effect then, the client was able to regain a homeostatic balance previously disrupted by the perturbation.

Where termination and loss of system were initially seen as the focus point around which the problem was organised, the ability of the client to language her feelings in an interactive space allowed a redefinition of the system to occur. The facilitation of cybernetic process by the introduction and development of a metaphor is clearly evident in the dis-solving of the problem initially defined as termination. The metaphor facilitated the process of redefinition turning a most painful experience into an experience of growth, change and new beginnings.

5.3 Case study 2 : Therapy is a healing pool

5.3.1 Client introduction

Niki, a seventeen year old female client, decided to come for therapy after she felt that she was unable to control a recursive loop of severe binge eating. This redundant pattern of behaviour had persisted over a period of four years.

5.3.2 Therapeutic process

Immediately after sitting down, Niki commented that she was not sure what to expect from therapy nor was she sure that I could offer her any help. Sensing her anxiety, I decided to

explain the process of psychotherapy as I saw it from a cybernetic perspective. I said that it was an opportunity for her to speak about things which were troubling her, and that together we would attempt to dissolve them. Niki appeared happy with this explanation and I invited her to talk about any issues which she felt comfortable discussing with me at this early stage.

Moving around in the chair, Niki appeared visibly uncomfortable. I reflected on her anxiety to talk about why she had come to therapy. Niki responded that she did not know why she had chosen to do this. Again I tried to explain the process of therapy in an attempt to put her more at ease. However she still said that she did not know why she had come. The session progressed extremely slowly and I constantly had the feeling that I was not connecting with Niki on any level. It was at this point that I asked Niki what was making her so nervous about therapy. She responded by saying that she was not sure what I wanted from her or what to expect from therapy. Feeling rather frustrated by my inability to explain the process of therapy, I remembered a metaphor used by a colleague to describe this process. I decided to introduce the metaphor.

5.3.3 Co-evolution of metaphor

I began my explanation by saying that in therapy ‘we’ (referring to both client and therapist), would build a healing pool in the space between us. I suggested that at times she would swim and I would observe her, and at other times I would swim alongside her. Niki commented that she understood. Sensing that she still was not totally at ease with this metaphor, I invited her to demonstrate the effect of her recursive loop of constantly saying that she “did not know” in terms of the healing pool.

Niki looked at me for a few moments, rose from her chair and began to walk around an imaginary pool in the centre of my office. She then explained that the water in the pool looked cold and somewhat uninviting. I asked her whether it was possible for us to heat the water to make it more inviting for swimming. Looking at the imaginary pool Niki commented that the water did not look that cold and that perhaps she would swim after all.

Sensing that Niki was allowing herself to co-engage in the introduced metaphor, I invited her to put her foot in the water. Standing on one foot she placed the other foot in the pool and said that although the water was still a bit cold she would be able to swim in it. I then asked Niki if she felt ready to talk about the issues that had brought her to therapy. Gesturing that she was, we waited in silence.

Breaking the silence Niki said that she was embarrassed to be seen in a revealing costume as I would think that she was fat and ugly. I accepted her feelings of vulnerability and fear of exposure, and reflected back to her that perhaps on a different level she did not want to reveal any emotional vulnerability as she was scared of my judging and rejecting her. Niki nodded saying that I would think she was silly. I asked her what else bothered her about swimming. She said that she was scared that she might catch a cold upon exiting the pool. I reflected that perhaps after a therapy session during which she might have felt vulnerable and exposed, she would have to leave the session with these feelings which would make her feel unhappy for some time following the therapy. She agreed with the reflection and visibly began to relax more. I then asked her how we could dry ourselves upon exiting the pool to prevent catching a cold. After a short pause Niki ventured a solution: she suggested that she might smoke a cigarette while reflecting upon the session. I agreed that it sounded like a good solution and

that we would try it at the end of the session.

Curious as to the effect the metaphor was having on the facilitation of the process, I asked Niki to show me in terms of the pool at what depth she experienced herself? Sitting on the edge of the chair Niki explained that her knees were in the water. She also said that the water was not as cold any more and that she felt certain that she would definitely be able to swim in the water. I then asked her what was still preventing her from allowing herself to swim in the pool. Looking uncomfortable again, Niki said that she was very scared that I would force her to swim when she did not want to. I acknowledged her fear as real and valid, and wondered aloud whether she could indicate to me if she felt pushed or forced to swim in which case I would not force her. This seemed acceptable to her, and she said that she would tell me to stop if she felt threatened in any way. Looking at the imaginary pool, Niki proceeded to sit on the floor. I asked her how it felt to be swimming. Smiling for the first time, Niki said that the water was cool but pleasant and swimming would not be that much of a problem for her.

