6. LINGUISTIC STUDIES

INTRODUCTORY REMARKS[1]

The relationship of "psychoanalysis and language" was in the center of many theoretical and clinical discussions ever since Freud (1917) had declared:

> Nothing takes place in a psycho-analytic treatment but an interchange of words between the patient and the analyst. The patient talks, tells of his past experiences and presents impressions, complains, confesses his wishes and his emotional impulses. The doctor listens, tries to direct the patient's processes of thought, exhorts, forces his attention in certain directions, gives him explanations and observes the reaction of understanding or rejection which he in this way provokes in him. (p. 17)

In contrast to the clear recognition of psychoanalysis as discursive activity - as Lacan (1953) espoused it succinctly - for quite a time the main stream activity on the relation of psychoanalysis and language was focused on Freud's theory of symbols. Language and the development of the ego was a favourite topic in the New York study group on linguistics (Edelheit, 1968). As Freud had developed his own rather idiosyncratic way of understanding symbols, some conceptual work with the different usage of the term symbol had to be done. Victor Rosen in his paper on "Sign Phenomena and their relationship to unconscious meaning" (1969) demonstrates that the work of the psychoanalyst can be conceptualized as a process of differentiating conventional symbols from sign phenomena. Understanding meaning by common sense has to be completed by understanding the additional unconscious meaning any concrete piece of verbal material may carry. The technical rule for the analyst of evenly hovering attention is directed to just this process. Listening to his patient's associations the analyst receives the conventional meaning of what he listens to. Suspending his reaction to this level of meaning he then tries to understand potential meanings beyond the everyday meaning. By interpreting the analyst usually uses a perspective that is not immediate in his patient's view.

However, Forrester (1980) expressed, in his introduction of his book "Language and Origin of Psychoanalysis", astonishment that there were only a few treatise on

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[1] Horst Kächele & Erhard Mergenthaler

psychoanalysis, which dealt directly with the role of language in the course of treatment (p. X). Detailed studies concerning "spoken language in the psychoanalytical dialogue" were just beginning to blossom in the eighties of the last century (Kächele, 1983a).

Praising the Freudian dictum many a times psychoanalysts - often unintentionally - have been followers of the philosopher Austin (1962), who in his theory of speech acts, proceeds from the observation that things get done with words. In the patterns of verbal action, there are specific paths of action available for interventions to alter social and psychic reality. In psychoanalysis, writes Shapiro (1999), "the prolonged interaction between patient and analyst provides numerous opportunities for redundant expression of what is considered a common small set of ideas in varying vehicles and at various times, designed to get something done or to re-create an old pattern" (p. 111). However, speech, if it is to become effective as a means of action, is dependent on the existence of interpersonal obligations that can be formulated as rules of discourse. These rules of discourse depend partly on the social context of a verbal action (those in a court of law differ from those in a conversation between two friends), and conversely, a given social situation is partly determined by the particular rules of discourse. Expanding this observation psychoanalytically, one can say that the implicit and explicit rules of discourse help to determine not only the manifest social situation, but also the latent reference field, that is transference and countertransference.

If the discourse has been disturbed by misunderstandings or breaches off the rules, metacommunication about the preceding discourse must be possible which is capable of removing the disturbance. For example, one of the participants can insist on adherence to the rule (e.g., "I meant that as a question, but you haven't given me an answer!"). In such metacommunication, the previously implicit rules which have been broken can be made explicit, and sometimes the occasion can be used to define them anew, in which case the social content and, we can add, the field of transference and countertransference can also change.

The compulsion arises from the fact that analyst and patient have entered into a dialogue and are therefore subject to rules of discourse, on which they must be in at least partial (tacit) agreement if they want to be in any position to conduct the dialogue in a meaningful way. It is in the nature of a question that the person asking it wants an answer and views every reaction as such. The patient who is not yet familiar with the analytic situation will expect the conversation with the analyst to follow the rules of everyday communication.

The exchange process between the patient's productions, loosely called "free associations", and the analyst's interventions, loosely called "interpretations", most fittingly

may be classified as a special sort of dialogue. The analyst's interventions encompass the whole range of activities to provide a setting and an atmosphere that allows the patient to enter the specific kind of analytic dialogue (the general principle of cooperation enunciated by the philosopher Grice, 1975):

> If any kind of meaningful dialogue is to take place, each partner must be prepared (and must assume that the other is prepared) to recognize the rules of discourse valid for the given social situation and must strive to formulate his contributions accordingly. (Thomä and Kächele, 1994b, p. 248)

The special rules of the analytic discourse thus must be well understood by the analysand lest he or she waste the time not getting what he or she wants. Therefore she or he has to understand that the general principle of cooperation is supplemented by a specific additional type of meta-communication on part of the analyst. As we have already pointed out the analyst's interventions have to add a surplus meaning beyond understanding the discourse on the plain everyday level.

How does one add a surplus meaning? Telling a joke is a good case for working with a surplus meaning not manifest in the surface material. Jokes have a special linguistic structure and most often work with a combination of unexpected material elements and special tactic of presentation. Reporting clinical examples from the literature Spence et al. (1994) suggest that the analyst is always scanning the analytic surface in the context of the two-person space, consciously or preconsciously, weighing each utterance against the shifting field of connotations provided by (a) the course of the analysis; (b) his or her own set of associations; and (c) the history of the analysand's productions (p. 45). An experimental way to detect the generation of such ad-on meanings was Meyer's (1988) effort via post-session free associative self-reports to find out "what makes the psychoanalyst tick".

For such questions which are basic for the psychoanalytic enterprise the development of conversational and discourse analytical methods was crucial moving the pragmatic use of language as speech on empirical grounds. When Sacks et al. (1974) proposed a "simplest systematics for the organization of turn-taking behavior in conversation" it was obvious that such tools would be of high relevance to psychotherapy as an exquisite dialogic enterprise.

Although Mahony (1977) gave psychoanalytic treatment a place in the history of discourse, Labov and Fanshel (1977) probably were the first to apply such concepts to empirical investigation of psychotherapy sessions. In Germany the linguist Klann (1977) connected "psychoanalysis and the study of language" no longer focusing on the traditional

discussion on symbols but focusing on the pragmatic use of language as therapeutic tool exemplified by role of affective processes in the structure of dialogue (Klann, 1979).

In this arena many things that take place in the relationship between patient and analyst at the unconscious level of feelings and affects cannot be completely referred to by name, distinguished, and consolidated in experiencing (see Bucci, 1988, 1997a, 1998, 2005). Intentions that are prelinguistic and that consciousness cannot recognize can only be imprecisely verbalized. Thus in fact much more happens between the patient and analyst than just an exchange of words. Freud's "nothing else" must be understood as a challenge for the patient to reveal his thoughts and feelings as thoroughly as possible. The analyst is called upon to intervene in the dialogue by making interpretations using mainly linguistic means. Of course, it makes a big difference if the analyst conducts a dialogue, which always refers to a two-sided relationship, or if he makes interpretations that expose the latent meanings in a patient's quasi-monological free associations.

Although it has become customary to emphasize the difference between the therapeutic interview and everyday conversation (Leavy, 1980), we feel compelled to warn against an overly naive differentiation since everyday dialogues often are:

> characterized by only apparent understanding, by only apparent cooperation, by apparent symmetry in the dialogue and in the strategies pursued in the conversation, and that in reality intersubjectivity often remains an assertion that does not necessarily lead to significant changes, to dramatic conflicts, or to a consciousness of a "pseudo-understanding" . . . . In everyday dialogues something is acted out and silently negotiated that in therapeutic dialogues is verbalized in a systematic manner. (Klann, 1979, p. 128)

Flader and Wodak-Leodolter (1979) collected these first German studies on processes of therapeutic communication. Some years later these researchers discovered the rich material available at the ULM TEXTBANK (Flader et al. 1982). This was probably not surprising because the availability of original transcripts for linguists was at the time very limited. Amongst others, the opening phase of Amalia X's treatment, that phase of familiarizing the patient into the analytical dialog and the transition from day to day discourse into the analytical discourse, was examined (Koerfer and Neumann 1982):

> Towards the end of the second (recorded) session Amalia X complains about the unusual dialogic situation in the following way: "alas, I find this is quite a different kind of talk as I am used to it".

This kind of difficulty has been described by Lakoff (1981) succinctly: "The therapeutic situation itself comprises a context, distinct from the context of 'ordinary conversation', and that distinction occasions ambiguity and attendant confusion" (p. 7). In fact we are dealing with a learning situation comparable to learning a foreign language though less demanding:

> If in fact psychotherapeutic discourse were radically different in structure from ordinary conversation, we should expect something quite different: a long period of training for the patient, in which frequent gross errors were made through sheer ignorance of the communicative system, in which he had time after time to be carefully coached and corrected. (Lakoff, 1981, p. 8)

This perspective supports our maxim of the treatment technique: as much day-to-day dialogue as necessary to correspond to the safety needs of the patient, to allow this learning process and as much analytical dialogue as possible to further the exploration of unconscious meanings in intra and interpersonal dimensions (Thomä and Kächele, 1994b, p. 251 ff).

In the following years, the "linguistic turn", the inclusion of pragma-linguistic tools into the study of the psychoanalytical discourse, gained considerable momentum (Russell 1989, 1993). For example, Harvey Sacks (1992) described "conversational analysis" (CA) that put "coherence" in the center, which also plays a central role in attachment research. Lepper and Mergenthaler (2005) could show in a group therapy setting and recently in a psychodynamic short therapy (Lepper & Mergenthaler 2007) that the "topic coherence" stands in a close connection with clinically important moments, insights and changes.

Systematic investigations on the special conversational nature of the psychoanalytic technique have become more diversified. The linguist Streeck (1989) illustrates how powerful conversational technique were even in identifying prognostic factors for shared focus formulation in short term therapy related to positive outcome where psychometric instruments failed. The role of metaphor in therapeutic dialogues has developed into a field of its own (Carveth, 1984; Spence, 1987; Buchholz, 2007; Lakoff, 1997; Casonato and Kächele, 2007). Intersubjective conceived treatment research enlarges the empirical frame by including dimensions of conversational practice, narrative representation and use of metaphor. Is it too far reached to connect the development of the relational perspective in psychoanalysis with the rise of narrative treatment research focusing on what happens between patient and analyst in great details as Buchholz (2006, p. 307) does?

The mechanism of psychoanalytic interpretation had been the object of an early discourse-analytic case study by Flader and Grodzicki (1982) recently followed by a larger sample studied by Peräkylä (2004). The issue whether discourse in psychoanalysis proper is different from discourse in psychotherapy might be no longer in the center of interest. The more empirical material is studied the less these differences show up. Patients and their analysts display a range of conversational strategies in the diverse therapeutic situations as Streeck (2004) has illustrated.

Long before we have seen the development of a conversation-analytical methodology for the study of verbatim protocols, the implementation of social science based content analysis technique had fertilized the field of psychotherapy process research (Mowrer, 1953). Ever since Dittmann and Wynne (1961) suggested to study emotionality in initial interviews the technique of content analysis was at the fore of process research.

