Process Studies

FRAMES (FRMS)

Dahl, H. & Stengel, B. (1978). A classification of emotion words: A modification and partial test of de Rivera's decision theory of emotions. *Psychoanalysis and Contemporary Thought, 1,* 252-274

Dahl, H. (1979). The appetite hypothesis of emotions: A new psychoanalytic model of motivation. In C. Izard (Ed.) *Emotions in Personality and Psychopathology,* 201-225. New York: Plenum.

Dahl, H. & Teller, V. (1994). The characteristics, identification and application of FRAMES. *Psychotherapy Research, 4,* 252-274.

Hölzer, M. & Dahl, H. (1996). How to find FRAMES. *Psychotherapy Research, 6,* 177-197.

Dahl, H. (1998). The voyage of el Rubaiyat and the discovery of FRAMES. In R. Bornstein & J. Masling (Eds.), *Empirical Studies of the Therapeutic Hour,* 179-227. Washington, DC: American Psychological Association.

Brief Summary of Approach

FRAMES (Fundamental Repetitive and Maladaptive Emotion Structures) are a research tool for assessing psychopathology, the therapeutic process, and treatment outcome (Dahl, 1998; Dahl & Teller, 1994). 'The principle of free association as the "basic rule" in psychoanalysis is to sample stories that are characteristic or typical of the patient's emotional experiences' (Hölzer & Dahl, 1996). The plots of these stories with their events expressed as emotions, permit reliable and systematic descriptions of each patient's central conflicts using the FRAMES method. The underlying emotion theory (Dahl, 1979) and empirical classification (Dahl & Stengel, 1978) include several basic propositions:

(a)   emotions share basic attributes of familiar somatic appetites such as hunger and sex;

(b)   one of two major functional classes of emotions, termed IT emotions, have objects and function as appetitive wishes about those objects;

(c)   a second major class, ME emotions, function as beliefs about the state of fulfilment or nonfulfillment of wishes, including appetitive ones;

(d)   together, the IT and ME emotions constitute a basic information feedback system that provides knowledge about our fundamental and significant motives and their outcomes. IT emotions (e.g. love, surprise, anger, fear) function as appetitive wishes about objects. If the wish can be consummated, the result is a Positive ME emotion (e.g. contentment, joy). If the wish cannot be consummated the result is a Negative ME emotion (e.g. anxiety, depression).

The goals of this research program are to demonstrate the use of FRAMES: (a) to provide a detailed description of each patient's recurrent maladaptive structures, i.e. character pathology; (b) to identify the nature of the therapist's interventions that help alter the structures; and (c) to assess the outcome by determining the fate of the FRAMES at the end of treatment. The specific structure and content of Prototype (first demonstrated) FRAMES constitute hypotheses which predict that the same sequence of events (plot) will recur again. These hypotheses can be empirically tested and confirmed or disconfirmed, e.g., as Dahl (1998) demonstrated at the microprocess level in a crucial change in a FRAME structure that followed a critical intervention.

Major Results

The methods and procedures for reliably identifying FRAMES have evolved over the past two decades and include results from doctoral dissertations. The basic steps are: (1) applying some criteria

for selecting the session(s) to be studied; (2) classifying the patient's expressions of emotion (typically very numerous) in verbatim transcripts of the session tape recordings; (3) constructing an "object map," which is simply a table in which the successive columns represent the object being talked about and the row entries are the paragraph and sentence numbers of the talk, which then allow selecting segments that contain definable story plots; (4) describing the plots; and (5) constructing a prototype FRAME Structure and looking for Instantiations (repetitions).

These steps have been applied to transcripts of treatment hours, structured interviews, reported behaviour, and the observed behaviour of children. Instantiations of prototype FRAMES can be found with different persons in different settings and particularly in interactions with the analyst. For example, in the analysis of Mrs. C, one repeatedly identified FRAME structure (*Support*) was: (1) patient has conflicts, (2) wants support, (3) does not get support, and (4) expresses hostility. Another FRAME structure (*Provocation*), highlighted at the end of the fourth year of analysis (hours 726-728), was: (1) patient picks a fight with someone, (2) the person fights back or the patient attacks herself, and (3) the patient feels "satisfied." In these three sessions it was possible to show the point of change in this FRAME structure. In 726 she enacted the plot twice with her husband. In 727 she repeated the same plot three times with the analyst and in an association to a novel. In this session, when the patient omitted the third event, the analyst made an interpretation to remind her of how satisfying these provocations and retaliations were to her. In 728 she picked a fight with her husband, got him to fight back, but this time she felt "very unpleasant," and the persistence of this change was supported by the fact that the original FRAME structure did not appear again in later hours of the analysis, illustrating how FRAMES can capture and specify how and which conflicts change.

Brief Evaluation of the Approach

One of the four major strengths of the method is that the structure and content of the Prototype constitutes a testable hypothesis that predicts that the same sequence of events will occur again. New instances of the FRAME structure then confirm the prediction and failure to find them disconfirm them. A second strength is that FRAMES, in contrast to some other research strategies, e.g. CCRT, do not involve pre-set or predefined categories; they are ideographic representations of maladaptive behaviour. The categories of events and their sequential order are determined by and are specific to each patient's own narratives. A third strength is that the method can also be applied to both reported behaviour and observed behaviour. And fourth is the fact that the central importance of emotional expression, which all analysts give lip service to, is based on a clear theory and classification system.

A first limitation is that, although considerable research has been conducted using the FRAMES method, the work needs to be applied to a much wider range of analytic, and perhaps psychotherapeutic patients to discover the method's limitations and possibilities. The most detailed studies thus far have only been conducted on Mrs. C. Secondly, although FRAMES share with other measures involving judgements of similarity, there is a need for more reliability studies such as those reported by Siegel (2001)[1]. He found very encouraging reliabilities for the emotion classifications, and both the segmenting and the plot sequencing agreements among two independent raters. The issue of what are sometimes perceived as problems associated with specifying the relationship between conscious and presumed unconscious mental representattions is not addressed.

There is no attempt to establish causal relations between particular classes of interventions and patient change, but there is a strong implication that the focus of most interventions should be on the events in FRAMES which the patient, for defensive reasons, is avoiding. And efforts to discover definitive interventions, as illustrated in the Provocation example, are best directed at these. No other general rules are implied. Finally, although the appetite hypothesis of emotions, which is fundamental to representing and understanding FRAMES, is often misunderstood as "tied to drive/structural" conceptualizations of mental functioning, this is incorrect. It is in fact a clear substitute for traditional drive formulations. Moreover, rather than precluding "the interactive, relational or intersubjective aspects of the change process" the appetite hypothesis emphasizes the centrality of the relationship between objects, in particular that between the patient and the analyst.

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[1] The Reliability, Identification, and Evolution of FRAMES in the case of Mrs. C. A dissertation of the Gorden F. Derner Institute of Advanced Studies, Adelphi University (2001).

Core Conflictual Relationship Theme Method (CCRT)

Luborsky, L. (1976). Helping alliances in psychotherapy: The groundwork for a study of their relationship to its outcome. In J.L. Claghorn (Ed.), *Successful psychotherapy* ((pp. 92-116). New York: Brunner/Mazel.

Luborsky, L., Barber, J., & Diguer, J. (1993). The meanings of the narratives told during psychotherapy: The fruits of a new operational unit. *Psychotherapy Research, 2*, 277-290.

Luborsky, L., Popp, C., Luborsky, E., & Mark, D. (1994). The core conflictual relationship theme. *Psychotherapy Research, 4*, 172-183.

Luborsky, L. & Luborsky, E. (1995). The era of measures of the transference – the CCRT and other measures. In T. Shapiro & R. Emde (Eds.), *Research in psychoanalysis: Process, development, outcome* (pp. 329-351). Madison, CT: International Universities Press.

Luborsky, L., & Crits-Christoph, P. (1998). *Understanding transference: The core conflictual relationship theme method.* (2nd ed.). Washington, DC: American Psychological Association Press.

Brief Summary of Approach

The CCRT is the longest established empirical method for deriving patients' central relationship pattern from clinical material including the patient's transference pattern (Luborsky, 1976), usually inferred from material in treatment sessions. In recent years, there has been the growing realization that unguided systems for formulating the transference are unreliable – even very experienced analysts often fail to agree with one another. In addition, the usual method of formulating transference is difficult to evaluate for its reliability because each therapist's formulations can differ both in its language and in its components. In contrast, the CCRT method facilitates the use of the same language and same components. While the CCRT relies on the basic principles that experienced psychodynamic clinicians typically use in formulating transference patterns, it allows clinical judges to rely on shared guidelines for making inferences.

First, Relationship Episodes (REs), or self-other narratives, are located in accounts of the patient's [narratives of] interactions with others, usually in verbatim transcripts, though more structured intake interviews have also been used. A relationship episode is defined as part of a session in which there is a clear narrative about relationships with others, or at times, with the self. These episodes are located and marked off on the transcript of the session by an experienced judge. Once recurrent aspects of relationship episodes are identified, they are reviewed with the following questions in mind: (a) what are the patient's wishes? (b) what are the responses from others? (c) what are the responses from the self? Another major dimension of scoring is the distinction between positive and negative responses. Negative responses are those that the patient experiences as involving expected or actual frustration of satisfaction or wishes. Positive responses involve expected or actual satisfaction of wishes.

The method initially relied on "tailor-made" idiosyncratic categories, or types of components inferred by each clinical judge in the judge's own language for describing internal qualities of each patient's central relationship pattern. Later, standard categories were added to the method, i.e. a limited set of categories that are used in common by all judges for all patients. The judge first infers a tailor-made category from some aspect of the narrative, and then translates it into one or two of the standard categories. Several different category lists have been compiled over the years. The first consisted of 15 categories for each type of component, the second comprised 30 for each type of component; data reduction procedures (cluster analysis) finally yielded 8 standard categories for wishes, 8 for responses from others, and 8 for responses of self. Reliabilities for standard categories range from .61 to .70 (Luborsky & Diguer, 1998).

Major Results

The state of the art of research on the CCRT has been summarized in a relatively recent review (Luborsky, Diguer, H, & al., 2000). Over the last two decades, numerous research articles and two books have been published that describe the CCRT and its development and application. Significant

effort has been invested in the construction and refinement of the CCRT method, the standard categories of Wishes and Responses, and in establishing its reliability and validity (Luborsky & Crits-Christoph, 1998). The CCRT operationalises transference in a clinical meaningful way, and as a consequence researchers from literally around the world have adopted the method, and it has been translated into several languages. Luborsky and his colleagues have also tested an extensive series of hypotheses concerning the origin, the functions and the stimuli that activate the transference. They include the observations that it involves a central relationship pattern, that it originates with early parental figures, that it comes to involve the therapist, and that it is partly an awareness (Luborsky & Luborsky, 1995; Luborsky, Popp, & Barber, 1994). In another example of the kind of study done with the CCRT, Popp and colleagues (Popp, Luborsky, & Crits-Christoph, 1990), in order to test the observation that the core conflictual relationship pattern appears in multiple modes, were able to demonstrate a significant similarity of the CCRT from dreams with the CCRT from waking narratives.

Brief Evaluation of the Approach

The CCRT has provided powerful research support for key psychoanalytic theories about transference, and as such is one of the best demonstrations of the possibilities of operationalising psychoanalytic constructs in a form suitable for empirical research. It remains close to the clinical material, and provides guidelines for inference that clinicians find suitable. It can be scored reliably even by judges who have had little or no clinical training (Luborsky, Andrusyna, Friedman et al.). It is not, however, a measure of the therapeutic process, and the implications for how patients (and their CCRTs) change is unclear. As the method comes to be widely applied in countries that are culturally and linguistically varied, there is some concern about the adequacy of the hierarchical system of standard categories that were mainly developed in the US. Research is currently underway in several countries to establish the cross-cultural utility of the W, RO, RS category system, and to offer additional scoring options, where necessary.

Ulm-Leipzig-Göttingen studies of transference patterns using the CCRT method

Albani, C., Pokorny, D., Dahlbender, R., & Kächele, H. (1994). Vom Zentralen Beziehungs-Konflikt-Thema (ZBKT) zu Zentralen Beziehungsmustern (ZBM). Eine methodenkritische Weiterentwicklung der Methode des "Zentralen Beziehungs-Konflikt-Themas". *Psychother Psychosom med Psychol, 44*, 89-98.

Albani, C., Blaser, G., Thomä, H., & Kächele, H. (2000). La fine dell ánalisi di Amalie. Una ricerca con il metodo del tema relazionale conflittuale centrale (CCRT). *Psichiatria e Psiciterapia Analitica, 19*, 27-37.

Albani, C., Brauer, V., Blaser, G., Geyer, M., & Kächele, H. (2000). Sind Beziehungsmuster in stationärer, integrativer Psychotherapie veränderbar? *Gruppenpsychotherapie und Gruppendynamik, 36*, 156-173.

Dahlbender, R., Erena, C., Reichenauer, G., & Kächele, H. (2001). Meisterung konflikthafter Beziehungsmuster im Verlaufe einer psychodynamischen Fokaltherapie. *Psychoth Psychom med Psychol, 51*, 176-185.

Brief summary of the approach

The Ulm-Leipzig-Göttingen study group after having developed the German version of the CCRT method by Luborsky & Crits-Cristoph (Luborsky & Crits-Christoph, 1990) has been investigating transference patterns in two single cases. In the first case, a short term focal psychoanalytic therapy, they identified six transference patterns, elaborating a structural version of the CCRT concept which they called the Connected Central Relationship Patterns (CCRP) (Albani et al., 1994; Dahlbender, Albani, Pokorny, & Kächele, 1998); adding the concept of mastery (Grenyer & Luborsky, 1996) they demonstrated that focal work on one of the six CCRT-defined transference patterns is related to systematic change in terms of mastery (Dahlbender et al., 2001).

In the second case, a long term high frequency psychoanalytic therapy, they illustrated the possible use of CCRT as an in-treatment change measure (Albani, Blaser et al., 2000), illustrated the functional utility of the Ulm process model of psychoanalytic therapy (Albani et al., submitted) and analysed object-specific CCRT-patterns (C. Albani et al., in press). They have also studied changes of relationship patterns in in-patient psychodynamic group therapy (Albani, Brauer et al., 2000).

As a contribution to basic research this group analyzed the connection between affective evaluation of recollected relationship experiences and the severity of the psychic impairment by this method (Albani et al., 1999; Cierpka et al., 1998). This study, carried out at three different university centers, contributes to validating the valence dimension of the CCRT-method. Working on the state of the CCRT-research on affective evaluation of relationship narratives, the connection between the valence dimension of the responses from others (RO), responses of the self (RS) and the severity of the psychic disorder has been analyzed investigating a large sample of relationship episodes (N = 8686) taken from 266 female patients. Therapists and patients evaluate the severity of the impairment similarly. The more the patients are impaired, the more negatively they describe both their own reactions and those of their interaction partners as shown in the relationship episodes.