5.3.4 Conclusion of metaphor

Niki then began to discuss her relationship with her mother highlighting how she felt that her mother forced her into doing things she was not confident enough to do. She spoke of her eating habits which she felt were becoming more and more uncontrollable. Niki spoke freely and openly; reflections regarding aggression towards her mother were acknowledged rather than dismissed, and I felt that we had connected on a level not possible prior to the introduction of the metaphor. As the allotted time was nearly over, I briefly recapped the session paying particular attention to the progression of the metaphor. I then asked Niki if she

could climb out of the pool in her own time. Niki slowly got up off the floor and returned to her original chair. She then lit a cigarette and smoked in silence.

5.3.5 A meta-level understanding of process facilitation

When the client entered the office and sat down the healing linguistic system of client and therapist had formed. However, for the client, the boundaries of the linguistic domain were neither sufficient nor clarified. The lack of consensual understanding and co-ordination of meaning resulted in the client continually exerting pressure on the domain to redefine the relationship in terms of a mutual co-definition. In the researcher's explanations of what he thought psychotherapy entailed he attempted to define the relationship for both members of the linguistic domain. The client however expressed both her dissatisfaction and disqualification of the relationship not only with the therapist's definition, but also with his attempt to redefine the relationship. The client accomplished this very effectively and powerfully by continually saying that she did not know. By doing this she in effect forced the relationship to be redefined based on a co-creation of meaning before progress could be made. The result of this was that the newly formed linguistic domain including client and therapist found it increasingly more difficult to establish a sense of commonality where co-definition of the relationship was possible.

The client was then invited by the therapist to redefine the relationship in a way that would be more satisfactory to her. However, she was initially unable to allow herself to language her ideas so as to promote an interactive process. The client refused to allow herself to language her thoughts, feelings and fears. The reason for this refusal to language inner experiences

regardless of whether she wanted to or not could be due to a belief that the therapist would misunderstand her or not allow her to participate as an equal in the linguistic domain. It also seems probable to assume that from the ontogeny of past relationships with adults the client was hesitant to re-engage in a linguistic domain. One could hypothesise that these relationships were not of a gratifying quality hence the introduction by the client of a negative feedback loop to ensure a homeostatic balance by not engaging in the interactional process. A further hypothesis worth entertaining is that the client felt a deep sense of vulnerability and threat to her own homeostatic equilibrium due to her increasing interaction within the therapeutic relationship. The challenge was therefore thrown to the therapist to create a medium in which the facilitation of language could occur.

By the therapist introducing a healing pool as a metaphor for psychotherapy, the client was offered the opportunity not only to co-define the systemic realities of the linguistic domain, but also the opportunity to express some of her fears regarding her participation in such a domain. It is interesting to note that the client chose to react to the particular metaphor of psychotherapy as a healing pool, as opposed to any of the other metaphors offered by the therapist. In so doing the client confirmed that as languaging beings, we react to metaphors which resonate with very personal inner experiences and reject those metaphors with no particular personal relevance.

The cybernetic notion of an intersubjectivity of process is captured in the metaphorical image of both members of the linguistic system swimming together. It is the willingness displayed by the therapist to be an equal participant in the process which ultimately gives rise to shared, co-evolved and consensual understanding. Furthermore, the therapist, by creating an atmosphere

of intersubjectivity, initiates a positive feedforward loop which diverts the client wanting to disengage from the therapeutic process and directs her towards becoming fully involved in the therapy as a result of the introduced metaphor. By qualifying the relationship as co-participative, the client was able to accept the therapist's invitation to co-define the relationship through the enactment of the metaphor.

In terms of the actual metaphor, various attempts by the client to define the relationship are clearly seen. The client's comments regarding the water being cold and uninviting were indicative of her initial attempts to define the relationship. By refusing to swim on account of the cold water, the client demonstrated her refusal to allow herself to become involved in the linguistic domain without a satisfactory redefinition of the system's boundaries. The therapist also demonstrated his unwillingness to allow the client to disengage from the process by continually inviting the client to explore further within the metaphor. Hence a co-definition of the linguistic domain occurred where the intersubjectivity of process was allowed to flourish and grow.