The motherground of content analysis was the area of the mass communication and media research; all the more astonishing is the historical role, which Silbermann (1974) attributed in his handbook article to the author of the "Dream Interpretation", S. Freud:

> If one would try to investigate the developmental history of the content analysis in all its details back to the times in which this term was not yet coined, so one would have to begin with the scientist who prepared the way for the scientific study of the soul. However, at least the name of Sigmund Freud would have to be mentioned and in particular his book "Dream Interpretation" from the year 1900. Here, for the first time, a summarized work is presented. It tries, in an experimental fashion, with the exclusion of philosophical thought processes, to cast light onto the irrational elements of human behavior, particularly in reference to symbolism, language and myth. The conceptual analysis of symbolic forms, as it stood in the foreground of Ernst Cassirers "Philosophy of Symbolic Forms" (1923), is already abandoned here to give way for an analysis that tries to show the meaning of symbols concerning the social life. (Silbermann, 1974, p. 253)

Crucial for the classification of the technique of dream interpretation by Freud as the precursor of the content analysis is the demonstration of relationships between symbol and social communications structure. So following Silberman it was social scientists who first studied the communicative function of symbols in the social structure.

As one of the first, Lasswell (1933) mediated between the psychoanalytical and the social scientific methodology. In his work about "Psychoanalysis and Socioanalysis," he discussed the relationship between the extensive observation method of the social science and

the intensive method of psychoanalysis and thus comes to speak about the meaning of the psychoanalytical symbol science:

> The fruitful dialectic relationship between intensive and extensive observation methods can be viewed through a short reference on the meaning of the psychoanalysis for general theory of social happenings. Psychoanalysis has broadened our knowledge of dialectic relationships among symbols… Psychoanalysis mainly provides contributions for the dialectic handling of symbol to symbol and complements therewith the dialectic procedure that up to now only enclosed material-symbol and symbol-material relations. (Lasswell, 1933, p. 380)

The development of content analysis, led to a scientific interpretation technique, which tried to differentiate itself from the hermeneutic interpretation method essentially in that the interpretative process had to be conducted according to prior set rules and specifications. This scientific attitude was found in the first fundamental definition of the content analysis as it was presented by Berelson (1952):

> The content analysis is an examination technique that serves the objective, systematic and quantitative description of the obvious content of information of all kinds. (p. 18)

This early definition has been since then extended and changed in a manifold way. Berelson's commitment to manifest contents was particularly outdated through the inclusion of the properties of transmitter and receiver in the research processes. Stone (1966) underlines in the framework of the particularly by him developed mechanical content analysis its deductive character:

> Content analysis is every research technique for the set up of conclusions in which systematically and objectively, individually defined properties within a text are identified. (Stone, 1966, p. 5)

From the mere descriptive intentions of Berelson content analysis developed to a concluding observational method. In this development, the theory related character of all scientific questioning is more visible than ever, which is emphasized particularly in the discussion of the content analytical dictionaries in the framework of mechanical text analysis (Gerbner et al. 1969). The very first effort to bridge between linguistics and content-analysis studying "pathological and normal language" (Laffal, 1965) paved the way for further developments.

The pace setting "Reader" von Gottschalk and Auerbach (1966) represented, at the time, important works concerning content analysis of psychotherapeutic protocols. Soon after, the 1st volume of the "Handbook of Psychotherapy and Behavior Change" (Bergin and

Garfield, 1971) summarized the contributions of content-analytic studies to the growing field (Marsden, 1971) and Luborsky and Spence (1971) pointed to the new possibilities of computer based technology. Our early familiarity with the works of Dahl (1972, 1974) and Spence (1968, 1969) was crucial for the further methodological development in Ulm (Kächele 1976; Kächele and Mergenthaler, 1983, 1984). Fertile collaboration with Bucci linking verbal and non-verbal representations using computer analysis of referential activity (Mergenthaler and Bucci, 1999) and development of the Therapeutic Cycles Model (Mergenthaler 1996, 2008) mark the state of the art in this technology for process research.

Computerized linguistic indicators have been developed (Bucci & Maskit, in press) that are associated with each phase of the referential process that includes Arousal, Imagery and Narrative, Emotional Reflection, and Process of Change. Referential Activity, one of Bucci's major linguistic indicator has been shown to be higher in A sessions as opposed to Z sessions (Bucci, 2007). With the concept of A and Z sessions Bucci refers to Freedman et al. (2003) - A sessions "generally represent processes of integration, consolidation, developmental progression, and relatively stable exploration" and Z sessions with qualities that indicate "non-integration, regression, and destabilization" (Bucci, 2007, p. 185).

With the verbatim protocols of Amalia X various exploratory linguistic studies were conducted. Schafer's (1976) ideas concerning the language in action prompted a student of the Department of Linguistics in Hamburg, Beermann (1983), to study syntactic variations of the usage of active and passive voice in the text of our four tape-recorded analytic patients' protocols. Identifying neurotic disorder as a relationship disturbance she decided to characterize a neurotic speaker as a user of frequent passive sentences constructions in order not to appear as active agency and as not being able to thematize the very own interest in relationships. A neurotic person – so her assumption – compensates the limited capacity for metacommunicative expression by a forced strategy using passive sentence constructions. Studying four sessions of Amalia X she identified significant, case-specific increase of active syntactic constructions in the course of the treatment. Like of interest was her finding that the quantitative analysis of the analyst's language identified a lesser use of passive constructions throughout the analysis.

Another pilot study tested how the change of latent speech structures could be measured (Mergenthaler and Kächele, 1985). Using computer-based vocabulary methods the body related vocabulary of Amalia X and Christian Y was compared (Schors et al., 1982). These encouraging results led to the development of the Ulm Body Dictionary (Schors and

Mergenthaler 1994), which has already been applied to four short term therapies; studies with this dictionary of Amalia X's protocols are not yet completed.

To develop computer-based strategies of analyzing the bodily representations of Amalia X has been one avenue of research. The same line of investigatory efforts was also taken by Maldavsky and his group from Buenos Aires applying the David Liberman algorithm to sessions of Amalia X (Maldavsky, 2005). A totally different road was taken by von Wyl and Boothe (2003) using a qualitative approach to understand Amalia X´s way of constructing her gender related body experiences. Their psychodynamic interpretations of results of a narrative methodology - known as JAKOB (Boothe, 2000) - aim to reconstruct the organization of individual experience, subjective involvement and personal relationships. The systematic unfolding of the plots involved allows conflict and defense impulses to be modeled within the inter-subjectively testable context of communication. The Zurich group directed by Boothe has extensively applied this qualitative technique to study many facets of Amalia X´s in-treatment patterns (Luder, 2006).

In summary the diversity of techniques that are available for studying verbatim recorded sessions opens a wide field for research. But we also agree with Bucci (2007) that a theory is needed that allows to demonstrate "the validity of the concepts of the metapsychology essentially as defined a century ago" (p. 203) and, as we may add, allows to integrate the findings from the disparate empirical approaches presented elsewhere and in this book for the case of Amalia X.

THE ULM TEXTBANK[2]

Introduction

Extensive verbatim transcribed protocols of psychoanalytic treatments demanded by Luborsky and Spence (1971) have established themselves as an important source of data in psychoanalytical research. From today's point of view it clearly shows that it was overdue - because of the manifold expectations - to develop, for the application in the area of psychotherapy, proper and user-friendly methods intended for the handling of a text corpus. Beyond this, it also became apparent how important it was to develop meaningful methods for the description of such texts; or to learn from linguistic data processing. To solve the problems thirty years ago in Ulm, an interdisciplinary approach was chosen that connects the psychotherapy-related questions with scientific methods of informatics and linguistics.

Historical Summary

Since 1968 the Department of Psychotherapy of the University of Ulm focused on the development of a methodology for psychoanalytic process research. Within this framework producing audio and video recordings of psychoanalytic long-term treatments provided an essential methodological step that inevitably led to a great collection of verbatim-transcripts. In the course of the first decade we realized the necessity of developing a computer-based databank for our research. Thus began, within the "Special Research Collaboration 129" (SFB 129) of the German Research Foundation, the development of the Ulm-Textbank-Management-System. During this period of development it became further apparent that such a databank[3] would also serve other scientists who are interested in process research and in analyzing of linguistic material. The final design of the system was therefore characterized strongly by the orientation of a manifoldness of users with very differing methodological approaches (Mergenthaler, 1985). With the conclusion of the SFB 129 in the year 1988, this

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[2] Adapted and shortened version based on Mergenthaler & Kächele (1993).

[3] In the conceptualization, the example of routine services provided by a medical BLOOD BANK were helpful in many lectures to spread the steering idea of the project.

task was completed. Since then the ULM TEXTBANK is a public institution available for psychotherapy research.

General Aims

One of the main goals in the development of the TEXTBANK was to make available linguistic material of psychotherapeutic sessions and also of neighbouring areas, to researchers in order to save time and money for research endeavours that can be conducted with the already accessible material (archival function). A further goal was also to create availability for computer-based text analyses for all the scientists who do not have resources of this kind of their own. A third goal, consisted in to connect the results that were gained in preceding analyses in order to facilitate a rediscovery of text on the basis of already available results. Thus the TEXTBANK-MANAGEMENT-SYSTEM was designed to facilitate the following tasks.

a)   Recording and processing of texts under manifold points of view.

b)   Management of an unlimited number of text units on various data media.

c)   Management of an unlimited amount of information on text units and their authors and their conducted text analyses.

d)   Management of an open-ended amount of methods for editing and analysis of stored text units.

e)   Support of interfaces for statistical and other user-software.

f)   Support of a simple interactive user interface in the utilization of the above, from a) to e) mentioned tasks.

The TEXTBANK-MANAGEMENT-SYSTEM is thereby an information system, which can manage texts and information about texts and integrates processing of linguistic data-processing as well as text processing for the analysis of texts. It features a uniform user interface that assists in the input, processing, output and analyses of text units.

The documents stored in the ULM TEXTBANK represent an open collection of texts. The main character of such data collections is that they can be extended continuously. The measure of completeness of a data base however influences the strategies in which the research results concerning these texts are handled. Two approaches can be discerned: in the first, all available data are stored together with the texts itself; in the second, the analyses are being conducted anew, according to need.

The TEXTBANK project provides the realization of tools for informatics in psychotherapy research. Special interest was given to the acceptance and performance of the,

at the time, rather new approach. During the phase of the gathering of texts, the field had to be acquainted with a new fact: namely the shared usage of primary data. Soon a rapidly increasing number of colleagues understood our goals and joined generously in contributing to the success by making their data sources available.[4]

Methods

Clientele and Samples

The optimal display of a TEXTBANK-MANAGING-SYSTEM requires to be open for processing scientific questions that are hard to predict at the time of its inception. Therefore it is particularly important that individual text collections can be put together as subdivisions in the TEXTBANK. In this context two important working emphases have crystallized, which at the same time correspond to two different research approaches: longitudinal studies and cross-section studies.

Longitudinal studies concentrate on the materials from psychotherapeutic and psychoanalytic treatments. Their goal is to investigate changes through the therapeutic process. To collect large numbers of tape-recorded psychoanalytic treatments is still a dream. Therefore, the study of single cases and their evaluation concerning the manifold aspects have remained in the foreground.

Naturally there are also questions that can be studied in cross-sectional designs, for example in the initial interview texts. In these studies different populations of patients are examined. In this way it is possible to observe the influence of variables such as for example, sex or diagnosis (Parra et al., 1988). Sometimes it is useful to keep separate text collections for special studies such as studies of Balint-Groups (Rosin, 1989), the linguistic behavior of doctors and patients during the ward-rounds (Westphal & Köhle, 1982), or the linguistic exchange in family therapies (Brunner et al., 1984).