In an exploratory study they explored the relationship between attachment related variables, assessed by the adult attachment prototype rating (AAPR by Pilkonis, 1988) and relationship patterns in a sample of adult psychotherapy patients (C Albani et al., in press). Sub-samples formed according to three attachment prototypes (excessively dependent, relationally instable, and compulsive self-reliant) were found to differ mainly in CCRT-variables with respect to object- and subject-related wishes and responses of the self.

Brief Evaluation of the Approach

The German CCRT group have been active over a number of years not just demonstrating the transportability of the approach across cultures but expending the constructs beyond the ideas originally entailed in the measure. The linking between different fields of process research (e.g. the exploration of attachment classification – CCRT relationship) will help in understanding both sets of approaches. It should be remembered that these are studies of the nature of therapeutic effect and moderators of these effects; in and of themselves they do not help us answer the vexed questions concerning the reasons and mechanisms of improvement (only in a principally descriptive manner).

Control-Mastery Theory & the Plan Formulation Method (CMT)

> Weiss, J., Sampson, H., & and the Mount Zion Psychotherapy Research Group. (1986). *The psychoanalytic process: theory, clinical observation, and empirical research*. New York: Guilford Press.

> Weiss, J. (1993). *How Psychotherapy Works*. New York: Guilford Press.

Brief Summary of Approach

Control-Mastery Theory (Weiss, 1993; Weiss, Sampson, & and the Mount Zion Psychotherapy Research Group, 1986) is a cognitively oriented approach derived from ego psychology, which has recently become described as cognitive-relational. The theory holds that psychopathology stems largely from pathogenic beliefs acquired during childhood that prevent patients from pursuing appropriate life goals. These beliefs are frightening and constricting. The person suffering from them assumes that the pursuit of certain goals will endanger herself or another. Irrational beliefs in one's power to hurt others, excessive fears of retaliation, and exaggerated expectations of being overwhelmed by feelings such as anger and fear are all examples of beliefs that can act as obstructions to the pursuit or attainment of goals.

The theory assumes that the patient comes to therapy with an unconscious plan to disprove these debilitating "pathogenic beliefs." One of the primary means by which a patient attempts to disconfirm pathogenic beliefs is to test them in her relationship with the therapist. Therapeutic action lies in disproving patients' pathogenic beliefs. The patient plans how she will work in therapy to disprove her pathogenic beliefs (Weiss, 1993), overcome her problems and achieve her goals. The therapist may help the patient to disconfirm her pathogenic beliefs through a variety of means; by her overall attitude toward the patient, by passing patients' attempts to test the pathogenic beliefs, and by interpretation. The model has important implications for technique. Weiss (1993) argues that there can be no technical approach that applies to all patients. Technique must be case specific, and the therapist must adapt her approach to each patient's particular beliefs and goals.

Interpretations may be used for a variety of purposes: to pass the patient's tests, to help the patient feel more secure in therapy, as well as to help the patient become conscious of pathogenic beliefs and goals, and thereby to work more effectively at disproving these beliefs and pursuing these goals. An interpretation is helpful to the extent that the patient can use it in her efforts to overcome her pathogenic beliefs. The therapist may also be helpful by noninterpretive means by providing the patient with a sense of safety. The patient then begins to develop insights on her own.

In this model, the therapist should, in general, not be neutral; rather, he or she should serve as the patient's ally in the effort to disprove the patient's pathogenic beliefs and pursue goals. Weiss emphasizes that even if the therapist tries to be neutral, the patient does not experience the therapist as neutral, since the patient's tendency is to relate everything the therapist says to her efforts to disprove pathogenic beliefs. The patient's successful use of interpretation depends on the patient's reliance on the therapist's authority to help her to pursue her unconscious goals.

Formulations developed according to this theory have four component parts: the patient's *goals* for therapy; the *obstructions* (pathogenic beliefs) that inhibit the patient from pursuing or achieving these goals; the *insights* that will help the patient achieve therapy goals; and the manner in which the patient will work in therapy to overcome these obstacles and achieve these goals (*tests*) (Curtis, Silberschatz, Sampson, & Weiss, 1994).

The procedure for generating a formulation, The Plan Formulation Method, has five steps.

Three or four clinical judges independently review verbatim transcripts of early therapy hours. Each judge then creates a list of 'real' and 'alternative' goals, obstructions, tests, and insights for the case.

The judges' lists are combined into master lists of goals, obstructions, tests, and insights.

The master lists are returned to the clinical judges who independently rate the items on a 5-point Likert scale for their relevance to the case.

Reliability is measured for each of the four plan components by calculating alphas for the pooled judges' ratings.

A final formulation is developed by a group of judges who decide by consensus which items should be included. The Plan formulation includes a description of the patient and the patient's current life circumstance, followed by a narrative of the patient's presenting complaints. Then the goals, obstructions, tests, and insights are listed. Reliabilities have ranged from .84 to .90.

Major Results

The validity of the Plan Formulation Method has been tested in studies in which formulations have been used to measure the impact of therapist interventions on patient progress in therapy. Several studies have demonstrated that the accuracy of therapist interventions (defined as degree of adherence of the interpretation to the individual's Plan Formulation) predicts subsequent patient progress in therapy. A few studies have also shown that a case-specific outcome measure, Plan Attainment, that rates the degree to which a patient has achieved the goals and insights and has overcome the obstacles identified in his or her Plan Formulation correlates with other standardized outcome measures and is a predictor of patient functioning at post-therapy follow-up. These findings appear to support the hypothesis that the Plan Formulation identifies important factors that influence the nature and maintenance of a patient's psychopathology. When the therapist responds in accord with the patient's plans, the patient improves.

The ability to develop reliable case formulations using the Plan Formulation Method has enabled this group to systematically compare theories of psychotherapy empirically and in a clinically meaningful way. Weiss (1993), for example, tested two theories about the emergence of previously repressed mental contents. The 'Higher Mental Functioning Hypothesis' (HMFH), which is derived from Control-Mastery Theory, assumes that such contents may emerge because the patient unconsciously decides that he may safely experience them. The 'Automatic Functioning Hypothesis' (AFH), derived from classical drive structural theory, assumes they may come forward if they push through to the patient's consciousness or if they are disguised or isolated so that they evade the forces of repression. The successful testing of this hypothesis rested on the assumption that the patient would feel differently while previously repressed mental contents were emerging. According to the HMFH, the patient will overcome his anxiety about the contents before they come forth, and so will not feel especially anxious while they are emerging. The AFH assumes that if previously repressed mental contents emerge, the patients feel increased anxiety, unless they are disguised or isolated. This hypothesis was tested using the transcribed analysis of Mrs. C, with judges determining what contents were warded off and applying ratings of anxiety. The Higher Mental Functioning Hypothesis was confirmed. A series of studies, many of which have been published (some of which are unpublished doctoral dissertations) have systematically tested various predictions derived from control-mastery theory (see Weiss, 1993; Weiss et al., 1986).

Brief Evaluation of the Approach

One of the real strengths of this research program is that it attempts to systematically test theory; at the same time, it is clinically relevant, promising to offer new insights about how psychotherapy promotes patient change. Unlike much psychotherapy research, which tends not to bear directly on how clinical intervention should be conducted, this work has clear and immediate implications for how therapists might work effectively. This group has a long record of productive research, and their work is gaining international stature.

The Control-Mastery theory has been tested against traditional psychoanalytic theory (Weiss et al., 1986). These tests have been done by research organized by investigators adhering to the traditional theory and by investigators adhering to Control-Mastery Theory. The results supported the Control-Mastery Theory. Research has demonstrated that interpretations designed to help the patient to

overcome her pathogenic beliefs have an immediate effect. The patient becomes more insightful, bolder, and less defensive.

The investigators who carry out research on the Control-Mastery Theory must be familiar enough with the theory to rate its central constructs - including pathogenic beliefs, unconscious goals, and patients' tests.

The research carried out by Control-Mastery investigators has tended to support the Control-Mastery Theory against the traditional psychoanalytic theory. It has not been tested against Luborsky's CCRT approach, or against other current perspectives.

Configurational Analysis and Role-Relationship Models (CARR)

Horowitz, M. J., (1987-2nd edition) *States of Mind: Configurational Analysis of Individual Personality.* New York: Plenum.

Horowitz, M. J. (1995). Defensive control states and person schemas. In T. Shapiro & R. N. Emde (Eds.), *Research in psychoanalysis: Process, development, outcome* (pp. 67-89). Madison, Connecticut: International Universities Press.

Horowitz, M. J., Eells, T., Singer, J., & Salovey, P. (1995). Role-relationship models for case formulation. *Archives of General Psychiatry, 52*, 625-632.

Horowitz, M. J., & Stinson, C. H. (1995). Consciousness and the processes of control. *Journal of Psychotherapy Practice and Research, 4,* 123-139.

Horowitz, M. J. (1992). Person Schemas and Maladaptive Interpersonal Patterns. Chicago: University of Chicago Press.

Horowitz, M. J.(1997). Formulation as a Basis for Planning Psychotherapy Treatment. Washington, D.C.: American Psychiatric Press.

Brief Summary of Approach

Until recently clinical theories, psychological formulations of patients, and inferences about their mental processes could be evaluated only informally. Such assessments necessarily relied largely on clinical understanding and judgement. Important strides are now being made in the formidable task of testing, in scientifically acceptable ways, inferences and assumptions made routinely in clinical practice about patients' mental processes. Mardi Horowitz and his colleagues' method for generating psychological formulations that are reliable and replicable is one of several important exemplars of this development. All of these approaches apply an organizing framework for specific constructs and capture repetitive structures of motivation, cognition, emotion or interpersonal transactions.

The Role Relationship Model Configurational method derives from an extensive research program and during the last ten years a series of publications has appeared presenting the model and its theoretical underpinnings. Significant effort has clearly been invested in the development of this approach to diagnosis and formulation, and it represents a step forward in the ongoing attempt to operationalise complex and subtle clinical constructs. Underlying this new approach to case formulation is an ambitious attempt at creating a new theory of mind that borrows constructs, terminology and metaphors from psychoanalytic theory, cognitive science and information processing models.

The central construct in this approach to case formulation is that of schemas. Person schemas are defined as 'structures of meaning' that affect thinking, planning and action concerning the self and others. Schemas are: unconscious and part of preconscious processing; they organize processes of control of emotions over time; help form conscious experience; their derivatives become (conscious) belief structures; as person schemas they are 'self' and 'other' relational structures that exist in multiple combinations; they include scripts for action sequences; and they are forms of knowledge that co-ordinate features of perception, thought, emotion and action.

Role Relationship Models (RRMs) are a method for identifying person schemas, giving them an organizing framework, and presenting them diagrammatically. The RRMs capture attributes of the self (as seen by the self) and attributes of other persons. They also include a script for the expected emotional interactions between oneself and the other. In short, how we behave or act toward others depends on how we view ourselves in relation to the other person. How we experience an event that occurs in reality depends on what latent person schema is activated by the event. Various desired, dreaded, and defensive RRMs are postulated as part of a configuration. The configuration thus presents the dynamic of wish-fear dilemmas and defensive and characterological compromise positions.

Major Results

Horowitz (1995) correctly argues that diagnosis of personality disorders represents only a first step towards treatment and that proper individual case formulation is essential for effective therapy. Configurational analysis and RRMs is a method for systematic formulation. Configurational analysis adds steps for inference of states, conflicted topics, and defense tactics to inference of RRMs and their configurations. The method requires a videotape or transcript of an evaluation interview or therapy session if it is to have research validity. The first step in creating an RRM requires identifying systematic consistencies and inconsistencies in the words that a patient uses to describe him- or herself. This task can apparently be accomplished reliably using a systematic format for the configuration of RRMs. In one example (Horowitz et al., 1995) two independent teams freely created their own RRM configurations. One team arrived at an RRM 'shy sick patient'; the other team generated 'socially uncomfortable' for that same configurational location. These formulations were then deemed 'acceptably close'. Formulations are represented by several figures, diagrams and cycle charts illustrating the RRMC of the patient, and the systematic "blank" format that guides inferences.

An important assumption seems to be that identity and relationship conflicts are common in personality disorders. A central premise of the RRM method is that identity conflicts can be assessed as multiple roles; these roles can be inferred from state-variant statements about oneself. The RRM method requires judgements about self concepts and roles of self and significant others. Cycles of states, with their variable emotions, rules, and defenses are seen in most personality disorders, so this method seems appropriate to the actual clinical complexities. That is why Horowitz and his colleagues evolved it as a necessary increase of complexity from where they started, which was using Luborsky's CCRT as the self-other aspect of the formulation system called configurational analysis.

Brief Evaluation of the Approach

The RRM method attempts to address an important problem for clinical science. It is creative, complex, and intriguing. The effort to integrate psychoanalytic theory with models from cognitive science and information processing can yield terminology that is used across disciplines, and that can carry psychoanalytic thinking beyond its own tight disciplinary circle. This common cognitive science language—states of mind, person schemas, defensive control of emotional information processing—may strike some who read and hear only psychoanalytic writings as "difficult" but it does offer the possibility of articulation to other psychological and neurobiological sciences.

The description of the symptomatology of personality disorders in Horowitz's work on histrionic, compulsive dependent, and narcissistic categories, and their underlying motivation of behavior, utilizes the full system of configurational analysis (phenomena, states of mind, conflicted topics, defenses, self-other belief structure, RRM configurations). Looking at the RRM configurations alone does not capture the whole formulaic picture. That is why Horowitz has added a method for typologizing developmental level of self-other schematizations to configurational analysis. Some empirical studies have shown an important interaction of this dispositional variable with process-outcome interactions. Horowitz asserts that maladaptive state cycles and contradictions and conflicts in conflicted themes, defensive styles, and person schemas are the hallmarks of personality disorders. Most researchers who have studied the traits comprising, or at least descriptive of, the various personality disorders now acknowledge state variation and even bipolarity (excessive voyeurism and excessive exhibitionism) in character related problems. The treatment implications of RRMC include predictions of transference and countertransference dilemmas. An RRMC can inform a therapist's approach, it is a way to clarify conflicts and it helps her to organize developmental information. It can lead to a systematic way of judging when to make what specific interventions and how she can clearly frame an interpretation. However, it is configurational analysis as a whole rather than the RRM as one component that is likely to be most helpful to clinicians in direct practice with individuals. Researchers may wish to formulate the RRM configurations that underlie and lead to maladaptive interpersonal patterns both before and after treatment, in order to specify qualitative changes. It is not, however, a quantitative method.

Multiple Code Theory (MCT) and the Referential Process: Applications to Process Research[2]

Bucci, W. (1995) The power of the narrative; A multiple code account. In Pennebaker, J. (Ed.) *Emotion, Disclosure and Health*, Washington, D.C.: American Psychological Association .