The co-negotiation of domain boundaries was clearly seen in the interaction between client and therapist, hence little comment is required. However, the process of the interaction is significant to note. The increasing ability of the client to language her feelings regarding boundaries was seen in the client physically getting deeper, not only in terms of the pool but also in terms of her interaction with the therapist. This is evident by her increasing willingness to language more personal material. The progression is seen in the client's ability to language feelings as opposed to her initial attempts at trying to sabotage the relationship through the implementation of a negative recursive loop.

At the conclusion of the session the act of the client smoking had an important implication for the future ontogeny of the linguistic domain. Allowing the client to smoke as agreed created confidence in the co-defined resolutions that occurred in the domain by enforcing the notion that the process was real and resolutions would be upheld by both members of the linguistic system. The metaphor of therapy as a healing pool contributed to the facilitation of the cybernetic process in two ways: it created a forum for the co-negotiation of system boundaries and it provided a medium in which the languaging of threatening emotional material could occur. The metaphor thus enhanced and facilitated the psychotherapeutic process.

5.4 Case study 3 : The adventures of Dash

5.4.1 Client introduction

Dillon, a fifteen year old male came to me for therapy following a failed suicide attempt. Dillon engaged well in the linguistic system provided the interaction remained on an emotionally superficial level. He found it difficult to continue languaging when the emotional content became anxiety provoking.

5.4.2 Therapeutic process

During the therapy session, Dillon mentioned that he felt like a mouse trapped in the corner of my office with no place to run. Picking up on the metaphor I asked Dillon whether it was possible for him to give the mouse a name. After some thought Dillon decided that he would call the mouse Dash.

5.4.3 Co-evolution of metaphor

Dillon began to relate to me the story of how Dash was chased by a cat over a period of almost four years. The chase began at his home and ended in the corner of my office. He was now finally trapped in the corner with no way of escaping. Dash, according to Dillon, was stranded and felt alone and desperate. Rather than being eaten by the cat, Dash decided he would consume a lethal portion of Rutex. Dillon mentioned that the box of 'rusks' on the floor near the corner in question represented this to him. In retrospect Dash was appalled that he could actually eat the poison but also surprised that he was able to do something like that. Dash, according to Dillon, experienced the whole episode as if it were a dream. Also in the corner with Dash was a spider which Dillon said represented the drug dealers he was friends with.

When he regained consciousness after eating the Rutex, Dash found a hole in the wall. Looking down the tunnel he saw a tiny white light far off in the distance. I asked Dillon if it was possible for him to ask Dash what he thought the light at the end of the tunnel was. Dillon said that the light represented Dash's old self. Dash crawled into the tunnel. I asked Dillon where Dash was currently. He responded by saying that Dash was planning to dig towards the light although he was resting at the time. Dash however did not want to look down the tunnel as it was dark and scary. Dillon then became somewhat concerned for Dash's well being and wondered whether perhaps Dash might fall asleep in the tunnel and he would have to shout at him to wake him. He also thought that he would have to encourage him through the next obstacle he uncounted en route to the light.

Dillon and I then knelt on the floor in the office and knocked on the spot where Dillon imagined Dash to be. Dillon encouraged Dash to continue working the following day as Dillon wanted Dash out of the tunnel by that coming Friday.

Dash continued digging and making good progress until he came to a rock in the tunnel that he just seemed be unable to burrow through. Half way through the rock Dash's spade broke with the result that he was forced to dig up and over the rock. I asked why he did not go down and under the rock. Dillon replied that by going down and under the rock there was a greater possibility of the rock falling and trapping him. Dash, according to Dillon, had gone down and under a rock previously and had been trapped for almost three years and he would not make the same mistake again.

Having removed loose sand and finding the going relatively easily, Dash thought that the rest of his journey would not be that difficult. Dillon, smiling, said that Dash was moving so fast through the tunnel that he almost banged his head on the next rock. Upon examining the rock, Dash found that it was too big to go over or around and he knew that his only option of getting out of the tunnel was to go through the rock. Dash felt that as he had encountered and conquered such rocks before that he would get through the final rock if he worked hard.

I enquired from Dillon how Dash was feeling regarding the prospect of coming out of the tunnel. Dillon said that Dash was confronted with mixed feelings of excitement and anxiety at the thought of returning to his mouse community. Dash would be one of the few mice who would ever have made it through the tunnel and thus expected to feel proud of his achievement on returning home.

Dillon continued to relate that as Dash was digging through the final rock, he heard a loud crash in the distance. Dash knew that the first section of the tunnel he had come through had collapsed; this meant that the only way out of the tunnel was forward and that it was impossible to go back down the tunnel. The thought of no return or escape from the tunnel motivated Dash to work even harder so that he could return home and be able to stand with his face in the sun.