The texts that correspond to the main goals of the ULM TEXTBANK are sampled as potential users come along. Meanwhile the archive contains, besides several completely available short therapies, also extensive samples on four psychoanalytical treatments. The initial interview corpus consists of several hundred different interviews and is balanced in view of the sex of the patient and that of the therapist respectively; and further in the view of the diagnostic differentiation, neurosis, that is psychosomatic disorder. The kinds of texts that are found in the TEXTBANK also determine the goals, questions and scientific interests of the

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[4] We extent our thanks to our many colleagues who have given us their trust and cooperation

other supporting facilities. The creation of such a publicly available research basis is likewise useful for clinical education and supervision.

At present about two thirds of the stock of the ULM TEXTBANK dates from investigations we have performed in Ulm itself. The other texts were gained as a result of scientific contacts and joint research projects in facilities outside of Ulm. In most cases these texts were handed over with the agreement to be utilized by other users as well. Many users are psychotherapists themselves, the other users predominantly belong to the fields of linguistics and social sciences. Presently there are contacts to about thirty institutes in Germany, four in the United States of America, two in Sweden, two in Switzerland and one in Austria.

Altogether the electronically stored texts comprise 10 Mill of words generating a basic vocabulary of 180,000 different German words. Thus the ULM TEXTBANK can also provide statements on the frequency of words in spoken German such as Dahl (1979) has shown with the "Word frequencies of spoken American English," solely relying on his database of Mrs. C.

Questions concerning the degree of representativeness of the collected materials are rather difficult to answer. We tried to keep an eye to include a variety of therapists, to include different diagnostic categories, and to get hold of shorter and longer treatments. Still, the psychoanalytic corpus in Ulm can be viewed as representative only for specific questions. The table 6.1 provides an overview of the material at the end of the year 2006.

Instruments

Departing from a semiotic view of language, as can be traced back to Peirce the founder of semiotics, and its further development by Morris, language is understood as a system of symbols whose structure is ascertained through rules concerning the relation between form and content.

Correspondingly it is possible to distinguish between the following text measures:

a)   formal

b)   grammatical and

c)   content

Each of these measuring methods can be differentiated further in view of focusing on an individual speaker or on the text as a whole, as a dialogue. Therefore, one can speak of monadic or dyadic measurement values. Further, it can be differentiated according to the kind of measurement values. Well known are the simple measurements of the frequency of

appearance of tokens, which are the basis for proportional data and their distribution. Moreover, one should heed that some of the formal measures requires knowledge of content; for example, the denotative meaning of a word.

The formal measurements can generally be generated in a very simple way. In computer based approaches, simply the ability of segmenting of symbol-sequences (letters, digits and special characters) concerning words and punctuation can be examined. The effort for programming is comparatively small; recoding or pre-coding is not necessary. Formal measurements that are available encompass:

- Text size (Tokens)

- Vocabulary (Types)

- Type-Token-Ratio

- Redundancy and

- Change of speaker in family- and group conversations.

The simplest and most elementary measurement is the number of words spoken by the therapist and the patient. This will be illustrated in chap. 6.3 using the example of the treatment of Amalia X.

Redundancy is a text measure that derives from information theory. Spence (1968) suggested that redundancy would increase during psychodynamic treatment without providing an empirical demonstration. Thus we confirmed one of his hypotheses, namely that the redundancy of the patient (frequent repetition of words) during the treatment of the patient Christian Y increased stepwise. The values of the analyst however, remained constant (Kächele and Mergenthaler, 1984)

Grammatical measures demand linguistic knowledge about the examined language, for example, about the German grammar. The programming and coding effort for computer-based procedures for such measures yet is quite considerable. Until today many questions cannot be performed completely automatically. An example is the lemmatization that is the automatic back-tracing of an inflected word form, to its basic form, which today, depending on the kind of text, has a degree of effect between 50 and 95%. Psychotherapeutic conversation which displays many syntactic deviations (for example, incomplete words and phrases), is typical for spontaneously spoken language and therefore ranges in the lower area. Corresponding, there are few computer-based analyses of psychotherapeutic texts that are based on grammatical measurements (Mergenthaler & Pokorny, 1989). The ULM TEXTBANK provides the following measures:

- Distribution of word types

-       Diminution and comparison and

-       Interjection

The connection between the choice of a type of word and the semantic class to which it belongs was already shown by Busemann in 1925 in an examination of child language. He spoke of an "active" and "quantitative" style in relation to verbs, respectively to adjectives. He furthermore showed that these stylistic differences are only minimally dependent on the topic of the spoken word and should rather be seen as being personality related. By a computer-based approach, Mergenthaler and Kächele (1985) analyzed a psychoanalytical session of Amalia X and demonstrated that the choice of the type of word definitely depends on the content of the report. However, this micro-analytical view does not exclude the possibility that, viewed by a macro-level, variables of the personality, as they are described by Busemann, can have an influence.

The role of personal pronouns for the structuring of self and object relationships in spoken language was analyzed by Schaumburg (1980) on the four extensively recorded psychoanalytic cases of the ULM TEXTBANK.

Measures of content have been 'types of anxiety' or 'primary/secondary' processes. Measures of content demand additional detailed expertise in terms of the referential content: what concept does a word stand for? Computer based procedures can, in this case, only deliver approximate results and are limited in the frame of narrowly sketched working-models. Convincing examples have been delivered by Dahl´s analysis of working and resistance sessions in the case of Mrs C (Reynes et al., 1984) or Bucci (1997b) description of patterns of Mrs. Cs discourse in "good" and "troubled" hours. Based on a German adaptation of the Harvard III-Psychosocial-Dictionary, Kächele (1976) could demonstrate that linear combinations of content categories and complex clinical concepts, such as positive and negative transference constellations in connection with selected anxiety topics, could be predicted. His results are based on a single case study of the patient Christian Y, in a sample of 55 sessions; correlations between the clinical concepts and the Harvard-III-Dictionary-Categories were amazingly high figuring between .77 and .91.

Large amounts of text, but also selected segments from treatment protocols, can thus be examined with the help of computer based text analysis as a tool in psychoanalytical process research. This will be illustrated in the following contributions.

These approaches however demand that the available methods are further developed; that basic research is furthered and newer techniques of related scientific disciplines, such as informatics and linguistics, are continuously implemented.

Requirements

In order to include a text into the TEXTBANK it is necessary to remove personal names, names of location and otherwise personal features using cryptographic procedures or even to replace them by pseudonyms to keep the text more readable. These personal data are stored on computers, that are exclusively at the disposal to the ULM TEXTBANK management staff. This separate data storing, as well as extensive control mechanisms, protect the ULM TEXTBANK extensively against misuse. The personal of the TEXTBANK is obligated to abide by the rules of the government controlled data protection regulations.

New research fields and directions

Further methodological progress can only be reached by overcoming the weak points of present research techniques. This begins with the process of collecting data, which is still tied to laborious transcript writing; however, in the meantime this can be conducted more efficiently and reliably because of the development of standards (Mergenthaler & Stinson, 1992). In the meantime further steps of qualitative and quantitative text handling have been essentially improved through multimedia approaches by which very comfortable forms of tools are available for archiving, retrieval, analysing and attributing of texts.

The ULM TEXTBANK began in the eighties as a "big science" enterprise in the mainframe computer world. The successful evolution of the PC provides that text analysis systems are by now established in the daily routine of the scientist and offer themselves for defined analyses. However, it remains desirable that individual research groups push ahead for further development. An example for this is the software CM that allows to measure features of the Therapeutic Cycle Model (Mergenthaler 1996)[5]. CM is a text analyzing tool that produces, for a text transcript, a graphical representation of the emotional and cognitive processes taking place during the session (see also section 6.6).

The relation to other research programs

The services of the ULM TEXTBANK are available for other scientific institutes for a small fee. Fees are asked particularly for work intensive tasks such as the transcribing of texts of tape-recorded conversations as well as for material. However, it is expected that texts that find their way into the TEXTBANK in this way are also available for other scientists in the

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[5] for technical details go to: http://inf.medizin.uni-ulm.de.

future. In view of the material that is being handed out by the TEXTBANK a copy of the report or the publication made with the help of this material should be given in return. Thereby, in addition to the texts, a growing stock of knowledge by various scientific disciplines about the texts can be stored and made available for others. The ULM TEXTBANK is open to all researchers who want to store their texts there. The possibility of routine or specialized text analyses, the simple type of text management or the possibilities for multiple prints are reason enough to utilize these services.

As a final remark there remains, due to recent laws concerning data protection, only text material can be admitted to the TEXTBANK or borrowed from it if it is factually anonymous; so that there is no indication as to the identity of the participating speakers. This is often difficult to do without changing the content or partially even distorting it. When dealing with older material another difficulty arises; the law does not allow asking the patient for consent at a later time for further questions or for the handling by another research team. The emphasis of the ULM TEXTBANK therefore lies now rather in the consulting and cooperation with interested scientists of various disciplines and in the work with material in which the parameters of the recent valid data protection are given. Table 6.1 reflects in its overview, the stock of the ULM TEXTBANK prior to the last decisive change of the data protection law (federal and state).

Typ	Available as Sessions	No. of
1	Consultation:	
	Transcript, Audio & Video	4
	Audio	1
	Video	1
2	Short-Term-Therapy:	
	Transcript, Audio	153
	Transcript, Audio & Video	17
	Transcript only	2
	Audio	584
	Video	314
	No Information	5
3	Analytical Psychotherapy:	
	Transcript, Audio	27
	Transcript, Video	19
	Transcript only	91
	Audio	1484
	No Information	14
4	Psychoanalyses:	
	Transcript, Audio	1023
	Transkript only	214
	Audio	5662
	Video	13
	No Information	58
5	Therapy of Couples:	
	Transcript only	2
	Audio	37
6	Family Therapy:	
	Transcript, Audio	31
	Transcript only	28
	Audio	11
7	Group Therapy:	
	Transscript only	26
	Audio	140
	Video	21
8	Supportive Psychotherapy:	
	Transkript, Audio	1
9	Group Work:	
	Transcript only	3

10	Client-Centered Therapy:	
	Video	3
11	Behavioral Therapy:	
	Transcript, Audio	6
	Audio	32
	Video	1
12	Initial Interview:	
	Transcript, Audio	127
	Transcript, Audio & Video	23
	Transcript, Video	3
	Transcript only	232
	Audio	180
	Audio & Video	19
	Video	73
	No Information	8
13	Initial Interview Report	
	Text, Audio	8
	Text	365
14	Report of Psychotherapy Session	
	Text	19
	Audio	57
15	Report of Psychoanalysis Session	
	Text, Audio	7
	Text	153
	Audio	163
16	Lectures General	
	Audio	14
	No Information	3
18	Balint-Group	
	Transcript only	53
	Audio	89
	No Information	3
19	Gestalt therapy	
	Transcript only	46
	Audio	2
20	Dreams	
	Transcript, Audio	36
	Transcript only	91
22	Psychodiagnostics	
	Transcript, Audio	128

	Transcript only	104
	Audio	40
23	Follow-up Interview	
	Transcript, Audio	41
	Transcript only	15
	Audio	7
	Video	7
24	TAT (Thematic Apperception Test)	
	Transcript only	183
25	Language Sample	
	Transcript only	74
26	Genetic Consultation	
	Transcript only	37
28	HIT (Holzmann-Inkblot-Test)	
	Text	60
29	Psychotherapy Session Report	
	Text	19
32	Cognitive Behavioral Therapy	
	Transcript, Audio	20
	Audio	19
33	Supervision	
	Transcript, Audio	16
	Audio	5
34	Psychiatric Treatment	
	Transcript only	24
36	Family Interview	
	Transcript, Audio	2
	Transcript only	47
37	Interactional Psychotherapy	
	Transcript, Video	28
	Transcript only	1
38	Half Standardized Interview	
	Transcript, Audio	21
	Transcript only	5
	Audio	44

Table 6.1 The Stock of the Ulm Textbank

(Overview of text units December 31st 2002)

VERBAL ACTIVITY IN THE PSYCHOANALYTIC DIALOGUE[6]

Therapeutic dialogues

In his paper on the "Question of Lay Analysis" Freud characterizes the psychoanalytic dialogue in the following way: "Nothing takes place between them except that they talk to each other" (Freud, 1926e, p.187). The dialogic situation that constitutes the psychoanalytic treatment, is not as specific as it often is portrayed. It may be useful to ask, whether the psychoanalytic dialogue is clearly distinguished from other, philosophical or literary forms of dialogue, how it can be distinguished from every day dialogues, and how it differs from the dialogues of other forms of psychotherapy (Streeck, 2004).