Bucci, W. (1997) *Psychoanalysis and Cognitive Science: A multiple code theory.* New York: Guilford Press.

Bucci, W. (1998) Transformation of meanings in the analytic discourse; A strategy for research. *Canadian Journal of Psychoanalysis, 6,* 233-260.

Bucci, W. (1999) The multiple code theory and the "third ear"; The role of theory and research in clinical practice. *Psichiatria e Psicoterapia Analitica, 18,* 299-310.

Bucci, W. (2000) The need for a "psychoanalytic psychology" in the cognitive science field. *Psychoanalytic Psychology, 17,* 203-224.

Bucci, W. (2001) Pathways of emotional communication. *Psychoanalytic Inquiry, 20,* 40-70.

Brief Summary of Approach

This research program is based on a new general psychological theory – the theory of multiple coding and the referential process, which describes the interactions of biological, emotional and cognitive systems (Bucci, 1997). The psychotherapy research is conducted within a broad research context that involves examining the concepts of the multiple code theory, and developing measures of these concepts, in nonclinical as well as clinical studies. In this theoretical framework, with the assistance of computerized procedures, the interaction between patient and analyst can be examined, and features of the interaction associated with different treatment effects can be identified. Application of the measures feeds back to further examination and elaboration of the theory.

Basic concepts of the multiple code theory: All information, including emotional information, is represented and processed in three major forms: the *subsymbolic nonverbal* processing that dominates in somatic and sensory systems, the *symbolic nonverbal* system of imagery, and the *symbolic verbal* system of language. The three systems are connected by the *referential process*, which links all types of nonverbal representations to one another and to words. *Emotion schemas* – the psychic structures on which treatment focuses – are made up of components of all three systems. The goal of treatment may be understood as change in the emotion schemas, in particular as integration of systems that have been dissociated.

Phases of the referential process: Change occurs through the bidirectional effects of the referential process, in the context of the therapeutic relationship. The referential process begins with arousal of a dissociated emotion schema, often expressed first in subsymbolic, bodily form. The schema may then be symbolized in narrative form, as, for example, a report of a recent event, a memory, a fantasy or a dream. The schema may also be symbolized in a different way in enactments or here and now events in the relationship. The narratives or enactments may be seen as metaphors of the emotion schemas – instantiations of the prototypic stories of one's life. The new material can then be reflected upon in the therapeutic discourse. The analyst is likely to take an active role in this reflection phase. If the process is effective, the words that are spoken will ultimately connect back to the somatic and sensory components of the dissociated schema so that the person actually feels different, sees things differently. The phases of the referential process occur repeatedly, within a session and across a treatment.

Each phase of the referential process is associated with a set of operational indicators in language and behavior. These include measures of Referential Activity (RA), which reflect the linking of nonverbal experience to language, and other language style and content measures. The RA measures include

scales rated by judges following procedures outlined in the RA manual (Bucci, Kabasakalian, & al., 1992), and a computer assisted version, the CRA, developed by Mergenthaler and Bucci (Mergenthaler & Bucci, 1999). (For more detailed descriptions of the RA and CRA measures and their psychometric properties, including references, and for information concerning versions in languages other than English, see the section on measures) The language style measures are not intended to stand alone, but to be used in a network of other measures assessing clinical content, including measures of central themes and measures of defense, as discussed by Bucci (1997; 1998; 1999). The linguistic procedures point to *where* in the session particular aspects of the process are occurring; content measures are then applied to specify *what* is happening.

For a more detailed account of the RA scales and computer procedures, see the Appendix to this report.

Major Results

The psychotherapy research agenda focuses on features of therapeutic work in the phases of the referential process. Interventions are evaluated on the basis of facilitating movement through these phases, and on the basis of changes in emotion schemas, assessed through thematic measures. Treatment effects may be examined within a session or over the treatment course. The research relies largely on verbatim transcripts of therapy sessions; the methods have also been applied to videotaped and audiotaped materials and process notes.

Features of the symbolizing phase: This phase is characterized primarily by high levels of RA or CRA, and by narratives about persons other than the analyst. CRA peaks are consistently associated with the Relationship Episodes (REs) on which the CCRT is based, and with Dahl and Teller's measure of FRAMES where objects are persons other than the analyst, as shown in a recent paper by Sammons & Siegel (Sammons & Siegel, 1998). CRA fluctuation provides a reliable, automatized method of locating REs that may, in some cases, be used in place of judges' ratings. The relation of RA to narrative speech has also been validated in several studies summarized by Mergenthaler and Bucci (Mergenthaler & Bucci, 1999).

During the narrative of the CRA peak, the analyst is typically silent; an intervention during a CRA peak marks a noteworthy technical moment in a session, for further investigation. Analysts are most likely to intervene verbally at the close of a narrative, when RA declines. Interventions at such times are likely to be focal probes and interpretations of the meaning of the narrative material. These features of content and timing have been observed with striking consistency across a wide range of analysts and patients (Bucci, 1998; 1999).

Transference or enactment phases have been identified in which central emotion themes are symbolized in "protosymbolic" form. CRA is likely to be relatively low, with REs and FRAMES scored with the analyst as object, as shown in a recent paper by Pessier and Stuart (Pessier & Stuart, 2000). Subsymbolic language style is dominant as indicated by stylistic components of language, and paralinguistic indicators such as pausing, discussed below.

Features of the subsymbolic phase. Subsymbolic processing is now being studied in a wide range of naturalistic and experimental as well as psychotherapy and other clinical research studies, as discussed by Bucci (2001). The patient's language is characterized by low levels of RA and CRA. REs as usually defined (with human objects) are unlikely. Themes focus on inanimate objects, particularly bodily states, pain, illness, body parts and actions (Bucci, 1998; 1999). Subsymbolic processing is not viewed as a phase of resistance, as in classical psychoanalytic theory, but may be a phase of disorganization *and/or* a phase of moving toward the symbolic mode, *without leaving emotions and bodily experience behind.* While this phase is likely to be characterized by facial, somatic and motoric expression, at times without accompanying speech, a number of linguistic and paralinguistic indicators of subsymbolic expression have also been identified using audiotapes and transcripts, as shown in ongoing work by Dubé, Roussos and Bucci (Dubé, Roussos, & Bucci, 2001). The analyst will be relatively silent while the patient is in this mode; verbal interventions that occur will tend to be neutral or supportive; with the goal of moving the patient toward a symbolizing mode (Bucci, 1998; 1999).

Reflection phase. CRA is generally low; REs may not be identified; emotional insight is likely to be present as indicated by concomitant high levels of the computerized Emotion Tone (ET) and Abstractness (AB) measures developed by Mergenthaler. The analyst is likely to be active in this phase.

Indicators of change or impasse in the treatment process.

The effectiveness of therapeutic work is indicated by the playing out of the referential process leading to changes in emotion schemas. Effects may be noted in the short term response within a session, or over time in the treatment (Bucci, 1997; 1998; 1999). The patient may move on to a new narrative indicated by high CRA, or may enter a phase of reflection leading to emotional insight. Change in an emotion schema is reflected in change in CCRTs or FRAMES, as expressed in narratives told in symbolizing or enactment phases. Possible indicators of impasse would include increase in abstract language (as shown, for example, by high levels of Mergenthaler's AB without concomitant ET); negative feelings toward the analyst expressed in narratives or enactments; or an increase in subsymbolic indicators coupled with a decrease in CRA. The indicators of impasse may also be indicators that a new cycle is beginning, with the patient moving again into an arousal phase. In addition to the "mini-outcome" studies, several studies (summarized in Bucci, 1995; 1998) have provided evidence supporting the relation of RA patterning to treatment outcome, defined in symptomatic and behavioral terms.

Brief Evaluation of the Approach

The strength of this approach, and its primary focus, is the new vision of the therapeutic process, developed in the theoretical context of multiple coding, and implemented using reliable and valid process measures, including computerized measures. Using this approach, consistent patterns of interaction, factors affecting these interactions, and effects on patient responses have been identified across diverse patient-analyst pairs. These observations also highlight noteworthy events in a session, such as deviations from expected interaction patterns, or indicators of impasse. These observations raise new research questions and provide a focus for interaction with clinicians, as in collaborative work with López Moreno and her colleagues at the Racker Institute study in Buenos Aires. (It should be noted that the direct application of these process research measures in clinical work or as a basis for supervision requires a particular epistemological stance, in which the measures are used to mark noteworthy moments as a basis for discussion with clinicians, rather than as indicators of the effectiveness or lack of effectiveness of an intervention).

The relationship of the process findings to measures of treatment outcome has been addressed thus far in a preliminary manner, and remains to be examined systematically. Additional measures of the referential process, in particular, measures of the subsymbolic and reflection phases; and additional indicators of change in the emotion schemas, including changes in behavioral indicators as well as in thematic contents, are in development. Other ongoing and future projects include development and assessment of a second generation computer assisted RA measure, the ARA, with clearer relationship to RA as scored by judges; development of a second generation computerized text analysis program for PCs, the Discourse Attributes Analysis Program (DAAP), that will use weighted dictionary scoring, and will eliminate the need for arbitrary word block segmentation; and development of additional versions of the rating scales and computer assisted procedures in languages other than English, working with colleagues in Europe and South America. The theory, like all living theories, as well as the research methods developed in this context, are in a constant process of revision and elaboration. As the work proceeds, the researchers expect that some answers will be found, and even more new questions will emerge.

The Montevideo Study of Attachment and Narratives[3]

Altmann de Litvan, M., & Gril, S. (1998). *Estudio exploratorio basado en el Modelo de los Ciclos y los Indicadores de apego*. Paper presented at the First Latin-American IPA Research Conference, Buenos Aires.

Altmann de Litvan, M., & Gril, S. (1999). *Preliminary results of an exploratory study based on Process Measures and Attachment Indicators*. Paper presented at the 2nd Latin American IPA Research Conference, Santiago de Chile.

Altmann de Litvan, M., & Gril, S. (2000). Relaciones entre duelo y apego en el Vínculo Madre- bebé: Desde la clínica a la Investigación empírica, in *Los duelos y sus destinos. Depresiones, Hoy*. Asociación Psicoanalítica del Uruguay: Publicación del Congreso de Psicoanálisis.

Gril, S., & Mergenthaler, E. (1998). Psicoterapia e Investigación, in *Revista de Investigación de la Facultad de Psicología* (Vol. 1). Uruguay.

Mergenthaler, E., & Gril, S. (1996). Descripción de las reglas para la transcripción de sesiones de psicoterapia. *Revista Argentina de Clinica Psicológica*, 5(2), 163-176.

Brief Summary of Approach

This is a process study of psychoanalytic infant – mother consultations. It attempts to bring the advances of psychoanalytic process research in the traditional consulting room encounter to the applied context of mother – infant interaction. This is a therapeutic setting that shares some features with the psychoanalytic but, in addition has a developmental focus.

Sample

Ten mother baby dyads were selected at random from the regular treatment program at the Pediatric University Hospital in Montevideo. The babies were aged from 3 to 18 months and showed psychofunctional disorders. The dyads received 3 to 4 therapeutic interviews.

Treatment

The goal of these psychoanalytically oriented consultations with mothers and their babies is to help the mother to better understand her emotions, especially when interacting with her child in the therapeutic situation itself. A psychotherapeutic objective is to enable the mother to (re)adjust to her baby in direct response to its non-verbal interventions by connecting the baby's gestures and behaviour with emotions and by verbal expressing of emotions.

Measures

The verbal exchange of therapist and mother is being empirically assessed using computer assisted language measures. Narrative Style is measured using a computer-based measure of Referential Activity developed by Mergenthaler & Bucci (Mergenthaler & Bucci, 1999). The analysis of the text

material utilizes the Cycles Model Program (CM, available from the Ulm Textbank website, Mergenthaler, 1996).

The non-verbal interactions between mother and baby during the interview will be empirically assessed using Massie and Campbell's attachment indicators (gazing, vocalizing, touching, affect, proximity, holding), both from mother to baby and the baby to mother (Massie & Campbell, 1983), following the word block segmentation.

Subprojects

- Study of risk in attachment

- Study of productivity in the session according to clinical and empirical criteria.

- Validation of the Therapeutic Cycles Model into Spanish language

- Study of the impact of interventions in the developmental process

- Implementation of training programs for health care groups and mothers in the topic of attachment

Major Findings

The psychotherapeutic interviews had an effect on the attachment indicators: the subjects changed from the extreme points (insecure, avoidance and over-anxious) towards the middle range (secure attachment). In the last sessions both mother and baby are closer to the middle range (3: secure attachment), and all the attachment indicators are closer to the middle range in the last sessions both in the mother and the baby.

All linguistic and non verbal variables were correlated in a block by block basis and no significant correlations were found between the verbal measures in the mother and therapist's speech and the attachment indicators in the mother-baby dyad (Pearson correlation).

Moments of productive speech between mother and therapist were not always moments of activation of the non-verbal indicators between mother and baby. These results showed the independence of the 2 levels: therapeutic discourse, and the non-verbal exchanges between mother and baby.

Brief Evaluation of the Approach

In interpreting the present results, several limitations to this study should be considered. One of the problems of this study is the limited number of cases. Nevertheless, for many of the sub-studies performed the sampling frame was the number of blocks of 150 words. This design enabled the study the relationship between verbal and non-verbal measures but didn't permit the study of the reasons for the changes that take place during the psychotherapeutic process. A new phase of the project is now being developed in order to study the process in each case at a microanalytic level.

Overall, the study has several strengths. First, the data showed that this model of psychotherapeutic intervention had a positive impact on the attachment indicators as measured by Massie and Campbell. Second, moments of productivity in the verbal exchange between the mother and the therapist are not necessarily moments of activation of non-verbal attachment indicators between the mother and the baby. These results may have practical implications for therapeutic interventions. In order to improve the mother's attachment to the baby these interventions should stimulate her to gaze, to vocalise and to touch the baby and also to avoid using abstract words as a means of communicating with the baby.

The Menninger Treatment Interventions Project (TRIP)

Gabbard, G. O., Horwitz, L., Allen, J. G., Frieswyk, S., Newsom, G., Colson, D. B., & Coyne, L. (1994). Transference interpretation in the psychotherapy of borderline patients: A high-risk, high-gain phenomenon. *Harvard Review of Psychiatry, 2,* 59-69.

Horwitz, L., Gabbard, G. O., Allen, J. G., Frieswyk, S. H., Colson, D. B., Newsom, G. E., & Coyne, L. (1996). *Borderline personality disorder: Tailoring the psychotherapy to the patient.* Washington, DC: American Psychiatric Press.

This was a small-scale but intensive study of three patients with a diagnosis of borderline personality disorder treated in psychoanalytic psychotherapy at the Menninger Clinic. The investigators explored the relationship of interpretations and therapeutic alliance. Independent groups of raters studied transcripts of audio-taped therapy sessions. One group studied changes in therapeutic alliance in response to specific interventions, while the other group rated the interventions themselves on the supportive-expressive dimension.