5.4.4 Conclusion of metaphor

Dash said that he had also met other mice in the tunnel but the vast majority of these mice had entered the tunnel from the wrong side and thus would not make it out the tunnel alive. Dash also informed Dillon that he had come across his great grandfather's spade and that it was that spade that he had been using. Dash experienced the spade as magical in a sense; it contained the wisdom of the ancients which guided him on his journey while in the tunnel. It also had the effect of inspiring Dash to dig even harder to be free. I asked Dillon whether it was necessary to encourage Dash on the home stretch of his journey. Dillon said that it was not necessary although he would check on Dash the following day.

5.4.5 A meta-level understanding of process facilitation

Although the linguistic domain operated relatively well from the outset, with the client being to language most concerns, it was his inability to language feelings that were emotionally threatening that proved a hindrance to the therapeutic process. Thus, it was when the client introduced the metaphor that the opportunity presented itself for further evolution. Again it

must be stressed that, although the client introduced the metaphor, the therapist encouraged its evolution so as to change its function to a perturbational process facilitator, for which outcome is impossible to predict. The therapist, however, rather than analysing the metaphor, invited the client to allow the metaphor to evolve, thus remaining in an intersubjective space with the client. In so doing, the client in turn invited the therapist into his inner world. By both parties interacting in and through the metaphor they afforded each other permission to co-exist and co-explore within the intersubjective space.

By encouraging the client not only to remain within the metaphor, but also to explore within the metaphor, a medium was created which clearly was comfortable for both the client and the therapist. This is seen in the client's willingness to recount the metaphor without much encouragement from the therapist.

In terms of the actual metaphor then, the client began to relate his phenomenological experience of his life in terms of the actions of the mouse. It is interesting to note how vividly the client allowed himself to become engaged in the metaphor, demonstrating the extent of creative investment he was prepared to volunteer to the domain. He also included his history before the introduction of the therapeutic system. It can be hypothesised that he attempted to allow the other member of the domain, namely the therapist, to participate in a greater understanding of his, the client's, recursive loops.

The client then began to incorporate the linguistic domain of therapist and client into his evolving metaphor. This is demonstrated by the main character entering the wall in the therapist's office. The hole the mouse entered contained a dim light at the end, perhaps

indicative of his expectations of the process somehow offering him a way out. In a sense though, the client created a metaphor of therapy within a metaphor of his life. The client was thus able to create a second order of observation thereby enhancing his ability to self-refer as he was now able to view interaction from a distance. By distancing himself from the process while at the same time being fully engaged in the interactional process with the therapist, the client was able to explore both his own life as well as his experience of the linguistic domain. The client was able to investigate and create his own systemic components while at the same time maintaining his basic unity of system.

Towards the end of the metaphor the client began to discuss the disintegration of the linguistic system in a mature manner without shying away from emotional content by his interaction with the system. Owing to the co-evolution of the metaphor, the client was able to monitor not only his own recursive loops in terms of his interaction with others, but he was also able to monitor the development and dynamics which existed within the linguistic domain. Through this process of recursion he was continually able to monitor his homeostatic balance thus being able to make the necessary adjustments to ensure such balance.

The client, through the metaphor as a therapeutic medium, was able to explore many facets of his recursive loop with his family and father in particular. The metaphor created a tool for the client with which he could reflect on these interaction patterns. This process of reflective recursion could not be achieved prior to the introduction of the metaphor. The metaphor thus created an environment where the client was able to language both his own experience and his experience of being an active participant in the linguistic domain. The co-evolution of the metaphor also allowed the client the forum in which to language emotionally painful content

which he had found difficult to do initially. The evolution of the metaphor contributed to the facilitation of the therapeutic process.

5.5 Case study 4 : My hands are tied

5.5.1 Client introduction

Dillon, the same fifteen year old client who provided the metaphor of Dash, came into my office, sat down and was silent.

5.5.2 Therapeutic process

I invited him to tell me what it was that he was finding so difficult to talk about. After a pause he looked down and explained that it felt to him as if his hands were tied. He continued to say that apart from his hands it also felt as if his feet were stuck under an extreme weight from which he felt it was impossible for him to escape.