We may start by stating that at first the patient is invited to talk, to freely associate. At a later point always uncertain for the patient in time the analyst may come in and add his points of view. From the first opinion poll, that Glover and Brierley (1940) performed among the members of the British Society, we learn that the most frequent question of younger colleagues addressing the more experienced were not so much concerned with criteria of interpretation, but were directed on the issue of quantity, shape and timing of the analyst´s talk (Glover, 1955b, p. 269). The question: do you tend to talk little or more during a session" lead to the findings that the majority of analysts rather tended to fewer interpretative activity than talking too much (p. 274). However the cliché that the analyst only uses interpretations never has done justice to his discursive activities. Simple questions, confrontations, clarifications and even supportive comments belong to his technical armamentarium. The most common feature seems to be a certain asymmetry of the dialogue that reflects the different tasks of patient and analyst. Patients react to this constitutional asymmetry of the psychoanalytic situation: "The patient may respond with various forms of explicit or veiled anger to the initial lack of verbal response" (Shapiro, 2002, p. 206). How the analyst can help him or her, is crucial in the warming-up phase of analysis. And the longer the analysis runs "even the most monological of analysts become more of a participant" writes Shapiro with a sober view on the real world (p. 208). There are number of formal features that characterize dialogue – like turn taking, topic maintenance, gestures, mimesis and even kinetics and in psychoanalytic dialogues many still await explorative studies (Streeck, 2004). We first

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[6] Horst Kächele & Erhard Mergenthaler; adapted from Kächele (1983b).

decided to study the most elementary of all issues: to talk or not to talk – that was the question.

How much talking Amalia X and her analyst do?

As the dialogic situation is placed into a more or less fixed frame of temporal limitation one has to take into account a bilateral dependency. Except from short periods of time either one of the two participants is talking or both are silent (Kächele, 1983b). Neglecting the usually small amount of simultaneous talking it has been worth to study the distribution of speech and silence activity in analytic dyads.

Extensive empirical data on verbal activity levels in such therapeutic encounters are virtually absent. There are some opinions saying that the relationship of verbal activity of patient to analyst is approximately 4:1 (Garduk and Haggard, 1972). We have recorded and transcribed large samples of four psychoanalytic treatments, two each from two analysts.

	Patient	Analyst	ratio P : A	N sessions
Amalia X	2.921,2	780,3	3,7 : 1	113
Christian Y	1.353,7	1.200,4	1,1 : 1	110
Franziska X	2.483,6	817,8	3,0 : 1	93
Gustav Y	3.595,0	718,0	5,0 : 1	50

Table 6.2 Verbal Activity in 4 Psychoanalytic Treatments: Mean number of words per session

Patient Amalia X and Christian Y were treated by an experienced analyst (H. Thomä); Patient Franziska X and patient Gustav Y by a candidate (H. Kächele). The table shows that in three of the four treatments the ratio P:A is between 3.0:1 up to 5.0:1. The analytic treatment of Christan Y displays a rather unusual ratio of 1.1:1; these figures account for the fact that handling of this chronic silent patient caused the analyst to be verbally involved much more than one would expect (see the clinical account of this patient in Thomä & Kächele, 1994b). However this finding is only characteristic for the first half of this long analytic treatment; after about 500 sessions the patient's average amount of speech

reached that of the three other patients and the analyst could return to his usual level of verbal activity (Kächele, 1983b).

Regarding the verbal exchange processes in the course of the analysis of the patient Amalia X one can see an impressive difference in degree of the analyst´s verbal activity level and that of the patient. Of her treatment, after 14 preparatory sessions, 517 sessions have been tape-recorded and by now more than 50% of all recorded sessions have been transcribed. One fifth of all recorded sessions have been included in this study representing an adequate sample of all (recorded) sessions over time of treatment.

[Insert Figure 6x1 about here]

Figure 6.1 The development of verbal activity along the course of treatment

Across the 113 sessions of the time-related sample the patient displays a broad spectrum of verbal activity. She takes part in the analytic dialogue in quite variable ways. Sometimes she talks a lot and at other times she is quite silent. The analyst however shows a narrow band of verbal activity moving around of 1/3 of the patient's verbal activity. Compared to our other cases Amalia X starts at a medium level - and moves down in verbal activity until midpoint of the treatment. Then her verbal activity reaches a peak towards the end (period XX: sessions 476-480). The analyst's activity shows a peak around the sessions of period VIII (176-180) in the first third of the treatment; then he slowly but steadily reduces his amount of verbal participation in the dialogue.

Discussion

One might ask whether this course of verbal exchange represents a typical pattern. To be fair we do not know. We know, however, that there is no significant statistical relationship between the degree of verbal activity of the two participants; this means each of them in each session regulated his or her verbal activity on their own. We surmise that this independence of talking participation should be expected in a well running psychoanalytic treatment where each of both participants partially has his or her own agenda to follow. Or would it be more appropriate to characterize this feature of non-significant verbal activity relations a co-produced agenda? Measuring verbal activity is but an indirect measure of the degree of silence which is a shared discursive activity. It is only the recommendation of "free association" that has been conveyed to the patient in the beginning, that one usually attributes

silence to the responsibility of the patient. The open space of silent moments in the analytic session is regarded as an invitation to the patient to use this space or not to use it. In everyday communication silence can be the speaker's silence, it can be the listener's silence, and only rarely it can be both. Usually participants in everyday talk know who's silence it is, and they conduct their interaction on the basis of this knowledge. Therefore the study of verbal exchange raises the issue of how much everyday communicative activity and how much of analytic communicative activity is useful for a patient at any moment during the analytic treatment.

THE EMOTIONAL VOCABULARY[7]

Vocabulary Analyses

Words, nothing but words; how can we produce change just with words? This question is at the center of the psychoanalytic treatment technique because, beyond all of the rules concerning the setting, significant meaning is given to the *Gestalt* of the psychoanalytical dialogue. Even if the verbalization in the psychoanalytical situation does not encompass the whole interaction, we can again refer to Freud's comment from the "Introductory Lectures" as a motto, since the exchange of thoughts and feelings through verbal action plays a critical role in psychoanalysis. The Argentine psychoanalyst Liberman has suggested in a three volume work *"Linguistica, Interaccion Comunicativa y Proceso Psicoanalitico"* (1970) the linguistic foundation of psychoanalytic action. North-American authors have connected "language structure and psychoanalysis" (Shapiro, 1988) demonstrating how the representational world needs to be translated into the linguistic idiom (Shapiro, 1999). Feelings have to be reformatted into words in the psychoanalytic dialogue which according to Shapiro amounts to a semiotic transformation (p. 108). Empirical studies on the role of giving words to affective processes on the basis of transcripts, highlight the fine-grained understanding of therapeutic operations in the dialogues of psychoanalysis and psychotherapy (Kemmler et al., 1991).

The vocabulary of patients was an early topic of an, at first, psychopathologic diagnostic orientated research (Johnson, 1944). Mowrer (1953b) could already show that linguistic variability increases in manifold ways with the success of the psychotherapy. Linguistic variability is being calculated in that one divides the number of the different words (types) by the whole number of the words in a text (token). The relation of these two indices is generally viewed as an indicator of the diversification of a text (Jaffe, 1958). However, this measure is not independent from the proportion of the text and so Herdan (1966) suggested using a logarithmic Type-Token Ratio (TTR). These early studies on the TTR generated enthusiasm that did not hold up. What Jaffe (1958) described as "Language of the Dyad," could not be replicated: Schaumburg (1980) analyzed the interactive patterns of personal pronouns in four psychoanalytic treatments and could not confirm earlier findings about interpersonal tracking phenomena. Thus the once promising lead may have been a function

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[7] Michael Hölzer, Dan Pokorny, Nicola Scheytt & Horst Kächele

of the uniqueness of his sample or even worse may have been just an artifact. The relevant literature for a lexical usage as an expression of psychopathology was first summarized by Vetter (1969).

In the same vein the general notion, measured in whatever way, that a greater linguistic variety could be a sign of a working through, as Spence (1969) argued, has not been substantiated up to now. We have ourselves performed a study concerning the aspect of formal redundancies; however not for the patient Amalia X. In this study we have identified in the text of the patient Christian Y — not in the case of the analyst — that indeed a phase-like course of redundancies could be linked to the process of working-through (Kächele & Mergenthaler, 1984).

Vocabulary analyses, as they have been detailed in the field of lexical statistics for a long time, were rarely considered in psychotherapeutic research to be a worthwhile effort; in psychoanalytic research they are absent. Studies concerning the connection of expressivity and form of neurosis dominated the first relevant studies (Lorenz, 1953[8]). Mahl's (1959, 1961) studies about paraverbal aspects of the spoken language received lively attention for some time. However, lexicographic statistics were bypassed last not least due to the immense manual labor work necessary. In the late sixties the capacities of computers to handle not only numbers, but also alphanumeric data, language, was discovered in various fields in the humanities (Gerbner et al., 1969). Dahl, Spence, Howard and Iker have been the forerunners to apply the new technology in psychotherapy research. At the first European conference of SPR in 1981 we were able to present our own developments in "computer-aided analysis of psycho¬therapeutic discourse" (Kächele and Mergenthaler, 1983).

If one would examine the vocabulary of an analyst: what would we expect? Would we have an assimilation of the linguistic world of the patient? Would we expect that the adherence to a certain school of psychoanalysis expresses itself in the vocabulary and that after longer time of professional experience of an analyst one would find a freer vocabulary independent of her or his theoretical orientation? One thing is certain, as Laffal (1967) has already shown: the effect of situational factors on the linguistic world is considerable. Therefore the question of which characteristics and dimensions of the vocabulary should be examined is not trivial.

Even before the establishment of the machine supported content analysis in Ulm (Kächele, 1976), we demonstrated the change of the topic-related classes of nouns as a

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[8] Many years later this author discussed „Language and a woman's place" in society (Lorenz and Cobb, 1975).

process characteristic in a single case study (Kächele et al., 1975). Later, with the establishment of the ULM TEXTBANK and its methodological tools, we could embark in more systematic vocabulary analyses.