Results

Transference interpretations tended to be more helpful from the point of view of strengthening the therapeutic alliance if used after the groundwork had been laid by supportive interventions. The findings argue against the appropriateness of the supportive-expressive dichotomy as characterising any therapy. The findings suggest that a dynamic combination of supportive and expressive interventions may be most useful in psychoanalytic psychotherapy with borderline patients.

Evaluation

This was not a study of outcome, yet it is helpful in identifying process dimensions relevant to measuring the effects of psychoanalysis. Some methodological innovations, for example those concerning the use of time series techniques, also represent potentially significant advances. The report is valuable for its integration of qualitative and quantitative research methodology.

The Buenos Aires Study - Empirical study of a six year successful psychoanalytic therapy of a patient with anorexia nervosa (BAS)

Hagelin, A., Acosta Güemes, S., Tebaldi, E., Tebaldi, R., Hodari, M.E., Weissman, J.C.

Brief Summary

This research involves study of tape recorded psychoanalytic sessions according to three basic variables (originally five): object relations, anxieties, and defences (the remaining two variables – structural change and psychosexual development – will be examined at a later date). After due consideration, Luborsky's CCRT Method for "Understanding Transference" (Luborsky & Crits-Christoph, 1990) was chosen as a measure of object relations. In order to rate anxieties, a special tool was designed, combining Freud's theories of anxieties, findings from the ULM research and local studies. In order to systematically study defences, Freud's conceptions on defences along with Perry's systematic studies (Perry, Cooper, & Michels, 1987; Perry, Luborsky, Silberschatz, & Popp, 1989; Perry & Cooper, 1986) and recent, not yet published, studies were considered. The association between these three measures represents the research question of central interest.

The outcome of psychoanalytic therapy after almost six years of treatment has been found to be positive in three specific domains (Kordy, Rad, & Senf, 1988): symptomatic, personality and family and social. The Buenos Aires Study was adapted and some special tools designed to study these aspects of the individual case.

Evaluation

This process study may make an important contribution by considering a unique combination of a number of measures of therapeutic action. The measures combine newly crafted measures with better established ones. The lack of explicitly stated hypotheses represent a major challenge to the study.

The Amsterdam Study of Process Records (ASPR)

Stoker, J. & Beenen, F. and the Dutch Psychoanalytic Institute (1996): *Outline of a quality monitoring and checking system for longterm (4 or 5 times a week) psychoanalytic treatment.* Presentation at the Stuttgart Kolleg, February 8-10, 1996

The study's focus is on process and outcome research, i.e. the systematic evaluation of the psychoanalytic enterprise before, during and after the treatment. Process-measures will be at the centre of attention with the ultimate goal of adding scientific-empirical arguments to analysts' clinical knowledge of the curative factors in psychoanalytic treatment. The aim of the multicentre project, of which the current study is a part, lies in the introduction of multicentre cooperation to establish a systematic structural evaluation system of daily psychoanalytic practice, combined with an empirical research effort that underscores the claim of psychoanalysis to a place among the sciences. A concrete future output of the whole enterprise could be the construction of one (flexible) quality monitoring and checking system for psychoanalytic treatment.

Sample

Patients will be recruited by and from the local centres for pilot-studies using AAI-interviews and CHAP-interviews. Interview material will be translated and scored and otherwise systematically processed by the group.

Measures

In the approach described, first priority will be to implement quality monitoring and checking instruments in the different local centres. First choice in this regard is the Periodical Rating Scale. This list will be filled out by the analysts several times during the treatment period and the data will be entered into the computer of the Dutch Psychoanalytic Institute for central data processing. The scale covers:

General characteristics of the treatment (time keeping, missed sessions, quality of the sessions, resistance) and content of the material (concerning the body, romantic/sexual relationships, relationships with significant others, object relations relating to unconscious content, sexuality, aggression relating to unconscious, current life events, employment, gender/age issues, discussion of treatment parameters)

Predominant aspects of analyst's feelings towards/about the patient in this week's sessions.

Analyst's predominant styles of intervention in this week's sessions.

Results

By developing and implementing the described instruments, it seems possible to evaluate more systematically, and therefore more reliably, the changes of the mind, especially the effect of treatment on the development of mentalizing functioning which psychoanalysis intends. Focussing on these changes with the newly adapted measurements during and after treatment can furnish a new 'window' on the psychoanalytic process. Application of the Periodical Rating Scale can also link the activities the analysts say they do (in a more systematised and standardised way) to the changes the patients show during and after treatment.

Empirical Studies on Clinical Inference: Similarities and Differences in the Clinical Work of Psychotherapists with Different Theoretical Approaches and Levels of Experience.

Leibovich de Duarte, A. (1996). Variaciones entre Psicoanalistas en el Proceso Inferencial Clínico. [Variations among psychoanalysts in their process of clinical inference]. *Investigaciones en Psicología. Revista del Instituto de Investigaciones, Facultad de Psicología, UBA, 1*(1), 27-38..

Leibovich de Duarte, A. (2000). Más allá de la información dada: Cómo construimos nuestras hipótesis clínicas [Going beyond the information given. How do we construct our clinical hypotheses]. *Revista de la Sociedad Argentina de Psicoanálisis, 3*, 97-114. .

Leibovich de Duarte, A., Huerín, V.; Mandler, A & Torricelli, F. (1998) "Sobre la inferencia clínica en psicoanálisis: algunos resultados empíricos" [On clinical inference in psychoanalysis: some empirical results] Paper presented at the 4th. *Meeting of the South American Chapter, Society for Psychotherapy Research.* Montevideo, Uruguay.

Leibovich de Duarte, A. Huerín, V. Roussos, A. Rutsztein, G. Torricelli, F. (2000) "Explorando la construcción de hipótesis clínicas en psicoterapia" [Exploring the construction of clinical hypotheses in psychotherapy] Paper presented at the 2nd. *Latin- American Research Conference on Psychoanalysis and Psychotherapy. 5th Meeting of the South American Chapter, Society for Psychotherapy Research.* Gramado, Brasil.

Roussos, A. (1999). *La inferencia clínica y la elaboración de hipótesis de trabajo de los psicoterapeutas.* [Clinical inference and the construction of working hypotheses by therapists] Doctoral dissertation, Universidad de Belgrano. Buenos Aires.

Rutsztein G. (in press). "Inferencias clínicas en el tratamiento de pacientes con trastornos de la alimentación. Una aproximación empírica" [Clinical inferences in the treatment of patients with eating disorders. An empirical approach] *VIII Anuario de Investigaciones: 2000.* Facultad de Psicología, Universidad de Buenos Aires.

Brief Summary of Approach

Clinical inference is, perhaps, the central activity of psychotherapists in the context of the psychotherapeutic situation. However, there are few systematic empirical studies dealing with the ways in which psychotherapists work with and construct their hypotheses about the material offered by their patients.

Several studies have been conducted to explore similarities and differences in the clinical work of psychotherapists with different theoretical approaches and levels of experience. The first (Leibovich de Duarte et al., 1998) studied the similarities and differences of Freudian and Lacanian psychoanalysts both senior (more than 20 years of clinical experience) and junior (less than 10 years of clinical experience). A second study, still in progress, (Leibovich de Duarte et al., 2000), investigates the same topic comparing psychoanalysts, cognitive and systemic psychotherapists. It explores which authors constitute the therapists' theoretical framework, the nature of the goals they set for their clinical practice, and it also has inquired into whether they use technical resources other than those proposed by their theory. In addition, possible connections between the moments in the patient's discourse from which the therapists select cues to elaborate their clinical inferences and CRA patterns (Mergenthaler & Bucci, 1999) that characterize the patient's discourse are explored.

Roussos (1999), in his study about psychotherapists' clinical inferences and construction of working hypotheses, explored the relation of the hypotheses produced by a group of psychoanalysts and cognitive psychotherapists on the same patient's session with the data obtained after applying empirical technical instruments such as the PPQS (Jones, Cumming et al., 1993), CCRT (Luborsky & Crits-Christoph, 1998) and CRA (Mergenthaler & Bucci, 1999).

Rutsztein (in press) studied similarities and differences in the production of clinical inferences by psychotherapists, expertss in eating disorders and therapists with no expertise in the subject and

explored how these two groups build their diagnostic hypotheses, decide intervention strategies and choose treatment plans.

In all these studies a tape-recorded first session of a psychotherapeutic treatment plus its verbatim transcript was the stimulus utilized. For each study the same session was used for all the participants. The sessions were selected because a prior group of psychoanalysts, cognitive and systemic therapists, who were not part of the study, had not been able to identify the treating therapist's theoretical orientation. Each participating therapist listened to the tape-recorded first session of a psychotherapeutic treatment, whilst simultaneously reading the verbatim transcript; they were asked to report their clinical inferences, clues and hunches about the material and to underline what they considered relevant. They were asked to stop the tape every time they had a hunch, an hypothesis, a commentary or a possible intervention, in order to formulate it. Once this phase was over the participants were interviewed to get their additional reflections and commentaries. Some specific other techniques were used in the different studies.

Major Results

Only some of the findings about the inferential process of psychoanalysts and cognitive psychotherapists are included in this report.

1) Time elapsed before the formulation of the first inference from the patient's materials.

Those studies that considered how much time elapsed before the formulation of the first inference (Leibovich de Duarte et al., 1998; Leibovich de Duarte et al., 2000; Rutsztein, in press) found an interesting pattern. 65% of the therapists needed less than 6 minutes to produce their first inference. In two of the studies (Leibovich de Duarte et al., 1998; 2000) in which the same clinical material was used, more than half of that 60% produced their inferences in 2 minutes or less.

It is very interesting to underline that 6 psychoanalysts, both seniors and juniors, and 4 cognitive therapists who needed less than 3 minutes to express their inferences were later asked about their subjective impression of how much time had elapsed before their first inference. All of them answered that the time elapsed was no less than 10 minutes.

2) *Types of inferential formulations*
Different types of inferential formulations produced by the psychotherapists in two of the studies were analyzed (Leibovich de Duarte et al., 1998; 2000). A list of categories for classifying different contents of the material referred to by the therapists was constructed, including themes like interpersonal relations, mental processes, family issues, diagnostic, prognostic, etiological, developmental considerations, among others. The therapists' production was then classified according to how many categories from the aforementioned list were involved in each formulation. Reference to one category constituted a simple clinical inference and any combination of two or more was considered a combined clinical inference.

Therapists with more experience produced more clinical inferences, both simple and combined. In this regard, in the study of similarities and differences among, both senior and junior psychoanalysts, cognitive therapists, and systemic therapists (Leibovich de Duarte et al., 2000) a comparison of the amount and type of inferences produced by psychoanalysts and cognitive psychotherapists (n= 28) Therapists with more experience produced more clinical inferences, both simple and combined. Figure 1 shows the frequency distribution of the 265 simple clinical inferences.

Fig. 1: Frequency of clinical inferences made by junior and senior therapists with cognitive and psychoanalytic orientations

SIMPLE CLINICAL INFERENCE
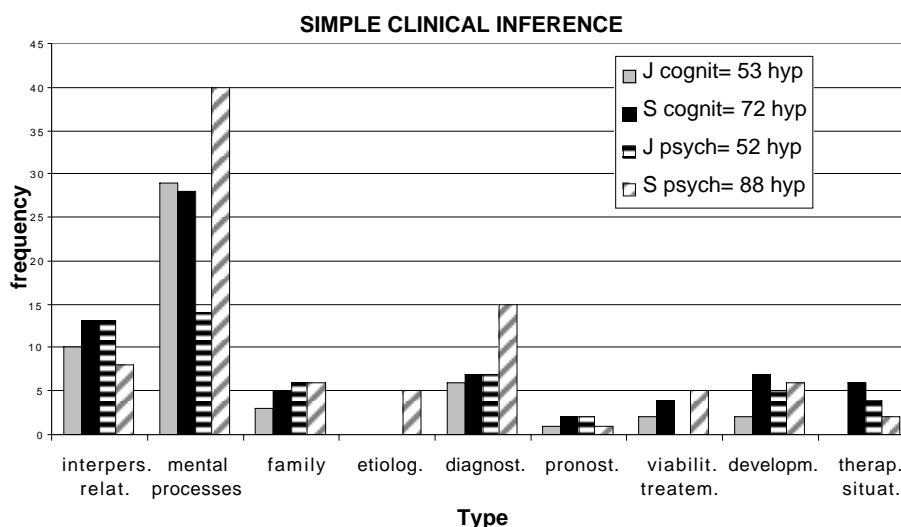
A total of 197 combined inferences were formulated in this study; senior psychoanalysts produced 96 of them, remarkably more than the 49 constructed by the senior cognitive therapists. Junior psychoanalysts and junior cognitive therapists formulated 25 and 27 combined inferences respectively.

Two of the studies (Leibovich de Duarte et al., 1998; 2000) show that, over time, senior therapists' simple inferences become articulated into more complex ones; expertise does appear to account for their tendency to establish more significant relationships among different contents of the material than junior therapists. Juniors produce inferences that are more limited in scope, less elaborated and less integrated than their more experienced colleagues.

Adherence to a particular theoretical school of thought was not reflected on the nature of the clues therapists selected, but theoretical differences did appear in the way those clues were organized and explained. This means that their clinical inferences were different, based on their different theoretical frameworks.

3) Reflections of the participants on their experience

Answers given by the psychoanalysts and cognitive therapists when they were questioned about their experience during this study are very revealing (Leibovich de Duarte et al., 2000): a) 26 out of 28 of all participant therapists considered that their clinical inferences were very close to the data. b) 20 out of 28 therapists indicated that the recurrence of themes during the session was an important point of reference for their inferences. c) in the opinion of 23 out of 28 therapists, prior experience with other patients was also relevant when making their inferences. d) the level of confidence in their inferences was high for all therapists: 3 points or more on a five points scale. e) psychotherapists considered that their theoretical framework has an important influence on their selective attention to the data and on producing their suggested interventions. f) even though there are few references to diagnostic and prognostic considerations in the therapists' clinical inferences (see Figure 1) most of the senior therapists (10 out of 14) thought that they had paid considerable attention to diagnostic and prognostic considerations.

An analysis of the answers to the questionnaire- an expression of the therapists' experience during this study- suggests that there were no remarkable differences among both senior and junior psychoanalysts and senior and junior cognitive therapists regarding the way in which they evaluate their approach to a patient' material.