5.5.3 Co-evolution of metaphor

Following Dillon through the metaphoric gate he provided, I asked him who it was that was tying his hands. Dillon looked up and said that it was his father. I then asked Dillon whether it was possible for him to describe what it was that his father was using to tie his hands together. Dillon replied that his father's rope was his constant criticism and his habitual way of always reminding him of incidents where Dillon had disappointed him or let his father down in some

way. It was Dillon's opinion that his father should have forgotten these incidents as they were in the past or should have forgiven him as he, Dillon was remorseful. I then asked Dillon if he could tell me how come he felt that his feet were stuck. He replied that his feet were stuck in his father's concerns regarding his relationship with his mother but he was not sure how to elaborate on those feelings.

When I enquired again from Dillon how he was experiencing the ropes around his hands, he said that they had loosened substantially and that his hands felt a lot more mobile. He could move them with a limited amount of freedom. After a short pause, Dillon said that actually there were only a few strings still binding his wrists together. I wondered whether he had any suggestions about a way of undoing and removing the few remaining cords of constraint. He however was not sure and said that he had no suggestions.

At a later stage in the therapeutic process, I again inquired how Dillon was experiencing the immobilisation of his hands. He responded by saying that all the rope was off except for one knot on his left hand which he found too tight to remove. Deciding to create an enactment of the continued metaphor, I asked Dillon whether he would allow me to demonstrate the metaphor. Looking somewhat surprised he agreed. I then took the electric cable from a fan situated near Dillon, and proceeded to tie the cable around Dillon's left wrist. I then inquired from him whether the knot I had tied was in any way similar to what he was referring to. Dillon said that it was, but he decided to make one small adjustment; he wrapped the cable several times round his fore arm towards his elbow. He then said that his hands were bound in such a manner. However, his feet were also bound by the same cord. Dillon explained that he was thankful that they were bound in front of him so that he could see how to undo them.

Dillon then began to unravel the cable on his right wrist until he was left with the securely tied knot. I inquired of him how he thought that he would be able to undo the knot. While listening to me, Dillon moved the knot back up his arm which loosened the knot with the result that he was able to slip the knot off his wrist. I then asked Dillon whether he could explain the procedure he had followed that had allowed him to remove the knot. Dillon was not sure what exactly he had done to remove the knot. I then informed him that he had moved it back in order to be able to go forward.

5.5.4 Conclusion of metaphor

Understanding the implications of the metaphor Dillon said that he was too tired to go back and asked to end the session.

5.5.5 A meta-level understanding of process facilitation

The therapist began the session by inviting the client to become engaged in the conversational process to initiate the languaging of experience from which the system could evolve. As an evolution process initiated by language implies change, the client immediately retreated to the safety offered by metaphors and instinctively responded with a metaphor. It is significant to note that he instantly chose to express himself in the form of a metaphor. One could hypothesise that the system's natural tendency to oppose change and thereby maintain system homeostasis was initiated. This also emphasises the contention that when a client wants to describe a deep and painful emotional experience for which normal language is inadequate, he opts for the metaphor.

Through the metaphor the client created a picture for the therapist which depicted his experience of his inner life world. By using a metaphor, the client extended an invitation to the therapist thus placing him in the privileged position of being able to co-engage with the client in this intimate space. In this case the therapist asked the client to make overt the pattern that connected the different domains of experience to gain a thorough understanding of the client's life world. In so doing, the therapist created a forum where the client was able to language emotions and gain a meta-perspective of his interaction with his father. This was evident in the client identifying and exploring what his immobilisation represented to him although expressed in terms of a metaphor.

Finally the metaphor provided an opportunity for problem dis-solution to occur. The client was unable to gain a new understanding of his immobilisation as seen in his inability to find a means of removing the cable. The client's inability to generate problem solving thoughts, and his inability to allow himself to initiate new possibilities of interaction can be seen as a symptom of negative recursive loops which he initiated in an attempt to maintain a homeostatic balance in his interaction with his father. The metaphor however provided the therapist with a linguistic vehicle from which a positive feedforward recursive loop could be initiated. As opposed to other metaphors presented, the therapist enacted the metaphor to make the metaphorical image more vivid and real for the client. By the client removing the knot himself, with the therapist merely acting as a recursive commentator for the client's interaction with his father, the client was allowed to place himself in a position where his ability to self-reference became more evolved, informed and individuated. This process of development in terms of his ability to self-refer allowed the client to initiate his own feedforward loop.

The introduced metaphor allowed the client to language painful emotional content and provided a yardstick for therapeutic progress. The metaphor also allowed a break in the client's recursive pattern to occur, creating the alternative of a forward loop to be initiated. The metaphor contributed to the facilitation of process as new meaning, understanding and behaviour were encouraged to develop.