A first vocabulary analysis of transcripts from the Penn Psychotherapy Project (Luborsky et al., 1980) demonstrated that "successful therapy" correlated indeed significantly with the simple vocabulary measurements such as the "private" (i.e. words used only by one of the speakers) and the "common" vocabulary (i.e. words used by both speakers). There were indications that in successful treatments the therapists adapted to the linguistic behavior of their patients, on the level of the vocabulary, to a greater degree than "non-successful" therapists do. The analysis of the various sub-vocabularies examined indicated that the adaptive performance of the therapists in respect to the affective part of the vocabulary was particularly prominent. Words of patients, which express feelings and moods, seemed to be systematically responded by successful therapists (Hölzer et al., 1996). This led to the development of an instrument for the systematic analysis of the affective vocabulary (Hölzer et al., 1997).

By investigating affective vocabularies it became possible to grasp the linguistic exchange of patients and analysts in order to examine it directly with respect to the creation of a shared linguistic world. The following report gives a first impression of the possibilities of this approach.

Affective Dictionary Ulm (ADU)

The authors´ construction of the Affective Dictionary (Hölzer et al., 1997) had the goal to use a classification schema of emotions that would be close to analytical thinking and at the same time, thanks to a simple classification algorithm, also of practical use in empirical research. The first steps were based on de Rivera's thoughts who proposed a 6-dimensional schema with 64 theoretically possible categories. De Rivera's schema was theoretically comprehensive, but the high number of categories prevented its practical application decisively. Dahl & Stengel (1978) simplified the construction to a 3-dimensional schema with 8 categories. The classification procedure takes place according to Dahl et al. (1992) in four steps:

- Is the given word principally of emotional nature or not?
- Does the emotional word express a positive or negative emotion?
- Does the emotional concept describe a feeling that refers to a relation (and a wish characteristic for this particular relation) of the subject to an object ("it"

or also object-emotion, prototypically: anger or affection), or does it describe an emotional condition of the subject without a direct object relation ("me" or self-emotion, which are seen as beliefs in the status of wish fulfillment, prototypically: contentment or depression)?

- In the case of the object emotions another dimensional direction is estimated: from the subject acting *toward* the object ("to" 1=Love; 5=rage), or the other way around: *from* the object to the subject ("from" 2=enthusiasm; 6=fear). In the self-emotions *passive* (3=contentment; 7=depressivity) and *active* emotions (4=joy; 8=anxiety) are differentiated.

Not only the first dimension has central meaning differentiate positive and negative; but especially also the second dimension (object/self) that grasps a psychoanalytic meaningful quality of the emotions: for example, in negative emotions, the negative self emotions (as, for example, anxiety and depression) are being differentiated from object emotions (as, for example, rage and fear). The aim of the analytic therapeutic work is generally not to replace step by step the negative by the positive emotions, but to transform "complaints" (that is negative self-emotions such as depressivity or anxiety) into "accuses" (rage, fear); that is to support a patient in becoming conscious of repressed attachment-regulating feelings through corresponding interpretations. Clinically valid subcategories were added later (Hölzer, 1996) to the four self-emotions: relief, pride, shame and guilt. With the studies using the Affective Dictionary Ulm (ADU) one now has the choice between the basic system with 8, or an extended system with 12 categories. The following figure 6.2 illustrates the basic 8 categories of the ADU (and in addition frequently used entries of Amalia X):

[Insert Figure 6x2 about here]

Figure 6.2. This schema shows the eight main emotion categories based on the independent decisions on the three dimensions - each with three emotion labels empirically shown to be prototypes of the category (Dahl and Stengel, 1978). In brackets either generic consummatory acts (it emotions) that fulfill implicit wishes or generic beliefs in the status of wish-fulfillment (me emotions) are depicted (Hölzer and Dahl, 1996).

On the basis of this theoretical classification procedure a German and an English version of the dictionary were created; an encompassing list of all words with the corresponding affective connotations of the 8 (or 12) categories was made. This classification could not be conducted mechanically, since the meaning of the words strongly depends on the context, which however can be examined only empirically. This was possible in a row series of studies on the basis of the available psychotherapy verbatim protocols texts in the ULM TEXTBANK and by the work of many Graduate and Doctorate Students. Presently the ADU encompasses contains 2046 affective words in the basic grammatical form that, with the help of a linguistic tool, can be expanded to 26823 potential complete forms (Pokorny, 2000). In the analysis of the verbatim protocols of therapy sessions, the program processes, word by word, but free of context thereby inevitably leading to some faulty evaluations. A greater exactness could therefore only be achieved by an additional manual evaluation that requires a considerable effort.

Among the successful studies made with the ADU, the above mentioned investigation of the transcripts, stemming from the Penn-Psychotherapy-Project, is of particular relevance. In outpatient analytically oriented therapies Luborsky et al. (1988) distinguished, by means of an differentiated outcome assessment, "successful" from "not successful" psychotherapies. Later the "helping alliance" was extracted from the results of this study as a predictor for therapy success. Not only could the extensive verbatim protocols of this study made available to the ULM TEXTBANK, but also the Affective Dictionary Ulm could, with the help of native speakers, be transformed from the German version into an English one. The study of the Penn-Transcripts in two consecutive steps brought forth the expected results: successful therapies were associated with the number of emotion words and the emphasis of negative object emotions at the end of the therapy correlated particularly high with the good outcome (Hölzer et al., 1997).

Analysis of the Text-Corpus of Amalia X: Qualitative Analysis by Examples

The following examples portray the working mode of the ADU. It becomes apparent that many feelings and moods are expressed metaphorically, in the phrase context respectively; and they are not necessarily coded by an individual word. Also false-positive coding is possible as in example B, in which the words *"am liebsten"* (liking the most) should indicate an acting preference, but not an actual emotion. Otherwise the examples show a rather high rate of correctness; most emotive words are automatically placed in the right categories. It is more difficult, yet in the aim of our hypotheses, to pursue therapeutic strategies by examples, or prove them through them, respectively.

Example A derives from the hour in which the therapist most often uses emotion words from category 1 ("love"), which is in any event the category in which the analyst significantly differentiates from the patient. This example makes it clear in a typical way not only how the therapist takes up an affective term of the patient and verbalizes it, but also how the therapist puts into relation the "loving daughter" immediately to "love in return" and in this case especially to the absence of this "love in return," (i.e. unrequited love, which would be a negative object emotion). There are many similar examples for this transformation process found in this analysis.

Example A: the Analyst's work with the Category 1 — Love (Session 11)

P: I still did want to say something about the father. Yesterday I said that I would have liked that I am a **loving (1)** daughter. That is obviously two sided; I naturally would also have a normal relationship from the inside.

A: A **loving (1)** father. You would like to be a **loving (1)** daughter, in order to also…

…

A: Yes, that is also the origin of the tears, hm.

…

A: Yes respectively, there was in earlier times one, as I believe you have described, that he has favored her which however obviously in a way that did not correspond to what looks to you like **love (1), attention (1) and affection (1).**

…

A: Yes, it is such a trying once and again, to be a **loving (1)** daughter, to then go empty handed.

…

A: You have said now that you are also searching for something then. You go home or so, or travel with the parents, so as if there you have the only chance as a **loving (1)** daughter to receive still some **love in return (1)**, there and nowhere else. I am exaggerating now.

…

A: Well on the other hand you said before, you would not search for them because it is so **frustrating (7)** to be a **loving (1)** daughter without finding any **love in return (1)** and now one could then say, so, instead you have then nonetheless the mother who cares for you, who is nice then, who also **spoils (2)** you somewhat.

…

A: That then however means, not only to renounce from him on the **hope (4)**, respectively; that they not realistic, as you are describing, that also he could be different sometimes, for this is an old **longing (1)** that did not receive any **love in return (1)**, but instead then also on the mother, so, that is a… that would then mean renouncing on all tracks.

Example B begins with the above mentioned faulty positive coding ("… would have liked the most to kill him"). Ironically the patient expresses with this, in the beginning of the session, the crass opposite of the coding, grasped by the ADU. The remaining coding is however correct: the leading theme of the whole hour was on how to handle hatred. In this sense it concerns a typical sequence, since the therapist takes almost every chance in the course of the further therapy to take up strong feelings on the part of the patient (here in particularly those from the category 5 — rage) and if possible to also relate them onto himself in order to enable a working-through of impulses that have so far been repressed..

Example B: category 5 — rage on the therapist (session 172)

A: Yes? (Very, very long pause). Is something special?

P: Hm. (Very long pause) I do not know, maybe.

A: Hmhm.

P: I believe I would have **liked (1)** to kill you yesterday.

A: Mh. (Very long pause) at then end, ah, of the session, or?

P: Mh.

A: Mh.

P: Afterward.

A: As you left, or?

P: Yes. (Very long pause).

…

P: I do not know whether I am **angry (5)**; I do not believe that I am **angry (5)**.
        (…) I know, for example, exactly why it touches you if I would be **angry (5)**.

A: Yes, maybe that, ah, also the **hatred (5)**, ah, has to do with, that so going
        according to the clock.

… … …

P: What do I mean?

A: **Hatred (5)**.

P: Yes, something as that (pause 0:10). There are two levels. You are talking to
        me as a therapist, but you are at the same time also a certain human; and…

A: Mh.

P: I am not quite sure toward whom the **hatred (5)** is directed.

A: Yes, toward the one; it is the **hatred (5)** toward the one who has the **power
        (4)**, has **power (4)**.

P: No; I rather believe toward you yourself.

…

P: I believe that I know this very well, how that is from secondhand.

A: Mh.

P: That is.

A: Yes, second hand, that means I can, you mean, I can talk, talk well.

P: Mh.

A: Mh. He can say whatever he wants.

P: Yes, so; and from this also the **hatred (5)** stems.

A: Mh.

P: Or the **envy (5)** or; I also do not know (pause 2:10).

        Example C: three hours later the line of interpretation and the recognizable strategy of
the transformation of negative self-emotions into negative object-emotions proves successful.
First the patient speaks about depression and helplessness (here by the example of a movie as
a departing point of her associations) so, at the end of the sequence (however not anymore

recorded by the ADU…) she finds the courage for open critique — even an ambush — against the analyst (category 5: "Do you even listen?").

Example C: category 7 — Depression and Enduring of Helplessness (Session 175)

P: Did you perhaps see the movie about these convicts; about prisoners for life, yesterday?

A: No.

P: No, hm. (pause 0:15).

A: That is **moving (2)** you and still **moves (2)**.

P: Yes, it was very **depressing (7)**. (…) **horribly (6) depressing (7)**; (…) so **gruesome (6)**, so (pause) the phrase about **helplessness (7)** came back to my mind; that one would have to endure it, which is unthinkable. (…) there one would *lieber* (**rather like 1**) do something and then I do not know what and then I feel really **helpless (7)**.

…

P: That there are humans who are there for enduring **helplessness (7)** and, and the others, ah, they tralala, have it well.

A: Yes, that, in any event. The phrase was generalized by you, not so as if I would have meant it.

P: Probably.

A: That one has to do in any case; that is wonderful.

P: Ah no; oh no, wait, no; I actually wanted to say to you today.

A: Mh.

P: I very often have the feeling, you demand from me, demand is said a bit **strongly (4)** now, rather change and do something and, and.

A: Mh.

P: And, yes, mainly (not understandable: talks very fast) and I also wanted to say something against this; does one always, always, always have to change and, and, yes, I immediately say in which context I mean it, completely. There actually the alternative enduring of **helplessness (7)** was not so convenient for me; but let us say into this direction that one occasionally also waits or really endures something. I certainly do not reject this and I also did not want to generalize it like this, but yesterday and today, as I read something like that in

the newspaper (not understandable) there it appeared to me when there would be human groups who could do what they wanted; they are somehow for this, ah, I would have almost said, damned to endure **helplessness (7)** and the others are **active (4)** and with **success (4)** or also **passive (7)** with **success (4)**. That is really generalized, I know; and that I have also made it to be this way. That I also know (pause 0:10). And sent them into the other camp and that I have also done; into the camp of the **successful ones (4)** (pause 0:45). Now you have not listened to me at all (pause 0:15).