4) Relation of the hypotheses produced by therapists with the data obtained after applying empirical technical instruments

Roussos (1999), in his study about psychotherapists' clinical inferences and their construction of working hypotheses, explored, among other issues, the importance of the psychotherapists' theoretical frameworks. Therapists' hypotheses were analyzed using the Q-sort items (PQS, Jones, Cumming et al., 1993). The analyses of the data indicate that when both the content and style of the hypotheses produced by the therapists were classified using the Q items criteria, two distinctive groups of hypotheses appeared corresponding to the two theoretical frameworks involved (canonical correlation= 0.873, p= 0.015). Each theoretical group produced a different and specific type of hypothesis. Also in this study, judges analyzed the therapists' hypotheses using the Q items. The results obtained were compared with the results obtained by Ablon & Jones (1998) in their study on how expert clinicians' ideal prototypes correlate with outcome in psychodynamic and cognitive-behavioral therapy. The comparison showed a very interesting coincidence: the hypotheses produced by the Argentinian psychoanalysts conformed to a similar prototypical pattern to that developed by American psychoanalysts. However, it was not possible to find the same coincidence between the group of Argentinean and American cognitive therapists.

5) Inferential work of psychotherapists who are specialists and non-specialists in eating disorders

Rutsztein (in press) has obtained interesting findings regarding the inferential work of specialists and no specialists in eating disorders. 90% of the specialists, both psychoanalysts and cognitive psychotherapists, diagnosed the patient whose material they worked with as having an eating disorder while only 43% of the non-specialists arrived at that diagnosis. 90% of the cognitive therapists considered that interviewing is not enough to diagnose eating disorders; they need additional information provided by specific scales. As to the estimated treatment length for cases like the one considered in this study, 75% of the psychoanalysts suggested a duration of four years or more, while 90% of cognitive therapists recommended two years or less of treatment.

Brief Evaluation of the Approach

Even though these are not truly naturalistic studies, their designs come very close to the process used by clinicians in their everyday clinical work. It is to be expected that these studies will help us gain a better understanding of the clinical inferential process and contribute to make our work and expertise more accessible to others, mainly young trainees.

The Therapeutic Cycles Model (TCM) in Psychotherapy Research: Theory and Measurement

Mergenthaler, E. (1996). Emotion-abstraction patterns in verbatim protocols: A new way of describing therapeutic processes. *Journal of Consulting and Clinical Psychology 64*: 1306-1318.

Mergenthaler, E. (1998). CM - the Cycles Model software. (Version 1.0). Sektion Informatik in der Psychotherapie. Ulm, Germany, Universität Ulm.

Mergenthaler, E. (1998). Cycles of Emotion-Abstraction Patterns: A Way of Practice Oriented Process Research? *The British Psychological Society - Psychotherapy Section Newsletter 24*: 16-29.

Mergenthaler, E. (2000). The Therapeutic Cycle Model in Psychotherapy Research: Theory, Measurement, and Clinical Application. *Ricerche sui Gruppi 10*: 34-40.

Brief Summary of Approach

The identification of therapeutic change agents is clearly necessary to understand and study psychotherapeutic processes. But is an understanding of the processes of change an adequate base for empirical research on them? What seems to be missing are models of therapeutic processes that prototypically define the interplay of change agents and describe their temporal sequence.

Karasu (1986, p. 693) argued that "all psychotherapies use some combination of affective experiencing, cognitive mastery, and behavioral regulation as therapeutic change agents". The Therapeutic Cycles Model (TCM) (Mergenthaler, 1996) has been developed using computer assisted content analysis tools. The CM software (Mergenthaler, 1998a) is easy to use and allows for the modification of various parameters like word block size and smoothing. It makes use of two change agents, Affective Experiencing and Cognitive Mastery measured as "Emotion Tone" and "Abstraction" in the verbal expressions of patient and therapist in verbatim transcripts. It defines a prototypical sequence of Emotion-Abstraction Patterns which can be compared with real sequences to allow critical moments to be pinpointed.

The quantitative dimension of the linguistic measures Emotion Tone and Abstraction allows the differentiation of four classes, the Emotion-Abstraction Patterns. They are made up as a combination of the standardized relative frequencies (z-scores) for Emotion Tone and Abstraction words. The four patterns are defined, labeled, and interpreted as follows:

Pattern A - Relaxing: Little Emotion Tone and little Abstraction. Patients talk about material that is not manifestly connected to their central symptoms or issues. They describe rather than reflect. Further, it is a state patients return to as often as they feel the need to, thus regenerating both physis and psyche to prepare themselves for the next step of their 'talking cure'.

Pattern B - Reflecting: Little Emotion Tone and much Abstraction. Patients present topics with a high amount of abstraction and without intervening emotions. This may be an expression of defence known as intellectualizing.

Pattern C - Experiencing: Much Emotion Tone and little Abstraction. Patients find themselves in a state of emotional experiencing. They may be raising conflictual themes and experiencing them emotionally.

Pattern D - Connecting: Much Emotion Tone and much Abstraction. Patients have found emotional access to conflictual themes and they can reflect upon them. This state marks a clinically important moment.

The model itself is derived from a specific temporal sequence of the four Emotion-Abstraction Patterns. It is based on the assumption that across a psychotherapy or within a psychotherapy session the flow of the linguistic measures Emotion Tone and Abstraction does not occur by chance. Rather a periodic process for the underlying concepts of emotional experience and reflective processes is assumed (see Mergenthaler, 1998b; 2000 for the phases of the model in its most recent version).

The TCM can be used for both micro analyses and macro analyses. In the macro-analytic perspective the patterns are computed for full treatments. A therapy can then be characterized by a given sequence of these patterns. From clinical experience it is known that in every therapy there are phases in which the patient has more working-through processes but also periods where defence mechanisms dominate or patients are occupied by emotional states. The TCM puts this experience into an ideal and prototypic order.

Microanalysis refers to the analysis of a single therapy session. Here the TCM describes the very moments of genesis, effect and end of therapeutic progress. From clinical experience it is well known that insight does not occur very often within a session and even not within every session. With regard to the TCM it is rather expected that the cycle fairly often can be observed partially.

Three principles contribute to the descriptive power of this approach. The first one is the principle of repetition which means that single phases of the model can be repeated. The second one is iteration when complete cycles are iterated. Finally the principle of recursion can be observed on the macro-analytic level: this means that one or more cycles can occur within a given major cycle. All three together constitute the descriptive power of the TCM.

Major results

The first validation of the TCM has been done with a cross sectional study covering ten improved and ten non-improved patients and with a single case study. It has been shown that improved patients show significantly more Connecting and less Relaxing than patients that did not improve. There were no differences for Experiencing and Reflecting. It was also shown that at the beginning of the therapies the two groups did not differ. It was concluded that improved patients learned to connect emotional experience with reflecting processes during their therapy. Thus Connecting may be seen as a necessary condition for therapeutic change. In the single case analysis a key session could be correctly identified and within the key session the two key moments. These findings could be interpreted clinically in the way the model proposes.

An increasing number of studies are using the TCM as a major component. The following list should indicate the diversity of possible approaches, but does not claim to be complete. Some of the studies are published or about to be published.

Therapeutic Orientations: Psychoanalysis (D. Baucom, A. Stern - Daniels Foundation, NC, USA); Psychoanalysis (A. Avila-Espada, J. Vidal-Didier, Salamanca, Spain); Group psychotherapy (M.I. Fontao, Buenos Aires, Argentina); Cognitive behavior therapy (A. Semerari, G. Nicoló, Rome, Italy); Process experiential therapy, Client Centered Therapy (L. Greenberg et al., York University, Canada); Supported/Self-Directed Constructivist Narrative Therapy (L. Glasman, L. Beutler, UCSB, USA); Supervision (G. Overbeck, A. Stirn, Frankfurt, Germany)

Textual material from other than psychotherapeutic sources: Prose: Analyses of two novels written by anorexia nervosa patients (A. Stirn, Frankfurt, Germany); Field post in the second world war: Analyses of correspondencies (K. Kilian, Berlin, Germany); Interviews with patients before bone marrow transplantation (N. Grulke, Ulm, Germany)

Diagnostic aspects: Psychotherapy with sexual offenders (F. Pfäfflin, Ulm, Germany); Psychotherapy with a torture victim (S. Varvin, Oslo, Norway); Psychotherapy with schizophrenic patients (S. Kraemer, M. Liehl, Munich, Germany); Psychoanalysis with borderline patients (O. Kernberg, Cornell, USA); Brief psychotherapy with a patient suffering from headache (R. Schors, München, Germany)

Comparing methodologies: Interpersonal regulation of interactions using SASB (K. Kalmykova, I. Tchesnova, Moscow, Russia); Mother baby attachment behavior during psychotherapeutic consultations (S. Gril, M. Altman, Montevideo, Uruguay); Adult Attachment Interview (A. Buchheim, Ulm); Discourse analysis (G. Lepper, University of Kent, England); Validation of translations (Frommer, Magdeburg); Comparing process notes with verbatim transcripts (E. Bailey, Loyola College, Maryland, USA).

Brief evaluation of the approach

The model of therapeutic change as it was presented here, allows for a formal and objective description of therapeutic processes within and across sessions. The variables used are identified as being sensitive in a sense of change agents as introduced by Karasu. Furthermore their definition is independent from orientations given by different schools. The graphical representation of patient's and therapist's speech behaviour, and the representation of the verbal activity of both allows a transparent view of the therapeutic process. But also the components that build up this model can be observed by the clinician him- or herself in the real therapeutic situation as: Negatively tinged language, positive Emotional Tone, reflecting processes, and narratives. All these are communication phenomena that can be realised by a therapist while in session with a patient, and therefore can help to control the dyad. It may therefore be considered as a step towards practise oriented research and improvement of process quality.

Computer-based textanalysis of the Adult Attachment Interview: The relationship between attachment representation, emotion-abstraction patterns and narrative style:

Buchheim, A. (2000). Bindungsrepräsentation, Emotions-Abstraktionsmuster und Narrativer Stil: Eine computerunterstützte Textanalyse des Adult Attachment Interviews. University Ulm, Ulm.

Buchheim, A., & Mergenthaler, E. (2000). The relationship among attachment representation, emotion-abstraction patterns, and narrative style: A computer-based text analysis of the Adult Attachment Interview. Psychotherapy Research, 10, 390-407.

Brief Summary of Approach

The aim of this study was to test the scope of the computer-based, economically compilable linguistic text measures (emotion abstraction patterns, Mergenthaler, 1996; computer-based referential activity, Mergenthaler & Bucci, 1999) for differentiating between less easily compilable complex attachment representations with the Adult Attachment Interview (Main & Goldwyn, 1998).

Measures

Mergenthaler´s textanalytic approach makes use of two change agents, "Affective Experiencing" and "Cognitive Mastery", measured as Emotional Tone and Abstraction in the verbal expressions of communicating persons using verbatim transcripts. The Therapeutic Cycle Model is based on the assumption that across a psychotherapy, or a single session, emotion-abstraction patterns do not occur by chance, rather in a periodic process. Mergenthaler operationalized "Connecting" as the coincidence of high Emotional Tone and high Abstraction, a state in which patients have found insight into their problem.

According to Bucci´s multiple code theory our inner experience is translated into words, and the words of others are translated back into nonverbal forms (Bucci, 1997). This process of connecting nonverbal experience with language is called referential activity (RA).[4] The CRA dictionary (Mergenthaler & Bucci, 1999) includes high and low RA-words. Subjects with high referential activitiy speak in rich, concrete narrative style and describe specific events in a clear manner. They evoke interest in the listener. Subjects with low referential activity speak in abstract terms, their speech is vague and diffuse.

The coding of the AAI (Kobak, 1993; Main & Goldwyn, 1998) focuses, through analysis of the literal transcription, on the coherence of the discourse, as well as on the emotional and cognitive integration skills in the narrated attachment experiences. With regard to narrative style the three major attachment categories are classified as 1) Secure-Autonomous; narratives are coherent and open, responses are clear and relevant; statements about childhood integrate and reflect emotional aspects. 2) Insecure-Dismissing; narratives are incoherent and emotionally distant on a general and abstract level. 3) Insecure-Preoccupied; emotional conflicts in childhood are addressed concrete but incoherent; use of pseudo-psychological language without adequate distance to conflicts.

Method

40 subjects´ complete AAI transcripts with the distribution: secure: n=20, dismissing: n=10, preoccupied: n=10 were examined. Two blind reliable raters analyzed the AAI-transcripts according to the Kobak-Q-Sort-method (both raters are also certified for the Main & Goldwyn system) The aim was to test whether Mergenthaler´s and Bucci´s language measures can contribute to a relevant construct validity of the defined attachment categories. Further they analyzed all transcripts, using each of the 18 AAI-questions as a scoring unit. They were expecting that different topics in the AAI (e. g. separation, illness, metacognition) would activate different linguistic variables and could contribute to a thematically relevant construct validity for the language measures.

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[4] For a detailed account of the RA scales and computer procedures, see the Appendix to this report.

Major results

The results showed that the textanalytic approach is useful to differentiate between the complex attachment categories on an objective level. The study of n=40 subjects produced the consistent result that of the two insecure attachment categories, the group "dismissing" (n=10) showed the lowest means on the text measures, whereas the group "preoccupied" (n=10) showed the highest means. The mean of the attachment group "secure" (n=20) lay between these groups. Looking at the single variables: Subjects from the group "dismissing" use the least words with emotional tone in the three-group comparison, show the lowest proportion of the emotion abstraction pattern "connecting", but most frequently use the complementary pattern "relaxing", a state of disorientation in which they hardly mention or consider feelings, or do not even know what to talk about. They also show a weakly developed narrative style, i.e. they rarely express themselves clearly, specifically, concretely or vividly. Subjects in the "preoccupied" group on the other hand most frequently use emotionally negative words in the three-group comparison. They show most frequently the emotional abstraction pattern "connecting", i.e. they use both concepts emotion and abstraction more often at the same time. Their style of speech is characterized by clear, specific, concrete, and vivid expression. Obviously, the verbally excessive, enmeshed and conflict-laden character of this group reflects a comparatively high verbal productivity in most linguistic measures. Interesting and at the same time astonishing is the high coincident use of emotion and abstraction ("Connecting"). The subjects classified as "secure" show moderate values in all linguistic computer measures . This seems to indicate a balanced approach to the verbalization of feelings, thought processes and the contribution of narrative material. The moderateness of this group is consistent with other results from attachment theory which show flexibility and balance in the regulation of emotion and cognition in securely attached persons (Zimmermann, 1999).

Furthermore the semistructured AAI with 18 questions seems to be a suitable instrument to contribute to a construct validity of the disparate language measures. The segment analysis showed plausible correspondences between thematic focus of the question and linguistic category. The anova-analysis showed highly significant differences regarding the intensity of appearance of all language measures depending on thematically corresponding AAI-questions, e. g. AAI-questions with focus on negative emotions "threat/abuse", "loss of a significant other through death", "separation from own child" activated the language measure *negative ET* more frequently; AAI-questions with focus on a metacognitive perspective "transmission of own attitudes towards the child" and "effect of childhood on personality" activated the language measure *Abstraction* more frequently; AAI-questions with focus on narratives "adjectives father", adjectives mother", "loss of a significant other through death" activated the language measure *CRA* more frequently.