5.6 Case study 5 : Unique minds

5.6.1 Client introduction

Niki, as introduced earlier, found it extremely difficult to break the redundant pattern of binge eating followed by self-induced vomiting. As the psychotherapeutic relationship evolved, this redundant pattern slowly began to decrease in frequency and intensity, particularly in terms of the binge eating cycle. Therefore, although structural changes were occurring within the client, there was always a subjective feeling on the part of the researcher that she struggled to language feelings and perceptions regarding her interaction with her deceased father.

5.6.2 Therapeutic process

I asked Niki whether she thought that it would be possible for her to find an alternative way in which she could language her feelings. Niki decided that she would be able to language her feelings in the form of a metaphorical story which she entitled 'Unique Minds'. The metaphor is paraphrased for the reader.

5.6.3 Co-evolution metaphor

A man lived with his wife and two children on the outskirts of a small village. The family survived by the father stealing food from the neighbouring villages. They did not regard their behaviour as wrong as they did not know any better. When the need became too much for the family they simply took what they needed. On one particular foraging expedition undertaken by the father he became disorientated in the large forest. Wondering round aimlessly he found himself more confused. Many hours later he was still trying to find his way home. He was cold, tired and alone. Very near to his death the man saw a light in the forest towards which he staggered. The light took pity on him and guided the man back to his family where his wife nursed him back to full health.

After Niki had finished reading the story, I commented on her high level of creative investment in the development of the metaphorical story. I also mentioned to her that I was wondering whether she was able to recognise herself in any of the characters that she had just mentioned. Niki replied that in a way they were all somehow representative of herself and that on some level she felt very connected to the characters she had written about.

I then encouraged Niki to give each character a name to make them more lifelike. After some pensive moments, Niki said that the father's name was Leo, he was 27 years of age. His wife according to Niki was a 25 year old woman with the name of Mandi. Niki named the two children Martin and Marti.

I then asked Niki how she thought Leo felt towards his children. Niki thought for sometime,

perhaps finding the question more difficult than she had anticipated. She then answered saying that Leo only wanted the absolute best for his children. I asked Niki how she thought the children, Martin and Marti, felt towards their father. Niki said that the children were not sure how they felt towards him, but that they did not get the opportunity to spend much time with their father. A further contributing factor according to Niki was the children's inability to understand Leo's mood swings.

Encouraging her to elaborate on how she thought the children must have felt, Niki said that Marti was scared of Leo. Marti, according to Niki, was afraid because Leo spoke very loudly which tended to upset her and give her a fright. Marti was also extremely scared when Leo lost his sense of humour or when he lost his temper particularly when she was the reason that he was so angry. Niki was beginning to speak a lot faster, especially when she mentioned that Leo constantly humiliated and belittled her. She was not allowed to get angry or show any emotions at all. It was, according to Niki, as if neither Martin nor Marti were allowed to be normal children. They were hardly allowed to speak and they were expected to perform adult chores which were far too advanced for them. Niki felt that his behaviour was a gross injustice to the children, but she said, in the face of Leo, all were powerless.

5.6.4 Conclusion of metaphor

I then asked Niki what she could do to help the children in her story. She responded by saying that she would like to know why Leo was such an angry and vindictive man, especially towards his own children. The elaboration of the metaphor had obviously left Niki with many unanswered questions for which she was struggling to find any appropriate answers.

5.6.5 A meta-level understanding of process facilitation

The therapist cannot directly change the client, nor can the therapist force the client to language thoughts and feelings if the client is not willing to do so. By allowing the client to decide how best to language the problem for herself, the therapist reinforced the intersubjectivity of the linguistic domain by giving the client the freedom to decide upon the language that would best suit her. Through reinforcing the client's natural willingness to co-engage in the process, both members became more structurally coupled to the medium of the linguistic system, thereby making their understanding mutual and consensual.

It is again interesting to note that when normal semantics fails to prove an effective medium for languaging personal material, the client tends invariably to resort to a metaphorical language. This contention is reinforced by the client being unable to language her experiences using her normal syntactical vocabulary. However, it must be remembered that, given the choice, the client will opt for a metaphorical language in which to express herself.

In terms of the metaphorical story which the client provided, it is difficult at first to see the connection between the story and the client's presumed interaction with her father. However by creating a metaphor the client was able to embrace the connecting pattern before entering a second order of observation. In so doing the client forced the therapist to re-observe in order to understand the client's observations of observations. To enable the therapist to follow the client's observations of the metaphor, he again invited the client to elaborate and expand the metaphor.