A: At which part not?

P: Yes, departing from the last phrase that you have spoken.

Example D should not so much depict the assumed therapeutic strategies of the verbalization or show the interpreting transformation itself respectively; but rather show the resulting emotional manifoldness with which the patient, in an advanced phase of her analysis, describes attachment episodes. In the terms of the Dual Code Theory of Bucci (1997a), the patient deepened her emotional experience; she describes particularly on the level of emotion, many-facetted and vivid, her inner experiences. From our view such episodes, at the end of therapies, speak for therapeutic success in the sense of a generalized emotional blooming; however not in the sense of a "superficial" accumulation of positive self-emotions.

Example D: Relationship-reflections at the End of the Therapy (Session 502)

P: But otherwise I will have no more material; if I do not dream and if my friend *D is no more there ; although he still exists. He still exists more than ever. He still covers everything. It is **horrible (6)** and I cannot be **angry (5)** at him. Sometimes I try in a **cramping (8)** manner to add up all his **bad (7)** things and it has no effect. On the contrary; it is such a stage where I, if I would not find it **embarrassing (8)** or almost sentimental, I could write a letter every day. Ah; I could write ten letters, not only one. But a lot is keeping me from this. Mostly, the awareness that this will **bother (6)** him and that it is altogether not true what I write. And then it is **overwhelmingly (2)** true again; that is completely **crazy (8)**. But that is.

(…)

P:	There are such humans who, I remember a primeval forest scene, **horrible (6)**. We walked for an hour, a good hour through the fog. Through thick forests and with really roaring stags; it was almost **uncanny (6)**. Nothing came except this night and this forest and it was miles away; walked completely **lonely (7)** there. And we walked together, but it was absolutely the distance. We also had not talked, but D. is, yes, like a little boy who is on his sand pile and builds his castles and bakes his cakes and does not need anyone for this; because he does not need anyone there. {Grasp}. But in, he is in everything very **lonely (7)**; in grasping and with the whole way in which he lives. He once had such a breakdown of perception; that is **frightening (6)**. There he also looks at you; there you think that he had fallen onto the world for the first time. He is an *single player* (i.e. one that plays alone). I do not know if one can play along with him, if there are bridges where one plays along. Actually, if one looks at him; that is mostly such a tragic look or such a grandiose look, or. I do not remember a, a long looking or **tender (1)** or so. It always was very, somehow very **hard (5)**; must have also lived as a child very locked up.

A:	Although he is an *single player* (i.e. one that plays alone), ah, as you say, he could also awake very much playing passion, ah, within you.

P:	Yes all. However, this has nothing to do with him, but only with myself.

A:	Yes.

P:	Yes, yes, all. Yes, oh. That is the point, at which I never get further; because I assume that the point makes for, ah, the whole **fascination (2)**.

Quantitative Analysis of the Text Corpus

This study was based on 219 (of 517 transcribed) sessions of the analysis of Amalia X. Since the results of our former study with data from the Penn Psychotherapy Project showed the interdependence of the emotional vocabulary of patient and therapist, we assumed that the corresponding emotional vocabularies should also correlate with one another as it would make little sense to bypass the feelings of a patient. Our data analysis also provided evidence, as described above, on a systematic transformation of negative self-emotions into negative object emotions in the course of analytic treatment. Correspondingly hypotheses for the examination of the corpus of Amalia X could be formulated as follows:

Hypotheses:

H1)   The corresponding emotional vocabulary-categories of patient and therapist should quantitatively correlate positively with one another.

H2)   For both speakers there should be a increase of negative object-emotions (particularly in the category "rage") in the course; and with it a corresponding decrease of negative self-emotions, respectively.

The absolute and the relative frequencies of the affective vocabulary (related to the "tokens", that is on the whole amount of words) was calculated and their subcategories, respectively. For both speakers a rate of approximately 1.8% of emotion words in the spoken text was found. The comparison of the realized vocabulary, that is the frequency of their usage (see tabular and graphic) shows a certain correspondence of the word usage, since the distribution of the affective words on the categories are strongly similar to one another. However, it is also not very astonishing that the patient — contrary to the therapist — shows increases in the categories of negative self –emotions and especially in the negative object category "fear" as well. The therapist's emphasis on the category 1 ("love") is discussed further down in the text.

Emotion	Analyst %	Patient %	ES
love	.25	.14	+.56
surprise	.15	.14	+.05
contentment	.10	.08	+.12
joy	.32	.28	+.19
anger	.17	.16	+.08
fear	.26	.32	-.54
depression	.29	.34	-.20
anxiety	.32	.33	-.05
total	1.8	1.78	+.03

T-Test, p twofold:		.05		.01		.001

ES: effect size, *d* according to Cohen

Table 6.3: Comparison of frequency of emotional vocabulary

      (percentage of total vocabulary)

The hypothesis 1, in view of the interdependence of the linguistic expression of emotions with which we assumed a positive correlation of the affective expressions of the patient and therapist on the level of words, could be proven:

N =219 Sessions	P 1 love	P 2 surpris.	P 3 cont.	P 4 joy	P 5 anger	P 6 fear	P 7 depres	P 8 anxie.
A1 love	.35	.11	.05	.08	11	.06	- .05	- .06
A2 surprise	.07	.23	- .10	- .12	- 07	.10	- .28	.04
A3 contentment	.01	.03	.28	- .03	05	.02	- .08	- .02
A4 joy	.16	.06	.04	.33	- 08	.01	.15	- .03
A5 anger	.01	- .07	.15	- .06	39	.03	.05	- .10
A6 fear	- .04	.05	.13	- .04	- 19	.30	- .07	.23
A7 depression	- .02	- .07	.13	- .04	01	.09	.22	.04
A8 anxiety	- .01	.01	.10	- .07	- 09	.15	.01	.33

Spearman-correlation, p onefold		.05		.01		.001

C = emotion category of the ADU:

C1 = love, C2 = surprise, C3 = contentment, C4 = joy,

C5 = anger, C6 = fear, C7 = depression, C 8 = anxiety

Table 6.4: Positive correlations of emotional vocabulary of analyst and patient

Amalia X and her analyst correlate with one another significantly positive in all corresponding categories of the Affective Dictionary. However, it remains open whether this adaptation reflects a particular understanding (and linguistically documented) of in-therapy behavior. It is at least possible that the analyst takes up the affective expressions of his patient and re-verbalizes them. However, it is also possible that Amalia X processes for herself, in a reflecting way, affective focused interventions of her analyst and therefore similarities in the linguistic usage result. One can however assume that it is clinically a commonly created process-like dialog in which both "directions" are integrated.

"Complaints in Accusations"

The Hypothesis 2, with which we assumed an increase of the negative object-emotions and a simultaneous decrease of negative self-emotions, could be partially confirmed. The increase of the negative object emotion "anger" is found in the vocabulary of Amalia X, but not in the vocabulary of the analyst. However, he focuses in the course less on negative self-emotions; in our view, because of a more and more relationship oriented interpretational activity. The fact that the detected correlations are of rather weaker effects, does not speak against the principal truth of the theoretical assumptions; but rather that it concerns the structural change, aspired in the analysis and is therefore a difficult and time consuming process (Hölzer et al. 2007).

N = 219 sessions	C1	C2	C3	C4	C5	C6	C7	C8
Analyst	-.02	-.05	-.11	-.07	.01	-.03	-.18	-.18
Amalie X	.05	.15	-.12	.07	.15	-.17	.04	.03

Spearman-correlation, p twofold		.05		.01		.001

C = emotion category of the ADU. C1 = love, C2 = surprise,

C3 = contentment, C4 = joy, C5 = anger, C6 = fear, C7 = depression, C 8 = anxiety

Table 6.5: Time related development of frequency of negative self – and object emotions of analyst and patient

Coda

In conclusion: it is worthwhile to pay attention on sub-vocabularies; hereby we can particularly emphasize, on the basis of our results in short-term and long-term therapies, the area of the affective vocabulary. This makes intuitive sense for clinical reasons. Krause (1997) claims that there is no relevant psychological disorder that would not also be an affective disorder. Therefore, affect theories in the understanding of the genesis of psychological and psychosomatic developments of symptoms thus rightfully take a prominent place (Stephan & Walter, 2003).

That the ADU delivers only a relatively rough analysis and that the more subtle metaphoric expressions are, to a great extent, not grasped has become clear in the above examples. However, this is not the intention of this method. According to our research policy, such methods should be indicators of the therapeutic process in order that it can later be applied as a screening procedure. If the interest is directed to micro-processes one must examine the text qualitatively for its subtle verbalization of emotions. Dahl et al. (1992) have worked out a manual for this, which connects theory and category schema with the ADU. The study exemplifies Freud´s viewpoint that the therapeutic task consists in the transformation of "complaints" (negative self-emotions) into "accusations" (negative object-emotions). This formula might sound simple; it is our opinion that this transformation significantly correlates with the success of psychoanalytical therapy alas which remains to be shown in a larger sample.

THE CHARACTERISTIC VOCABULARY OF AN ANALYST[9]

Introduction

Discussions about an analyst's official and private theories tend to limit themselves on the process of listening: "The psychoanalyst who knows and uses psychoanalytic theories ….listen to the patient, enriched by an associative context that includes the shared experiences of the entire community of psychoanalysts, past and present, as well as the psychoanalyst's own clinical and personal experience" (Michels, 1999, p. 193). Apart from the various influence on the receiving process that Spence and Lugo (1972) studied in an experimental fashion little is said or written about the impact of an analyst's theories on his way of implementing them by specific vocabulary (Hamilton, 1996). How does this cognitive background influence the analyst's way of talking; how does one transform one's understanding into an intervention. Approaches for elucidating the analyst´s role in creating the uniqueness of the patient-analyst pair (Kantrowitz, 1993) have been rare although the formative influence of the analyst´s feeling and thinking may well be crucial. Is it possible to study the lexical usage of an analyst at work?

Verbal activity is among other aspects constituted by vocabulary. Operational measures for the vocabulary have to distinguish between formal and substantial aspects. The term "vocabulary" refers to the number of different words (types) that are used by a speaker. Measures of types are interesting, since words stand for concepts (and therapy has essentially to do with an exchange of concepts and beliefs, with assimilation of new material and accomodation of previous schemata). So the analyst´s vocabulary at the beginning of the analysis will both shape and reflect the patient´s experiential world. During the analysis its evolution might run parallel or at least partly reflect the conceptual and emotional learning processes that take place (French, 1937).

As we have mentioned above a variety of computer aided methods for the evaluation of psychotherapy process have been suggested during the last decades. Promising in many respects are vocabulary measures that are rarely mentioned explicitly in literature on computer aided strategies in the field of psychotherapy research. Systematic studies of the size of vocabulary of an analyst or of the change of vocabulary during therapy are still lacking partly due to the fact that the computer supported search for linguistic markers as

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[9] Horst Kächele, Michael Hölzer, Erhard Mergenthaler; adapted from Kächele et al (1999)

indicators for therapeutic processes faces a general dilemma: While the rather mechanical way of analyzing data by means of computerized methods paves the way for a host of various procedures, the selection of the variables to be investigated is often restricted to formal criteria lacking functional, that is above all clinical relevance.