The confirmation of the hypotheses made non-directionally in this study cannot be accounted for in terms of simple artefacts of measurement. First, all comparisons were carried out with relative frequencies. Already known differences in the speech activity of the three attachment groups do not therefore imply a differentially frequent use of cognitive concepts. Furthermore, the definitions of the attachment types on the one hand and the emotions abstraction patterns and narrative styles on the other hand are conceptually different from each other. It may be concluded that the concepts of EAP and CRA not only relate to clinical aspects of therapeutic change but are also sensitive to attachment representation.

However the discussion of the results in relation to the concept of coherence shows that the mere consideration of the score on the language measures within the attachment groups is not suitable as a direct substitution of a complex discourse analysis of the AAI according to the criteria of Main & Goldwyn (Main & Goldwyn, 1998) and Kobak (1993). The group "preoccupied" with the highest proportion of "connecting" seems typically, from an attachment theoretical perspective, to be able to verbalize and at the same time reflect on conflicts. However, these people do not have the ability to integrate positive as well as negative emotions, nor to adopt an esteeming coherent metacognitive perspective. This raises the question of whether the coincidence of language markers for emotion and abstraction is adequate to discern "insightful" passages.

Both the "preoccupied" and "secure" groups showed a higher referential activity compared to the "dismissing", which was a surprising result due to the fact that the latter often misleads with its detail and specificity, if one overlooks the incoherence (drifting from the topic at hand, anger). On the other

hand, people classified as "secure" sometimes give the impression of being verbally excessive, although they do come back to the topic according to Grice's (1975) coherence criteria. Text-analytically, these boundary-zones are barely identifiable since both groups presumably show a similar narrative surface-structure. It would be well worth discussing whether there may be an "excess" amount of referential activity which, despite the richness of detail, imagery, and specificity of the narrative style, represents an underlying irresolution and conflict-stricken state. The question here is what degree of referential activity seems optimal in order to achieve an adequate narrative style.

Brief Evaluation of the Results

This is a unique study with the potential to contribute theoretically and methodologically to psychoanalytic research. It offers a way of understanding the nature of attachment classifications that the AAI offers. Further, it holds out the potential of an automated coding system replacing the complex and cumbersome system of coding currently in use. A further strength of the approach followed is the respect for attachment theory demonstrated by the authors and the resistance of the tendency to reductionism which is often manifest in efforts at reworking coding systems evolved using a qualitative method into a quantitative text based system.

The research programme on private theories of pathogenesis and cure

Levander, S. & Werbart, A. (1997). Rorschach-records from three apparently well adjusted women suffering from long-standing and diffuse somatic disturbances. In A.M. Carlsson, A. Cederström, & H. Janson (Eds.), *Research into Rorschach and projective methods: Selected papers from the First Nordic Symposium on Research into Rorschach and other Projective Methods*, Uppsala 1995 (pp. 93-101). Stockholm: Swedish Rorschach Society.

Werbart, A. & Levander, S. (1998). La construcción de significado y las teorias privadas de la patogénesis y la cura. *Revista de Psicoanalisis*, 55:767-768.

Werbart, A. & Levander, S. (2000). Pain in the body – pain in the soul: The need of private explanations when not feeling well. In P. Nilsson & K. Orth-Gomér, eds. *Self-rated health in European perspective*, pp. 136-151. FRN Report 2000:2. Stockholm: Forskningsrådsnämnden.

Every adult, like every child, from psychological necessity creates his or her own, private explanatory systems of enigmatic contexts. We try to comprehend what happens to us, by filling in the gaps with fantasies, popular folk ideas, and available pieces of real or distorted information. This search for meaning is especially obvious when we feel ourselves exposed to something unpredictable, or when our everyday context of meaning is ruptured. This research programme aims to investigate private theories of pathogenesis and cure, i.e. subjective explanatory systems about how the problems may have arisen and how they may be remedied, obtained from the narratives of patients and their clinicians in primary care, psychosocial support, psychoanalysis, and psychotherapy, as well as from a non-clinical sample. The researchers hypothesize that concordance or discordance between the explanatory systems of the two participants has an impact on the process of psychoanalysis or psychotherapy, thus influencing the long-term outcome. The research programme is conducted in four distinct steps.

Brief Summary of Approach

The first step in the research programme was an exploratory study (conducted 1994 to 1997) of the attempts of individual patients in non-therapeutic contacts to give meaning to their somatic and psychological difficulties and to include them within their private context. The empirical basis was 107 (out of 114 possible) interviews (repeated 6 and 18 months after the initial interviews) with three groups of patients: first-time psychotic (n=6) and chronically psychotic (n=6) patients, and patients from primary care with long medical contacts for diffuse somatic problems (n=7). The clinicians were also interviewed using the same questions: both patients and clinicians were asked to describe the patient's problem, when it began, why it started, and how the situation could be improved. The semi-structured interviews were recorded, transcribed and summarised following an especially designed model by three psychoanalytically trained, independent judges. The manual differentiated between the manifest narrative, recurrent themes; formal aspects of the narrative, such as important places and objects; degree of elaboration and plasticity, the degree of activity/ passivity of the hero; and the construction of the hypothetical core explanatory system. Theories of somatic and psychotic patients were compared, as well as early and late stages in the theory construction. Similarities and differences between the theories of the patient and the clinician were described. The group of first-time psychotic patients provided an opportunity of studying theories of pathogenesis and cure from their conception, whereas the two other groups enabled the researchers to study already well-established systems of ideas and fantasies. Stability over time, versus changes in these explanatory systems were studied over a period of 18 months.

The second step in the research programme is an ongoing prospective study (started 1997) of private theories of pathogenesis and cure obtained from patients in psychoanalysis and their analysts. The 8 analyses are investigated using a case study methodology. The research questions centre around the changes in these private theories during the psychoanalytic process, the degree of concordance or discordance between the two participants, the interaction between the two different sets of understandings, and its possible effects on the process and outcome of psychoanalysis. Analysands and analysts are interviewed on six occasions: at the start of psychoanalysis, and then 6 months, 1.5

years, and 3 years after the first interview, at termination of analysis, and 1.5 years after termination. The methodological starting point for this project is a narrative approach. A manual for PT-interviews *How do you perceive your own/ the patients problems and difficulties?* has been constructed. The PT-coding system was developed, which combines tailor-made formulations, standard categories, and global ratings. A reliability study was able to demonstrate an impressively high degree of concordance between independent interpreters. The procedure used in the reliability study was also adapted for a study of concordance or discordance between the analysands' and the analysts' private explanatory systems.

The third step is a naturalistic, prospective and longitudinal study of young adults applying for and undergoing psychoanalytically oriented psychotherapy: Young Adult Psychotherapy Project (YAPP). An increased number of young adults (18–25 years) in Stockholm are seeking psychotherapy and psychiatric help. Clinicians seek better methods of dealing with the specific strains met by young adults at the beginning of psychotherapy. Experiences from the two previous steps are used in the applied integrative treatment model, built upon two principles: (1) the patient's own problem and goal formulations are taken as a starting-point for the shaping of a time-limited psychotherapy, (2) elements of assessment and evaluation are incorporated in the clinical situation.This study is planned to include 150 consecutive, self-referred patients (aged 18–25 years) at the Institute of Psychotherapy who started their psychotherapies during the period 1998–2001. To date 95 patients and their therapists are included. The patients in individual psychotherapy are randomised to the integrative treatment group and to the comparison group (treatment as usual). The third group consists of patients in group therapy.

The fourth step in the research programme is the Young Adult's Own Thinking, Understanding, and Managing of Everyday Life (YOUTH) study (started 2000) of private explanatory systems and personal strategies, created by young adults (aged 18-25; non-clinical population) in confrontation with strains and challenges on the threshold of adulthood. Previous investigations indicated that it is important to study young adults' ways of expressing their thoughts and feelings about difficulties they experience in life and how they go through them, not only in clinical population of young adults in therapy, but also in a non-clinical population of "ordinary" young adults. Using case study methodology, both successful and non-adaptive strategies are investigated, as well as differences between women's and man's private theories about their difficulties and ways of managing strains and challenges in life. The private theories of 24 young adults from a non-clinical population are compared with private theories of young adults belonging to the clinical population at the Institute of Psychotherapy. The research project has a longitudinal design, and integrates qualitative and quantitative methods. The material includes semi-structured in-depth interviews with 24 young adults in Stockholm from different social backgrounds and life situations. All initial interviews are already conducted. Follow-up interviews will take place 1.5 year later (end of 2001) and 3 years later (2003). The comparison group consists of the clinical population of young adults at the Institute of Psychotherapy in Stockholm. The interview is conducted according to a modified version of the PT-interview and focuses on the iterviewees' own personal narratives about problems, private theories of pathogenesis, and personal strategies, both current and future. Next step is a survey in a representative random sample of young adults in Stockholm. A questionnaire about young adults' difficulties in everyday life, their thoughts of the background to these difficulties, and their ways of managing them, is constructed on the bases of case studies. The questionnaire will be administrated to a representative random sample of young adults in Stockholm (approximately 1000 participants).

Major results

Step 1: All patients, no matter how long their problems had lasted, as well as their clinicians created their own, more or less elaborate explanatory constructions about pathogenesis and cure. None of the patients or clinicians relied on one theory only. The private theories presented also seemed to have striking similarities with psychiatric, psychological, and psychoanalytical explanatory models, not only as to content, but also as to the formal aspects. In the group of chronic psychotic and long-time psychosomatic patients it was striking how vivid the narratives still were when they spoke of the circumstances that originally made them start reconstructing their personal contexts of meaning.

Private explanatory systems seem to be remarkably stable across time. First-episode psychotic patients, however, had more theories about their problems than did long-term psychotic patients, especially in the first interview. This implies that some theories are selected in favour of others, as time passes. The material also suggests that patients stay with their first theories to a greater degree than do their clinicians, who seem to grasp for new theories when they don't get the first ones confirmed.

Clinicians' attitudes toward patients were governed not only by scientific knowledge and tested evidence, but also by personal theories and opinions of which the clinicians themselves usually seemed unaware. Clinicians seemed not to notice that their own thinking often was not related to the explanatory models of their patients. Most of the clinicians appeared not to know about the patient's private, psychological explanatory systems. In non-psychotherapeutic contacts, the patients' own understanding, as it appeared in such theories, often did not seem to be a part of the dialogue between the parties. There were some indications that this might have had a negative effect on the treatment process.

Step 2: This study is ongoing. Big differences were found between the analysands' and the analysts' formulations of problems, theories of pathogenesis, and theories of cure at the start of psychoanalysis. As to the cure, the parties had on the whole quite different theories, with similarities only at very low levels of analysis.

Step 3: The study is ongoing. The project is expected to generate clinically applicable knowledge of how therapists could approach and use the patients problem formulations and private theories of pathogenesis and cure in order to promote a good therapeutic alliance, to find ways to overcome ruptures in the alliance, and to achieve a good therapeutic outcome.

Step 4: The study is ongoing. In the sample of 24 young adults in YOUTH they found many individuals with personality related problems who did not seek psychotherapy. Another finding was the great difference between the subjective explanatory systems, created by men and those created by women, especially with regard to private theories of cure. The most frequent themes in the male and female narratives are used in construction of the questionnaire for the survey investigation.

Brief evaluation of the approach

Psychoanalysis probably ignores at its peril the conscious theories of patients about their illness, about the possibility of help, about the nature of treatment that they assume might be helpful and about the ways they assume it might operate both at the level of interpersonal interaction and intrapsychic change. Freud's observation that our knowledge of the unconscious depends on the patient's conscious productions is often ignored. The implication of the layering aspect of the mind from present conscious to past unconscious through preconscious and the present unconscious, as the Sandlers have demonstrated, implies that a full topography of the phenomenological might indeed be helpful in our understanding of the deeper layers. Further, advances in therapies alternative to the psychoanalytic suggest that changes aimed at the phenomenological might be far more enduring than we had expected in the past. Patient's understanding of disease and treatment are likely to be key moderators of change and might also be indicators or even mediators of the restructuring of the internal world.

Psychoanalysis as social interaction: a conversation analytic study

Peräkylä, A. (2000). *Using conversation analysis in psychotherapy research.* Paper presented at the IPA Research Training Programme, London.

Peräkylä, A., & Vehviläinen, S. (2001). *Interpretative sequences in psychoanalytic interaction.* Paper presented at the Colloquium on Talk, Interaction and Medical Work, King's College, London.

Vehviläinen, S., & Peräkylä, A. (2001). *Turn design and trajectories in interpretative sequences in psychoanalytic sessions.* Paper presented at the Language and Social Interaction division of National Communication Association 2001 Convention, Atlanta, USA.

Brief Summary of Approach

The purpose of the research is to describe how psychoanalysis is realized in concrete interaction between the analyst and the analysand. The data consist of audio recordings from psychoanalytic sessions. The tapes are transcribed and analysed using the methods of Conversation Analysis (CA). Conversation analysis studies structures and patterns of social interaction in natural settings by examining ways in which participants construct their actions on a turn-by-turn basis in real-time situations (Boden & Zimmerman, 1991; Drew & Heritage, 1992; Heritage, 1997). CA studies are based on analyses of video or audio recordings of natural situations.

CA originated in the 1960's in the US from studies by Harvey Sacks (1992) and his colleagues. Their empirical work showed that *conversation is an ordered phenomenon in itself* with systematic and observable features. These are structures and devices that the conversationalists use to maintain the possibility for communication and social action, to act in various roles and to carry out various activities. Fundamentally, conversations are organised through turns and turn-taking. Furthermore, conversations are *sequentially organised.* Each turn displays an understanding of the prior turn, and presents certain possibilities for the following turn. Thus, participants show in their actions their interpretations of 'what is going on'. This provides for the possibilities for empirical observation of how participants construct social actions turn by turn.

Recently, CA has concentrated on the study of so-called institutional interaction, studying how conversational structures and mechanisms are applied to particular institutional, often professional-client, situations (see Boden & Zimmerman, 1991; Drew & Heritage, 1992; Heritage, 1984, 1997). The task is to identify interactional structures by which institutional tasks and activities are carried out and institutional identities are maintained. Prior research of institutional interaction has focused on issues such as question-answer sequences, advice, reports and statements in various institutional settings such as TV news interviews, courtroom examinations (Atkinson & Drew, 1979) and medical consultations (Heath, 1992; Peräkylä, 1998).

Although the study of institutional interaction has expanded to various professions, there is fairly little CA research on therapeutic interaction, and none of it has so far focused on psychoanalysis. However, CA has been applied to various interactional settings that are close to therapy. These prior studies show that CA is a useful method in the study of therapy. These studies have identified various practises which the therapeutical process is grounded in, which have not necessarily been recognized nor reflected on by the participants themselves. The presently planned study will be the first conversation analytical study of psychoanalysis.