This was accomplished firstly by positively reinforcing the client's creativity which was essential if the client was to elaborate on the metaphor, and secondly by acknowledging the client's connection to the characters which, on a metaphoric level, the client was structurally coupled to as she was in dialogue with them in creating the metaphor. Validated and encouraged, the client was able to allow the metaphor to evolve, hence making herself vulnerable to emotional content which one would assume to be anxiety provoking. This assumption can be made on the grounds that the client was only able to verbalise her interaction and experiences with her father as a result of the facilitating metaphor.

Within the safe confines offered by the metaphor, the client and the therapist, on a metaphorical level, were able to move freely within the client's relationship with her father. This freedom of movement was allowed to develop as the emotional content of the client's experience was no longer as anxiety provoking as it was safely confined within the boundaries provided by the metaphor. The metaphor thus provided a vocabulary for both the client and therapist. The vocabulary provided the linguistic domain with words for languaging. The therapist first invited the client to view the relationship from the perspective of the father in the story. The difficulty the client exhibited when having to answer the question indicates the sensitivity of the previously unlanguageable relationship. Therefore the client found it extremely difficult to use the newly provided vocabulary, thus accounting for the staggered nature of the initial dialogue between client and therapist.

Once the client had become more familiar and comfortable with the vocabulary offered her by the metaphor, she was able to language her feelings more freely. The client also began to engage in a meta-recursive feedback loop with her father through the metaphorical character

of Marti. Through this meta-feedback the client began to challenge her old, although recursive, structural make-up of her father in a much more direct and open manner. The client's ability to language such anxiety-provoking content was not possible prior to the introduction of the metaphor. The medium of the psychotherapeutic metaphor was able to accommodate and adjust to the client's need in terms of expression and language, by creating enough room for her to express the metaphor fostered in the forward progression of the linguistic domain. The client's relief at having a vocabulary from which she could finally language her feelings, and recreate the original recursive loop with her father, was evident in client's tone of voice and speed of pronunciation which mimicked this recursion. In so doing, the client also demonstrated her mastery of the metaphorical language which she was able to embrace in order to language critical incidents in her life for the first time.

The metaphor that the client provided for the linguistic domain offered both her and the therapist a new vocabulary from which to language the previously un-languageable. Although the experiences that needed to be language by the client were anxiety provoking, it was the client's inability in terms of an appropriate language form which proved to be the biggest barrier in terms of not allowing her to language her feelings. The metaphor facilitated the psychotherapeutic process by providing both client and therapist with a vocabulary from which to language experiences and thus making the experiences of the client valid and real. The metaphor also provided the safety structure that the client required in order to use the new vocabulary offered to the healing system. Through the introduction and use of the metaphorical story, the client was able to language her feelings. The metaphor contributed to the facilitation of the therapeutic process.

5.7 Summary

From the metaphors used in the healing linguistic system of client and therapist it becomes apparent that through the co-evolution of metaphors, the linguistic systems underwent various changes. Owing to the facilitating role played by the co-evolution psychotherapeutic metaphors, the linguistic systems were able to redefine system boundaries in a more positive light, create a forum where the co-negotiation of consensual behaviour could occur, and create a new vocabulary from which to language experiences which were previously un-languagable.

The variety of facilitating effects the metaphors induced within the linguistic systems contributed to both client and therapist co-evolving into autopoietic systems which are more differentiated, more diverse and more able to promote positive feedback loops and to stop the recursion of negative feedback loops. These changes occurred partly as a result of the facilitating contributing effect of the psychotherapeutic metaphor. It is thus the researcher's understanding that when metaphors are allowed to co-evolve within the linguistic system, new meaning, understanding and reality is created. This, in essence, is the facilitation of the cybernetic process.

Chapter 6

Discussion and recommendations

6.1 Introduction

The purpose of this chapter is to integrate and discuss the findings which were derived from the meta-analysis. In so doing the facilitating role played by the metaphor can be highlighted. The chapter will conclude with a brief discussion of further research recommendations elicited by this study, as well as a critical evaluation of the study by the researcher.

6.2 Metaphors, their facilitating role

Cybernetic 'process' is understood as the creation and facilitation of a conversational process, through which mutually co-evolved meaning, understanding and change occur. It is exactly in the facilitation of this process that the presented metaphors are most effective. If one reflects upon the case studies presented, the various facilitating roles elicited by the psychotherapeutic metaphors come to the fore. These facilitating roles can be linked in part to the basic concepts of the cybernetic epistemology as well as to the theoretical use of metaphors.