Our studies show that the investigation of vocabulary and certain features of vocabularies can well be linked to clinically relevant aspects of process and outcome of psychotherapy. Since psychotherapeutic treatment can well be seen as "the development of a shared language" (Gedo, 1984) it seemed to be a straightforward hypothesis, that exchange processes like those in psychotherapy and psychoanalytic therapy should somehow be reflected in the vocabulary of the speakers involved.

As opposed to verbal activity measures (see above), formal vocabulary measures do not belong to the current battery of psychotherapeutic research tools although they might well help fill the gap between formal and content related approaches. From a research perspective, vocabulary measures defined in terms of types are interesting, because they are easily and objectively obtained. Since words stand for concepts (and therapy has essentially to do with an exchange of concepts and beliefs, with assimilation of new material and accommodation of previous schemata), changes in the vocabulary during treatment might parallel or at least partly reflect such exchange processes.

In a therapeutic dialogue different kinds of vocabulary can be distinguished:

1. The "Private Vocabulary" (PV), that is the set of words (types) that are only used by one of the speakers.

2. The "Intersectional Vocabulary" (IV), the set of words (types) that are used by both patient and therapist.

In this study we examined a third kind: the "Characteristic Vocabulary" of Amalia X's analyst. Since there are many constraints operating in the use of language in actual discourse we focused on a specific interactive hence "characteristic" sub-set of the analyst's vocabulary, that part he is actively implementing within the dialogues not merely following the patient's lead. Here the decision as to whether a certain type belongs to the "Characteristic Vocabulary" is based on frequency of occurrence:

A word has to occur in the text of one speaker significantly more often compared to the text of the other speaker to be incorporated in this "Characteristic Vocabulary". Depending on the chosen level of significance, the magnitude of the "Characteristic Vocabulary" may differ considerably. The characteristic vocabulary does not include words used by just one speaker; these would belong to the realm of the Private Vocabulary.

An analyst's characteristic vocabulary

We identified the analyst's characteristic vocabulary at the beginning of the analysis of patient Amalia X based on 18 sessions. Based on a total of 13311 token we found 1480 types. The analyst's characteristic vocabulary comprised 36 nouns and 80 other words; this is about 10% of his vocabulary. Discussing the results of this study we reproduce the English translation and then the original German word and the frequency of occurrence in brackets. This data analysis used a "lemmatized" version of the text. This means that all inflected words have been reduced to their basic form, for example: The plural form "women/Frauen" has been replaced by the singular form "woman/Frau".

As no surprise the famous "uhm/hm" used by analysts all over the world came out the most frequent and the most characteristic (976). There are any number of words that betray the analyst's so called minor encoding habits like "yes/ja" (678), the dysfluency indicator once studied by George Mahl "ah/äh" (395), "also/auch" (238), "that/dass"(200), "something/etwas" (66), "this/dieser, dieses" (60), "than/als" (58), "uhuh/aha"(31), etc. Analyzing a second set of 18 sessions at the end of the analysis and checking these characteristics again, we did not find much change with these particles; they remain the linguistic fingerprints of any speaker out of conscious control. They are bad, but minor encoding habits. However some of them make for the tedious reading of transcripts. These particles are in no way specific to the analyst's task though they may be used for detective reasons especially when countertransference issues are the focus of an investigation (Dahl et al. 1978).

Nouns as elements of style inform us about the subject of a dialogue, they tell what the two participants were conversing about and how one of them tried to shape it (Kächele et al. 1975). Therefore the characteristic vocabulary of the analyst in terms of his nouns is very telling. In the 18 sessions from the beginning of the analysis we found the following nouns as being highly characteristic ($p \leq 0.01$) for the analyst:

dream (Traum 88)	demand (Anspruch 8)
woman (Frau 31)	madonna (Madonna 8)
theme (Thema 18)	notary (Notar 7)
thought (Gedanke 17)	insecurity (Unsicherheit 7)
question (Frage 16)	seduction (Verführung 7)
anxiety (Angst 16)	comparison (Vergleich 7)
hair (Haar 13)	claim (Forderung 5)
cousin (Cousin 9)	mortification (Kränkung 5)

relief (Entlastung 5)

lawyer (Jurist 4)

spinster (Jungfer 5)

toilet (Klo 4)

tampon (Tampon 5)

uneasiness (Beunruhigung 3)

breakout (Ausbruch 4)

candidate (Prüfling 3)

conviction (Überzeugung 4)

shyness (Scheu 3)

dog (Hund 4)

intensity (Intensität 4)

Ordering the nouns into semantic fields we may distinguish the following:

Technical items: dream theme thought question demand comparison claim conviction

Emotional items: anxiety breakout mortification relief insecurity intensity uneasiness shyness

Sexual/bodily items: woman seduction spinster tampon toilet madonna hair

Topical items: cousin notary dog lawyer

From this tabulation we may infer that the analyst in these first 18 sessions characteristically emphasizes in his interventions four classes of nouns: *Technical nouns* that are part of his task to invite the patient's participation in the special analytic point of view; *emotional nouns* that are part of the analyst's technique to intensify emotions. *The sexual bodily linked nouns* clearly refer to the patient's embarrassing sexual self concept and a few *topical nouns* that are stimulated by the patient's life situation as reported in the first sessions.

To deepen our understanding we next subjected the use of the noun "dream" to a more thorough examination. In the beginning of an analysis the analyst has conveyed to the patient that the analytic dialogue is an unusual dialogue insofar that the analyst may use highlighting certain word as a style of interventions. As the word "dream" was a prominent characteristic part of the analyst's vocabulary compared to the patient we hypothesized that the analyst tried to intensify the patient curiosity about dreams as a special class of reported material.

Hypothetically we assumed that in each of the sessions when the patient reports or speaks about a dream the analyst focuses his verbal activity using the noun "dream" relatively more frequent than the patient. To avoid circularity - our hypothesis is build on the findings from the 18 sessions - we extended the database from the original 18 sessions to include 29 sessions that cover the period from the first hundred sessions. The results confirmed our hypothesis: In 25 out of 29 sessions the analyst uses the noun "dream" more often than the patient, relative to the proportion of his speech activity.

The patient's use of the noun 'dream' has a mean of 0.13% (s = + 0.02) of all words; the analyst's use has a mean of 0.57% (s = + 0.35) The t-test for paired samples proves the significant difference (p ≤ 0.000). The result may be partially explained by the fact that the analyst uses shorter interventions, while the patient details his material.

Based on these findings we assume that in the opening phase of the analysis there is a systematic relationship between the patient talking about dreams and the analyst's efforts to stay close and even sometimes to intensify the work on the reported dream. Whenever the patient uses the noun 'dream' there is a variable response of the analyst which is in the majority of instances even numerically above the level of the patients use. This may mean that within a few sentences the analyst will point to the phenomena more explicit. Analyzing a new sample of sessions at the end of the treatment the noun "dream" no longer was part of the characteristic vocabulary of the analyst.

Discussion

Techniques of lexical investigation allow to identify the analyst´s preferred conceptual tools as far as they are expressed in words. The analyst´s vocabulary is a part of a complex linguistic task in a specially designed setting. Its study may help us to better understand what "analysts at work" are doing. There is no standard vocabulary, but there might be components of verbalization that are an essential part of the analytic technology for its task to transform theory into practice.

To work on the patient's communications with interpretations requires empathy and introspection. They alone would not lead the analyst to his specific form of understanding. He also needs theoretical knowledge which he has obtained by training, be it as part of his own analytic experience or by studying what other psychoanalysts have already described. About the process of how these two domains of knowledge are interwoven in the actual therapeutic operation we know very little. For many years we only had available armchair speculation on how the mind of the analyst works (Ramzy, 1974). The few empirical studies that have been performed on how analysts´ minds work have only opened a first glance at the immense variability of reasons for actual performance.

One fruitful approach to study personal concepts of individual analysts about a specific etiological topic - psychic trauma - was launched by Sandler's putting into operational terms his own reflections on the relation of concepts to practice (1983). The study group at the Sigmund Freud Institut in Frankfurt opened one way of exploring the unknown realm of what analysts think about their practice (Sandler et al., 1991). An empirical approach was established by Meyer

(1988) studying tape recorded post-session reflections of three German analysts on a larger sample of recorded sessions.

Clearly the relation of theory and practice is mediated by the analyst´s mental operations. Our concepts shape our actual therapeutic practice; however we do know very little about how this is executed. The very existence of different schools in psychoanalysis raises the question to what extent these theoretical orientations influence the daily practice. One can safely assume that the complexity of the human mind allows for quite a few divergent theoretical constructions that are all viable within the psychoanalytic frame of reference (Hamilton, 1996); however it has not yet been demonstrated that with respect to results that in psychoanalysis "all are equal and all must have prizes" (Luborsky et al., 1975).

EMOTIONAL AND COGNITIVE REGULATION IN THE PSYCHOANALYTICAL PROCESS: A MICROANALYTICAL STUDY[10]

The Therapeutic Cycles Model (TCM)

The TCM was developed for verbal therapy forms and is based on two variables of change: emotional experiencing and cognitive mastery, which is measurable in transcripts as a relative proportion of emotional tinged words and abstract words. Dependent on the quantitative emphasis of both variables, four emotion abstraction patterns are differentiated. The pattern A, Relaxing, is marked by little emotion, little abstraction. It often describes the condition of patients when they feel relaxed or do not speak about any topic related to illness. Pattern B, Reflecting, marks a condition when patients reflect however without being simultaneously emotionally involved. A high measure of abstraction can also be interpreted as an expression of defense, as it is described by the defense mechanisms of rationalizing and intellectualizing. Pattern C, Experiencing, shows an above average emotional participation whereas there is little manifestation of abstraction. In pattern D, Connecting, both variables are manifested above average. The patient has access to feelings and can, at the same time, reflect upon them. This pattern serves as an indicator for key sessions within a therapy; within individual sessions it stands for moments that are clinically particularly meaningful and are related with change. In psychodynamic orientated therapies it appears predominately when patients work-through conflict topics and through this also experience emotional insight.

Next to the emotional and the cognitive processes in psychoanalysis, aspects of the behavior are of meaning as well. Even without a limitation on transcripts and particularly in psychoanalytical therapy, the observation of the behavior is generally not possible immediately, but developable merely by recounts. However, recounts are basically nothing other than "actions turned into words." The course of the recount has beyond this, the effect of structuring the conversation as well. When a story is told, the listeners are silent; they are listening. As soon as the story is over a high character of demand develops upon the listener to respond to the story and to comment the recounted events. The "narrative style" a measure for the appearance of a

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story in the speech is therefore pulled up as a third Variable; a structure variable. In texts the narrative style concerning the appearance of markers is measured as, for example, prepositions.

After the TCM, the four emotion abstraction patterns appear and the narrative style during the therapeutic process in a specific sequence of five phases. The idealistically typical course begins with the pattern A, Relaxing (for example, the patient does not know what to talk about). It is followed by a report of a negative emotional experience (measurable as negative experiencing), frequently followed or mixed in by recounts (measurable as narrative style). This goes along with an increase of positive emotional tone (measurable as positive experiencing). Thereafter there should be found a phase of working-through with insight processes (measurable through connecting). The individual phases or sequences of phases can also repeat. The Cycle ends with the pattern A, Relaxing. One or more successful run-throughs of the Cycle within a therapy session lead to a "Mini-Outcome." The repetition of these "local" Cycles finally lead to a "global" change and a positive "Macro-Outcome." Therewith this model is suited for the description of complete therapy courses (macroprocess) as well as for the description of individual therapy sessions (microprocess). The meaning of the Cycle and particularly the pattern D, Connecting, for a favorable therapy course and therapy outcome could be shown by Mergenthaler (Mergenthaler, 1996) in a cross sectional study with 20 patients and in the meantime also in subsequent studies (Mergenthaler, 2000; Fontao, 2004; Lepper & Mergenthaler, 2005, 2007).