Sample

The data for the study currently consists of 60 audiorecorded sessions from three dyads (2 analysts, IPA; male and female; one with two analysands and the other with one analysand). Each dyad have provided 20 consecutive sessions of "deep" classical psychoanalysis. The authors are in the process of recruiting a third, possibly even a fourth analyst with 15-20 sessions from one patient. All the material will be transcribed according to the CA convention.

Anticipated Results

The planning of the project started in Autumn 1998. The tape recordings for the current database (60 psychoanalytic sessions from three analyst-analysand dyads) took place in September 1999-March 2000. Transcription of the sessions is ongoing; at the moment, 30 sessions out of 60 are fully transcribed. Preliminary data analysis focussing on the analysts' interpretative utterances has taken place. In summer 2000, the results of these preliminary analyses were presented at two Nordic seminars on research on institutional interaction, and at the IPA Research Training Programme in London. In the study year 2000-2001, Anssi Peräkylä and Sanna Vehviläinen have carried out empirical analyses concerning research themes 1 and 4 (see below). The results of these analyses have been presented in conferences and workshops in Finland, Europe and US and will be worked into journal articles by the end of 2001.

The overall research question in this study is *Which features of interaction are characteristic for psychoanalytic sessions?* Ultimately, the research aims at uncovering "what makes psychoanalysis psychoanalysis": which forms of asking questions, telling stories, listening, commenting etc. are characteristic for psychoanalytic interaction. Conversation Analysis is an inductive approach in which the more detailed research questions can only be formulated during the course of the actual data analysis. In the initial phase of the data analysis, study of the structure of interpretative sequences has proved most promising. Preliminary systematic data analysis has been conducted in this area. This and the other promising topic areas that the researchers hope to explore are briefly described below.

Theme A*: The structure of interpretative sequences.* Interpretations made by the analyst are understood to be in the core of the psychoanalytic method (cf. Sandler et al. 1992). In the preliminary data analysis, the following areas pertaining to the interpretations have been identified as susceptible of systematic description:

The sequential context of the interpretative utterances. The analysts' interpretative utterances occupy different sequential positions vis-a-vis the preceding talk by the analysand: they can be answers to the analysand's questions, they can expand the patient's self-reflective utterances, they can be commentaries on the analysand's answers to the analyst's questions, or they can interrupt the analysand's course of action prior to the interpretation.

The linguistic form of interpretative utterances. Some interpretations are inferences or reformulations based on the patient's talk while others are initiatory assertions by the analyst, not claiming to reformulate what has been said by the patient. Utterances that are not designed as assertions (e.g. questions) can also have an interpretative function.

The patients' responses to the interpretations. The patient's verbal and non-verbal responses to interpretations embody their initial acceptance, insight or resistance towards the suggested interpretation. In the preliminary data-analysis, it appears that patients' responses are often (but not always) rather minimal and they often involve a somewhat ambivalent stance towards the suggested interpretation.

The continuation of the interpretative sequences after the patient's first response. Interpretative sequences are usually not limited to one interpretative utterance followed by some form of response by the patient. They may involve longer interchanges between the analyst and the analysand, moving for example from "clarifications" and "confrontations" to deeper interpretations where the analyst proposes "explanations" of the patient's experiences and behaviour.

Theme B*: Practices of inviting and directing the patient's talk.* The research will examine the ways in which the analysts encourage the analysands to talk and the ways in which they direct that talk.

Theme C*: Telling and interpreting dreams.* A large part of the conversation in psychoanalysis involves the telling and interpretation of dreams. In narrating their dreams, the patients on one hand orient to everyday expectations (basic assumptions concerning time, place, causality etc) but on the other, also allow for dramatic differences between the dream world and the everyday world. The research will examine how the "reality of dreams" is constructed in the patients' narratives, and how the analysts convey the underlying meanings of dreams to the patients.

Theme D: *Free association.* It is thought that when the patients are allowed to freely associate, without the analysts' interference through questions or evaluations, this provides access to their mind, and ultimately, to their unconsciousness. At the same time, the patients' talk is always influenced by the situation and the interaction with the analyst. Free association is, therefore, a practical interactional task for both participants. This research will examine conversational phenomena relevant to this task.

Brief evaluation of the approach

Qualitative research methodologies are becoming increasingly important in the armamentarium of social and medical science researchers. Conversational analysis is a well-developed qualitative research methodology and has potentially great relevance to psychoanalytic work. The present study represents the first attempt at applying these methods to psychoanalytic material. Although the research is at a relatively early stage, the application of CA to psychoanalytic text should yield important clues about what makes psychoanalysis a unique process. CA will also be quite essential in the comparison of psychoanalytic cultures (e.g. object relational versus intersubjective approaches) and in the comparison of psychoanalysis and psychotherapy.

Comparing Psychoanalysis and Psychotherapy: Statistically Calculated Ideal Prototypes of the Psychoanalytic and Psychotherapeutic Process

Brief Summary of Approach

The researchers attempted to establish the theoretic or ideal prototypes of a psychoanalytic and a psychoanalytical based psychotherapeutic session, using statistical calculations. Psychoanalysts of the Asociación Psicoanalítica de Buenos Aires were asked to organize the 100 items of the PQS that describe empirically clinical events of the session, following the methodology described in the PQS manual (see E E Jones, 2000; Jones et al., 1991). The Q-items can be divided into: 1) patient interventions, 2) therapists interventions and 3) clinical situations, describing empirical elements. Each colleague had to order them twice, describing their image of the ideal sessions, once for each one of the therapies. The items were ordered according to what the analysts considered characteristic and uncharacteristic of the ideal of each type of session, and distributed in a gaussian array.

The resulting item rankings were studied statistically with the PRINQUAL (Tenenhaus & Vachette, 1977) technique for multivariate discrete data. The method was selected as appropriate to reduce the bulk of data and evaluate the relative weight of each item position according to the weight attributed to each of the psychoanalysts in their individual arrays, and then the accordance between the colleagues (with respect to each item by itself). The ideal session prototype was defined with those items that obtained the highest "score" due to the accordance (which was related to their placement in the extremes of the continuum in the characteristic and the uncharacteristic tails). The values of the uncharacteristic extreme were signaled as negative.

Major Results

The values reproduced in Table 1 are the scores (S), as defined in the preceeding paragraph, and the median (M) for each item, which is determined (Ablon & Jones, 1999) qualifying its weight considering its placement in the array of 9 categories of the PQS arrangement: **9**=extremely characteristic or salient; **1**= extremely uncharacteristic or negatively salient.

Table 1. Scorings of characteristic and uncharacteristic qualities of the therapeutic process of psychoanalysis and psychotherapy by psychoanalysts.

P-ANALYSIS					P-THERAPY			
Uncharacteristic items								
Item	**Score**	**Med**	**Dom**		**Item**	**Score**	**Med**	**Dom**
Q21	-2.32	1	T		Q51	-4.06	1	T
Q51	-2.14	1	T		Q77	-3.65	1	T
Q77	-1.97	2	T		Q24	-3.45	1	T
Q 9	-1.54	2	T		Q21	-3.26	1	T
Q24	-1.45	1.5	T		Q 9	-2.88	2	T
Q38	-1.38	2	S		Q37	-1.39	3	T
Q37	-1.28	2	T		Q14	-1.33	3	P
Q17	-1.2	2	T		Q 1	-1.03	4	P
Q66	-1.19	2	T		Q 5	-0.88	3	P
Q27	-1.14	2	T		Q19	-0.71	4	S
Characteristic items								
Q92	1.17	8	S		Q31	1	7	T
Q82	1.21	8	T		Q45	1.01	6.5	T
Q50	1.36	8	T		Q46	1.05	7	T
Q100	2.08	8	T		Q 3	1.07	7	T
Q93	2.24	8.5	T		Q89	1.18	8	T
Q91	2.63	9	S		Q65	1.25	7	T
Q32	2.64	8.5	P		Q63	1.33	7	S
Q90	3.0	9	S		Q23	1.36	8	S
Q98	3.14	9	S		Q69	1.43	8	S
Q67	3.49	9	T		Q 4	1.48	8	S

P-analysis: psychoanalysis session by psychoanalysts; P-therapy: psychotherapy session by psychoanalysts.
Dom: Domains (T: items reflecting the therapists actions and attitudes; P: items describing patients actions and attitudes; S: items attempting to capture the nature of the interactions or the climate of the encounter)

Looking at the table, one can see that for the "characteristic" items the matrix of the psychoanalysis session is more strongly defined than the matrix for the psychotherapy session: the values of the "scores" are more extreme and the medians of the items are less dispersed (psychoanalysis: S=3.5 to 1.2 and M=9 to 8 vs. psychotherapy: S=1.5 to 1 and M=8 to 6.5). With respect to the "uncharacteristic" items, the matrix for psychoanalysis shows less difference between extreme "scores" but more concentration of the medians (S= –2.3 to –1.2; M=1-2). On the contrary, the values for the psychotherapy session items show high accordance for the 5 more extreme items, but less concentration for the medians (S= –4.1 to –1.3; M=1 to 4). One can observe that 6 of the 10 items items selected for the "uncharacteristic" submatrix are common to the two types of sessions, but there is no coincidence between the "characteristic" submatrixes.

The "narratives" produced by aggregating the selected items (in their original wording), ordered according to 1) the dominions, 2) their being "characteristic" or "uncharacteristic" and 3) following the sequence set by their scoring, are given below. The "uncharacteristic" items are included using their definition by the opposite, as given by the PQS Manual, and the item is signaled by the letter r (reversed).

Psychoanalysis

In the psychoanalysis session: the activity of the **analyst** interprets warded-off or unconscious wishes, feelings or ideas (Q67). The analyst is neutral (Q93) and draws connections between the therapeutic relationship and other relationships. S/He draws attention to feelings regarded by the patient as

unacceptable (e.g. anger, envy or excitement) (Q50), and the patients behavior during the hour is reformulated by the analyst in a way not explicitly recognized previously (Q82). The analyst refrains from self-disclosure even if the patient exerts pressure to do so (Q21r). S/he conveys by her/his manner, tone of voice or comments, that s/he does not assume an attitude of superiority (Q51r). His/her comments reflect kindliness, consideration, or carefulness (Q77r), and s/he is genuinely responsive and affectively involved (Q9r). The analyst´s own emotional conflicts do not intrude in the therapy relationship (Q24r), and s/he does not assume a tutor-like role in relation to the patient (Q37r). The analyst does not exert actively control over the interaction (Q17r), and is not directly reassuring even if pressed to do so (Q66r), nor gives explicit advice and guidance despite pressure of the patient (27r). The **patient** achieves a new understanding or insight (Q32). In **the session** the therapy relationship is a focus of a discussion (Q98), patient dreams or fantasies are discussed (90), memories or reconstructions of infancy and childhood are topics of discussion (Q91). Patients' feelings or perceptions are linked to situations or behavior of the past (Q92), and there is no discussion of specific activities or tasks for the patient to attempt outside of session (Q38r).

Psychotherapy

In the psychotherapy session: The **therapist** acts to strengthen defenses (Q89), and clarifies, restates, or rephrases patient´s communication (Q65). His/her remarks are aimed at facilitating patient speech (Q3), and s/he communicates with the patient in a clear, coherent style (Q46). The therapist asks for more information or elaboration (Q31) and presents an experience or event in a different perspective (Q80). The therapist conveys by his manner, tone of voice or comments, that s/he does not assume an attitude of superiority (Q51r). His/her comments reflect kindliness, consideration, or carefulness (Q77r), and the therapist´s own emotional conflicts do not intrude in to the therapy relationship (Q24r). The therapist refrains from self-disclosure even if the patient exerts pressure to do so (Q21r), and s/he is genuinely responsive and affectively involved (Q9r). S/he does not assume a tutor-like role in relation to the patient (Q37r). The **patient** somehow conveys the sense that the therapist understands his or her experience or feelings (Q14r) and expresses positive or friendly feelings about the therapist (Q1r). The patient readily comprehends therapist´s comments (Q5r). In **the session** patient´s current or recent life situation is emphasized in discussion (Q69), and the patients treatment goals are discussed (Q4). The dialogue has a specific focus (23) and patients interpersonal relationships are a major theme (Q63). The therapy relationship seems basically unsexualized (Q19r).

The psychoanalysts that have been studied using the PQS produce completely different theoretical matrices of the ideal psychoanalysis and psychotherapy sessions: the submatrices for this part of the description do not have any item in common. On the contrary, from the point of view of the uncharacteristic end of the items, the situation is practically the reverse since both submatrixes share 6 items, and, moreover, those of maximum score or accordance: Q9, Q21, Q24, Q37, Q51 and Q77. For the psychotherapy session there is higher accordance for the 5 more extreme items of the uncharacteristic end, with a low accordance and less differentiation on the side of the characteristic items.

Once more in the field of "psychodynamic" based therapies, the similarities between the present data and that from other studies is more marked for the uncharacteristic. Looking at the items "recorded" by Jones and Pulos (Jones & Pulos, 1993) in psychodynamic psychotherapies and Ablon and Jones (Ablon & Jones, 1999) in interpersonal psychotherapies, the common items for the uncharacteristic matrix for the three studies, the present one and those mentioned, amounts to approximately 70 %, comprising 4 items (Q9, Q14, Q51 and Q77), recognized in the those studies. With respect to the characteristic side: when the data of the three studies under consideration are summed up, approximately 40 % of the items may be found repeatedly, and between these there are three (Q63, Q65 and Q69) which are common to all of them.

Up to now they have been comparing the theoretical matrices of this study and those calculated from psychotherapy sessions, since they did not find studies on psychoanalytic sessions but for individual treatments. Nevertheless it seems interesting to comment something more, which can be thought of comparing the theoretical o ideal matrixes and those which come up from the study of sessions. In the present study it is obvious that the 10 items which compose the submatrix of the characteristic items for an ideal psychoanalytic session do not overlap with the ideal psychotherapeutic session. Now,

comparing the ideal matrix built up in the study of Ablon and Jones (Ablon & Jones, 1998) for psychodynamic psychotherapy sessions, it becomes evident that it has a strong superposition with the ideal matrix for psychoanalytic sessions constructed in the present study: the 10 items which compose this last one find a place in that of those authors, but almost none of the items of the submatrix for the characteristic descriptors of a psychotherapy session (only 2 items) find a place there.

Brief Evaluation of the Approach

This is an important demonstration study of the use of the Q-sort on therapeutic material from a Spanish speaking treatment. This initial study of a small sample suggests that the Q-sort method might be helpful in highlighting the differences between psychoanalysis and psychotherapy.

Computerized Reflective Function: A Psychotherapy Process Measure

Fertuck, E. A; Clarkin, J. C., Target, M.