Perhaps the most obvious facilitating role played by the metaphors in the presented therapeutic transcripts is the facilitation of language for both the client and the therapist systems. Through the facilitation of language the system was able to be redefined as disintegrated which enabled a positive feedforward loop to be initiated as opposed to the continuation of negative feed

loops to maintain system homeostasis.

Through the facilitation of language, the co-evolved metaphors provided both the individual client system as well as the linguistic system with a safe and stable medium in which the languaging of threatening emotional material could take place. The anxiety caused by sensitive emotional material presents a very real threat to system homeostasis in that, by confronting this inner discomfort, the system runs the risk of change. To avoid the threat of change, the system introduces a negative feedback loop to avoid languaging the material. The safety offered by the metaphor, however, creates a paradox for the system in that, although the client does not want to engage in a possibly threatening conversational process, the metaphor seems so simplistic and non-threatening that the client feels safe to engage in the co-evolution of a metaphor. Paradoxically however, this process initiates the introduction of a positive feedforward loop which encourages languaging and hence change. Through this paradox the metaphor contributes to the creation of an environment where clients are able to language both their own experiences and their meta-experience of being an active participant in the linguistic domain.

The psychotherapeutic metaphors presented to the reader also created a new vocabulary from which the client could language painful emotional material, and thus provided the therapist with an invitation to speak the same metaphorical language as the client. Through this vocabulary-producing process initiated by the metaphor, both client and therapist could begin to language the previously un-languageable. The threatening activity of speaking a new language that would invariably threaten to disrupt the client's homeostasis is neutralised by the paradoxical safety provided by the metaphor.

It is thus the researcher's opinion that the introduction and co-evolution of psychotherapeutic metaphors facilitates the cybernetic process of psychotherapy. Metaphors encourage, allow and provide a vocabulary from which the client can language experiences and through which the therapist can interact within these experiences. It is through the interaction of language that the conversational process between client and therapist flourishes and through which change and healing ultimately occur.

6.3 Thesis contribution to psychotherapy

In this study the researcher has described the role played by metaphors in terms of facilitating the process of psychotherapy for the linguistic system. The description of this process suggests that when metaphors are allowed to co-evolve within the confines of the linguistic system, metaphor plays a decisive role in the facilitation of the process as understood from a cybernetic perspective.

As is evident from this study, metaphors facilitate the definition and redefinition of system boundaries, the breaking of redundant negative feedback loops while initiating positive feedforward loops and constantly facilitating the languaging of experiences. Metaphors thus contribute a great deal to the process of psychotherapy in that they promote all the aforementioned healing activities, while at the same time creating an ecology of intersubjective process.

Although the research population group is extremely small, there is enough evidence from this study to make the final conclusion that when therapists allow and encourage the co-evolution

of metaphors to occur within the linguistic system, the system is propelled forward towards new meaning, understanding, change and ultimately towards healing.

6.4 Suggestions for further research

As a result of this study, various suggestions regarding further research in this field have been elicited. The first of these suggestions is the need to explore whether metaphors play the same facilitating role in psychotherapy with adult clients.

A further point worth possible exploration is the re-theorising of adolescent developmental theory from a cybernetic epistemological perspective. This could be expanded across the entire developmental scope from infancy to late adulthood. Such an investigation would surely promote the practical applicability of the cybernetic epistemology.

A final suggestion regarding further research might be the exploration of psychotherapeutic metaphors in terms of their application to different cultural groups. Metaphors might provide therapists who work cross-culturally with a tool to overcome basic language and conceptual barriers. These barriers are especially common in the South African therapy context.

6.5 Critical evaluation

When this study is evaluated critically, one finds numerous unexplored possibilities and questions which were not answered. For the researcher, the most pressing of these is the relatively small sample size and the homogeneity of the research population. These two factors

raise the inevitable question of whether the metaphors would have played the same role with a more diverse research population.

A further point of critique directed towards the study might focus on the lack of investigation into the exact role played by the metaphors in terms of their ability to facilitate the process.

Although achieving the aim of the study was a priority, namely to provide a descriptive account of the facilitating role of metaphors, the study seems far from saturation point in terms of the exact role metaphors play.

6.6 Summary

At the conclusion of this descriptive account of the facilitating role played by metaphors in psychotherapy with adolescents, the reader hopefully is left with a sense of intrigue regarding their application and value. For this researcher, metaphors not only facilitated the cybernetic process in its various forms en route to healing, it also facilitated the intersubjectivity between client and therapist. It is in the world of metaphor that the client and therapist dance the dance of language, creativity and healing. Metaphor provides the forum in which to evolve - this is their power.

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