Brief Summary of Approach

The aim of this research project is to develop an efficient, transportable, and valid methodology to systematically assess, from audio- and videotaped sessions of the therapist-patient discourse, theorized mechanisms of change for patients with borderline personality disorder (BPD; American Psychiatric Association, 1994). The researchers hypothesize that psychodynamic therapy can improve BPD patients' Reflective Function (RF; Fonagy et al., 1998), and that over time this leads to clinical improvements in intrapsychic structure, symptoms, and behavior. RF involves a self-reflective and an interpersonal component that allows the individual to discern inner experience from outer reality. Consequently, it is a psychological function that is related to affect regulation and interpersonal functioning. BPD patients exhibit impairments in RF that lead to a pathological pathway of emotional development and chronic, potentially lethal psychopathology. A computerized text analysis version of the RF scale will be developed as a first step in the development of a methodology designed to assess the mechanisms of change in TFP session transcripts. This will initiate a line of research that aims to identify the unique features of psychodynamic therapy and how they are related to clinical improvement in BPD patients. With this research the link between psychoanalytic technique and outcome can be better understood by clinicians, and articulated to patients, policymakers, and funding agencies. The instrument should be applicable to transcripts of any psychotherapy session, and other texts.

Sample

AAIs from at least 100 subjects, most of whom are psychiatrically diagnosed. There are three sub-samples from which the entire sample will be derived, one of non-clinical adult females, the second from adult, hospitalized psychiatric patients, and the third from a sample of young adult outpatients who later entered psychoanalytically oriented psychotherapy or psychoanalysis.

Method

The procedure for transforming a well established manual coding system to a computerized scoring method has been articulated by Mergenthaler & Bucci (Mergenthaler & Bucci, 1999). First, a corpora of text samples that have been reliably rated with the manualized scoring system are transcribed. One half of the texts are then chosen randomly and within these texts, extreme samples from both ends of the contructs' measurement are identified, one corpus High and one corpus Low. The next step involves the identification of Characteristic Vocabularies for each of the two High and Low corpora in reference to the other. In other words, words that are significantly more frequent in one text versus the other are identified. Low frequency and overly specific words are eliminated. The result is two word lists, High and Low. Once these word lists are identified, the texts are analyzed by a computer, which calculates the number of High and Low frequency words, subtracts the latter from the former, and divides this by the total number of words in the texts. The resulting numbers for each text can be used to predict the second half of the texts with High and Low judge ratings of the construct, and to correlate with the criterion measure (the original judges' scores). These two procedures establish the validity of the computerized measure.

Measures

The Adult Attachment Interview (AAI; Main & Goldwyn, 1991). This semistructured interview aims to elicit information concerning and individual's current representation of his or her childhood experiences. Several categories of experience are probed, including the general quality of early childhood-caregiver experiences, experiences of early separation, illness, rejection, losses, and maltreatment. Interview are audiotaped and transcribed.

The Reflective Function scale (Fonagy et al., 1998). This scale is for AAI transcripts, and it assesses the interviewee's capacity to understand mental states and their readiness to contemplate these in a coherent manner. Raters are required to mark the presence or absence of a reflective stance in relation to self or other and use the frequency of these statements to score the subject on a scale from 1 to 9. For a more detailed account of the RF Scale, see the Appendix to this report.

Present status

One hundred AAIs have been transcribed and formatted for computer analysis, and approximately 70 have been scored for RF by an expert rater. After RF is scored on all the AAIs, the characteristic vocabulary will be identified.

Brief Evaluation of the Approach

Given the difficultities in coding this measure, both in terms of time invested in training and reaching reliability, it is desirable that there should be an automated version. It should be remembered that this would still require transcribing of the interviews, but given the success of other automated methods it could be an important methodological development.

Analytic Process Scales (APS) study of 3 audiotaped psychoanalyses

Scharf, R. D., Waldron, S., Firestein, S. K., Goldberger, A., & Burton, A. (1999). *The analytic process scales (APS) Coding manual*. Unpublished manuscript.

Waldron, S., Scharf, R. D., Crouse, J., Firestein, S. K., Burton, A., & Hurst, D. (submitted). Saying the right thing at the right time: Psychoanalytic interventions of good quality enhance immediate patient productivity.

Brief summary of the approach

This was a detailed preliminary study of audiotaped psychoanalyses. The Analytic Process Scales (APS) were employed to examine nine sessions of three psychoanalyses. They were applied to tape recorded sessions, enabling psychoanalysts to evaluate the nature and quality of the contributions of both analyst and patient to the psychoanalytic process. The APS makes it possible to study the impact of the quality of analysts' interventions on patients' immediately subsequent analytic productivity. The analytic work by both patient and analyst was characterized in a reliable and systematic way for sessions from these three analyses.

This research instrument, with an extensive coding manual, was developed by a group of experienced psychoanalysts using methods that would avoid problems encountered by previous investigators, by studying only the work of experienced analysts and using only highly experienced analysts as raters. They found that if they evaluated one session without understanding its context, their views were as discrepant from one another as reported by Seitz in his classical paper (Seitz, 1966). Therefore, it was required that raters listen to two or three preceding sessions for psychoanalytic context, before assessing the session at hand. The researchers chose central, unambiguous, experience-near process features of both patient and analyst, and defined their variables in the language of the clinical surface. The long process of conceptualizing variables, testing them on fresh recorded material, and then revising them led to the development of eighteen variables assessing the analyst's contribution and fourteen assessing the patient's, as both of these contributions vary during the course of each session. The APS Coding Manual (Scharf et al., 1999, 78 pages) defines and illustrates each variable to be rated. Brief clinical examples show how to assign ratings at the "0", "2", and "4" levels; the intermediate levels "1" and "3" are left to the judgment of the rater to use as necessary. Analysts need only brief training to achieve reliability using the manual. As little as one specimen hour suffices for training, followed by discussion of scores with a senior investigator, comparing them with those of senior raters. The central patient variable studied in relation to the analyst variables was patient productivity, measured as progress either in response to the analyst's intervention, or from the patient's own momentum. The analyst variables fall into three clusters. The first, *intervention quality,* comprises two variables: one measures how well the analyst follows the patient's productions, and the other measures the overall quality of the intervention. The second cluster, *core analytic activities,* measures the degree to which the analyst clarifies, interprets, and focuses on resistance, transference, and conflict. The third cluster, *affective involvement,* measures how much the analyst is confrontational and expressive of feeling.

To capture the back-and-forth flow between patient and analyst, sessions are divided into psychoanalytically meaningful segments. The division between segments often corresponds to a change of speaker, resulting in "analyst" segments and "patient" segments. When there is a rapid exchange between patient and analyst, a segment may include several changes of speaker, and is rated for both analyst and patient variables. Using the manual, psychoanalytically informed clinicians can segment sessions with substantial agreement. Applying the APS to successive patient and analyst segments throughout a session allows study of the interactional aspects of the work, specifically the relationships among what the patient communicates, how the analyst intervenes, and how the patient responds. It is possible to determine which qualities of the patient's work are enhanced by interventions over a series of segments, and how the patient's responsiveness and productivity shape the analyst's next intervention.

Nine sessions from three psychoanalyses drawn from the collection of the Psychoanalytic Research Consortium were rated in this study: four sessions were taken from various points in a 324-hour

analysis, three were selected from early, middle and late in a 660-hour analysis, and two were drawn from the end of a 388-hour analysis. The first patient had done relatively well; the second appeared to be deadlocked after 660 sessions; the third was chosen as a good representative analytic process. The nine sessions produced a total of 123 segments to be rated for the analyst variables, and 117 segments to be rated for patient productivity.

The APS variables were chosen and defined to produce measurable differences between scores on each variable. These scores constitute the basic data. Relationships between the clusters of analyst intervention data and patient productivity data are checked for. Then by the method of partial correlation the effect of differing analyst-patient pair is held constant. By the method of multiple regression analysis the effects of the other variables are held constant in order to discover the contribution of each individual analyst intervention variable to immediate patient productivity. The data are arrayed to show analyst intervention scores in relation to the immediately prior and immediately subsequent patient productivity scores. This makes it possible to follow events of the session from two reciprocal perspectives: how the analyst's activity affects the patient's work, and how the patient's work facilitates the analyst's activity. When the patient becomes more productive, the analyst may be able to make higher-quality remarks, demonstrate better core analytic activity, and become more involved, so that any increased productivity following an intervention might not only result from the intervention itself but from the patient's productivity in the previous segment. Since subsequent patient productivity might reflect *both* the patient's previous productivity *and* the analyst's intervention, the relative influence of these two factors was assessed using the method of multiple regression.

Major results

Our sample of 123 segments of psychoanalytic work is summarized graphically in Figure 1. It shows that the levels of core analytic activities (clarification, interpretation, addressing resistance, addressing transference, and addressing conflict) were different for each of the three analyses. Although the analyst for patient U8 analyzed resistance much more than the analyst for patient A2, the activities of both were comparable in other respects: both used clarification and interpretation extensively, often making interventions focused on transference manifestations to point out their patients' conflicts. V4's analyst made a substantial number of transference interventions, but in contrast, generally utilized core analytic activities to a far lesser degree. These differences are consistent with both the clinical descriptions of the 3 cases and the marked differences found by the study's raters in the overall quality of the treatments.

Figure 1: Core analytic activity by analyst-patient pair
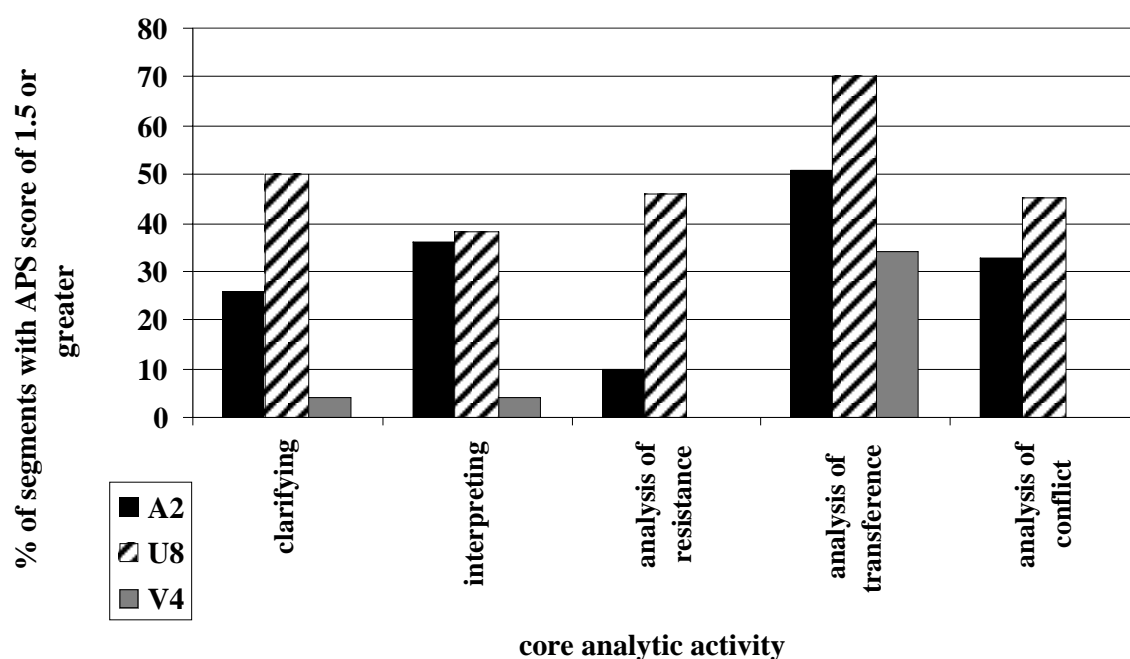
The majority of interventions were mixed. For example, about half the interpretations were combined with clarification; two-thirds of clarifications were mixed in nature, half of these being simultaneously classified as interpretations and the other half in other combinations. It was found that the interpretations which were combined with clarification received a higher rating for *quality* than interpretations given without a clarifying component. One other significant characteristic emerged from studying intervention types. It was anticipated that a clearly framed intervention would receive a score between "1" and "2" (1.5 or better) for at least one type (clarification, interpretation, etc.). It was found that the analysts differed in this respect. In the treatment that seemed to be going the best (U8) a large proportion of the analyst's interventions (two-thirds) fitted at least one type. The next best treatment (A2) had about half the interventions fitting a type. But V4, the case which was judged as least successful by other criteria, had less than 10% of the interventions fitting a type. Thus, in this small sample, the typing of interventions on the APS not only characterizes the nature of the analytic activity, but offers an indication of the quality of interventions, with poorer work being less well delineated.

There was considerable variation in quality of intervention within each analysis, as well as substantial differences between them. It is possible that high quality interventions are a predictor of benefit even when they constitute a relatively low percentage of the total. In the two apparently more successful cases, only 7 and 8% respectively of interventions were scored 3 to 4, while the apparently unsuccessful case, V4, had no interventions at these levels. However, a much larger sample will be necessary to examine the relationship between successful treatment and infrequent but very high quality interventions.

Finally, the researchers asked how much of the variation in patient productivity they had accounted for by their variables. It turns out that differences in analytic productivity across segments are only partly accounted for by the variables they measured together with the momentum of the process itself. Thus, despite the significant effect of intervention *quality* and prior patient productivity on later patient productivity, more than half of the differences in subsequent productivity remains unexplained by the APS variables. This is expectable in view of the complexity of the process assessed, and the often delayed impact of interventions.

To summarise: In this study, substantial correlations were found between core analytic activities (clarification, interpretation, and analysis of resistance, transference and conflict) and the productivity

of the patient in the immediately following segment. A multiple regression analysis showed that the impact of these analytic activities was entirely dependent on the quality of the analyst's intervention. In addition, patient's previous productivity contributed as strongly as intervention quality to subsequent patient productivity. Statistical analysis also demonstrated that the level of work of the analyst and the patient were highly correlated in this sample.

Brief Evaluation of the Approach

The APS makes it possible to investigate psychoanalysis by studying aspects of each case in a way that is both statistically reliable and clinically valid. The variables serve to delineate cases using central psychoanalytic concepts. The authors have demonstrated that experienced clinicians can agree on the nature and quality of interventions, once they are sufficiently familiar with a case. Because the APS assesses the nature and quality of interventions sequentially throughout an hour they have been able to examine their effects on subsequent patient productivity in the very next segment of the hour. The reliabilities achieved in assessing core psychoanalytic dimensions suggest that systematic study of even the most complex aspects of the psychoanalytic process is possible with suitable analytic data. The problems of achieving consensus in evaluating psychoanalytic treatments are not insurmountable, and are resolvable by methodological innovation and the participation of experienced clinicians. This is a preliminary study with much that remains to be demonstrated. We do not know if interventions considered to be of 'high quality' are actually correlated with better treatment outcome. The small size of the sample of 117 analyst interventions and patient responses from only three patient-analyst pairs limits the generalizability of the results.