However, for the application of the model in empirical studies it is expected that the therapeutic Cycle does not appear, as described above, in an ideal typical form. For practical application therefore the appearance of a Cycle and, with it the proof of a therapeutic advance, is simplified and defined as follows: a Cycle is every sequence of emotion abstraction patterns that contains at least one Connecting and is limited to the left and to the right by Relaxing (beginning and end of a session always are considered to be Relaxing). As another additional condition it demands that in the Connecting at least one of the two variables reach an emotional tone or abstraction with a value greater than half a standard deviation. The Cycles are generally preceded by so called Shift-Events, that is linguistic as well as non-linguistic events that allow an increase and the dominance of positive emotion after a negative dominating phase. Typical examples for Shift-Events are the reporting of childhood memories and dreams in the analytical therapy or imagination exercises; the work with chairs and the like in other therapeutic orientations.

Example from the Session 152 of Amalia X

After a short banter about the re-scheduling of a session quite in the beginning of the session, the patient recounts of a dream (at the transition of WB 1 to WB 2). This is reported here:

P: Mhm (pause 2:00) (moans). Tonight I have dreamed, this morning as long as the alarm clock rang. I was murdered by a dagger.

A: Mhm.

P: And it was however like in a movie — and I had to lie on my stomach very long and had a dagger in the back and then many people came — and, I do not know any more exactly, holding the hand very calmly, somehow //

A: Mhm.

P: It was very embarrassing to me that the skirt has slid so far up in the back.

A: Mhm.

P: And then came a colleague, very clearly visible also *5382 {a town}, this was my very first work place, and he then also pulled out the dagger from my back and took it with him and I know (1) it was then like a souvenir. And then came a young couple — I only know that he was black. And they have cut off my hair and indeed wanted to make a wig of it I believe. And that I found very horrible. Simply all down and they have then also started to cut. And, I then got up — and went to the hair stylist. And there I still had // I am /

The dream is put here at the beginning in order to explain the clinical context. What would an analysis be without dreams and dream interpretation? Certainly one waits with the dream interpretation for the ideas of the patient. However one cannot avoid that, during the telling of the story or the reading of it, respectively, one develops ones own interpretations; even if they are trivial: also the dagger is a sharp instrument; the patient has it in her "back," that is there where the analyst usually sits. In the tape-recording the passage with the "slid up skirt" is acoustically barely understandable and one will see as follows that the analyst does not get involved with this aspect for a long time; probably because he could not decipher it acoustically. Later in the dream, the patient is exposed (her hair is cut off) and the dream ends with the attempt of reconciling this intervention (going to the hair stylist).

[Insert Figure 6. 3 about here]

Figure 6.3: Application of the Therapeutic Cycle Model for the microanalysis of the hour
152. The two upper graphics concern the spoken shares of only the patient; the other two
graphics relate to the spoken share of the patient as well as that of the analyst. Cycles are
marked by an ellipse.

From the relative spoken shares of the patient and the analyst in Figure (1) it is shown
that the analyst is a lot more active than one can observe in many other protocols. The chart
above the graph for verbal activity shows the course of the positive (black) and negative (grey)
emotional tone and let one notice that these two variables depict only very discrete swaying with
three high points of the positive valence in WB 10-11; WB 16-17 and WB 20-21. The upper
graph shows the patient's text. One sees the typical fluctuations of the narrative style with a
maximum in WB 2, the dream report. There is a Cycle with Connecting in WB 13 and WB 17.
The lower part of the graphic documents the common text of the patient and the therapist, which
shows in this session two Cycles. The first is mostly the same with the Cycle in the text of the
patient; however the Connecting moments are weakened by the contribution of the analyst. In
addition there is a second Cycle with Connecting in WB 21, which is essentially dominated by
the spoken share of the analyst and becomes clearer through him.

The content of the dream is followed first by the associations of the patient concerning
the dream she experienced, "as in a theatre." She talks about nonchalance, everything is so
unimportant to her, which she associates at the same time with fearlessness. She ponders to sell
her vehicle, to go to a convent, feels dirty. In WB 4 and in the following word blocks there is no
Connecting, because - so is, in dependence on the model of the emotion/abstraction pattern, the
hypothesis - the psychoanalyst only verbalizes the negative feelings of the patient, for example,
here restlessness, her feeling to not get ahead, her impression to be rather dead than alive;
although the patient has emphasized several times before that she was still alive after the dagger
hit her and afterward (in the dream) still went to the hair stylist. Several times the analyst begins
his phrases with contradiction: "But … You have this and that …," and he says, she would be
afraid, she would do everything wrong. If one wants one can understand this taking up of
negative emotions of a dagger stabbing, respectively to the point that the expressed experience in
the dream of the patient seems to be subsequently confirmed in the behavior of the analyst.

In WB 6 the patient says that she would like to rush to the analyst, grab him by the neck
and hold him very tight; however fears that he would not endure this and would then suddenly
drop dead. Again he verbalizes her negative emotions (fears), interprets the dream as a "struggle
down to the knife."

In WB 8 with a high shaping of abstraction in the spoken share of the patient, she talks about how she wants to measure the head of the analyst, wants to know what is inside this head, what he thinks about her, whether he laughs over her etc.

In WB 10-11 the positive emotional tone increases. The content is about the analyst's laughing, about the false laughing of the father of the patient in earlier times as well as frequent laughing of the patient in earlier sessions. Very empathically and reassuring the analyst says: "Naturally I find it good that you can laugh … I laugh too little." After this intervention it comes in WB 13 to Connecting. This 13th Word Block is introduced by the analyst with a long interpretation:

> A: Yes, yes, mhm. Yes, you meant whether I now — why I do Jung and not Freud ah or, more Freud than Jung. Now ah, without that I that, that from — I do not believe out of practical reasons, but I believe that you in your occupation with my head are not only concerned with — the occupation with maleness, with my male head and a principle; but that you are possibly also — concerned with very concrete matters, which you have thought about before with the knife. Not so, not in vain your girlfriend has spoken about shrink heads.
>
> P: Yes. But I can do this; I have because of this also interrupted the thought.
>
> A: Yes, yes.
>
> P: Because, because momentarily this appeared to me so stupid.

About the understanding of this passage one must know the association field of the word shrink heads, which the two speakers - patient and analyst - have developed in earlier sessions. The patient has recounted of a girlfriend who, with this word, has brought her experiences with Fellatio to this term, which means that the analyst must have understood, at least unconsciously, the in the tape-recording barely understandable dream passage with the "slid up skirt" and the associated sexual connotation.

The patient reacts irritated: "That you have brought me out of my concept, now I am thoroughly lost" … "You want to find out and think about it, maybe start with something innocuous, but it is really your head" (WB 14). She gets up closes the window of the treatment room, lies back on the couch, continues to talk about the head of the analyst, which she wants to measure (WB 15) and which she is envious of.

In WB 16 and 17 in which the positive valence rises again the remarks of the patient about the head of the analyst are tied in with the shrink heads of which her girlfriend had talked

about and she differentiates that not their non-sexual meaning fascinates her, but the hands-on approach of her girlfriend. In a very intimate dialogue the analyst takes up her earlier association that she herself would like to take a hands-on approach, grab him by the neck, but had doubts whether he would endure this.

She wishes to be allowed to be able to knock a little hole into the head of the analyst in order to put some of her own thoughts in there, which the analyst takes up very sympathetically (WB 18-20). It is a relaxed dialogue. The positive emotional tone rises again (WB 20-21) and leads in (WB 21) to Connecting, which in its content culminates with a wonderful metaphor, namely in the wish of the patient to be able to stroll in the head of the analyst:

P: No, because you, because it appeared to me as if everything (20) which you have done here, nonsense and, and, and generally was useless, wasn't it?

A: Mhm.

P: I was simply — ah — yes, to be surpassed.

A: Yes, yes, I wanted to say, now it is; you have yourself now I believe so ah, a — ah found a solution for this, namely you would like, you have struggled yourself through that you entrust so much stability in me that I would overcome a little hole.

P: Yes.

A: True, and —

P: Mhm.

A: And you stick it in there. But you naturally want — hm — no little hole. You do not want to put in a little, but a lot.

P: Probably yes.

A: You have made a timid try, but —

P: Probably.

A: To try out the stability of the head, with the thought, of how big and small to make the hole, true?

P: Mhm.

A: But you want to make a big one.

P: Mhm.

A: Have an easy entrance.

P: Mhm.

A: Not a difficult entrance, you would like, with the hand — ah, also touch this which is there, not only see it with the eyes. One also does not see well with the eyes when a hole is only small, true. So, ah, I believe you want a big hole as —

P: I even want your (21) be able to go for a stroll in your head.

A: Yes, mhm.

P: I would like that. I.

A: Yes, mhm.

P: And I would also like a bench.

A: Yes, yes.

P: Not only in the park. — And well that is, I believe, easier — understand what else I would like.

A: Yes, more calmness of the head ah —

P: Yes.

A: The calmness that I have here! Here I am calm, aren't I? This is; this is also searched for, true?

P: Yes, I have thought before that when you die then you can say I have had a wonderful working place; that is very funny.

Discussion and Conclusions

The session 152 is mainly marked by the dream reported at the outset of the session. At this time the patient was, from an emotional viewpoint, in a neutral condition: neither the negative nor the positive shares predominated. Therefore there was first the need of an amplification of negative feelings and the leading toward a problem, which was to be worked-through. This succeeds in several approaches in which it followed that two Cycles came about. Thus one can assume that in this session a Mini-Outcome was reached and contributed to therapeutic change.

The formal evaluation of protocols made by tape-recordings and transcribed psychotherapeutic sessions with the dictionaries concerning emotional tone and abstraction shows processes that are clinically plausible. Particularly noticeable is that this is valid although with the two variables emotion and abstraction only less than altogether ten percent of the spoken words in the sessions are being grasped. By the concrete material one can — in our view provable — follow why a psychotherapeutic process either gets going or stagnates. Regardless of these impressive results, many questions remain open; however, here only one should be mentioned. The TCM is based on the assumption that the interchange of the valence of the

emotions has an essential part in the processes of insight. Yet also other dichotomies in the emotional happening are thinkable as, for example, rapprochement versus avoidance (Desire and Death, Rage and Sadness; It versus Me), that can contribute as a Shift-Event in the therapeutic change. Interventions such as interpretation or confrontation can, under this aspect, play an essential role. This will need to be clarified in further detailed examinations that lead to Cycles. It is also thinkable that both aspects are taking part in a specific manner, since a large part of the positive emotions go along with rapprochement and many of the negative feelings with avoidance.

Looking ahead, it can be ascertained that the microscopic analysis in the sense of the TCM seems to be suitable for the examination of the quality of psychoanalytic sessions as well as for the didactic purposes in the framework of the education.

ATTACHMENT AND LOSS[11]

Introduction

As discussed in the first part of this chapter, linguistic measures cover a wide range of qualitative and quantitative methods. One of the methods relying heavily on a cognitive-affective view of language is the Adult Attachment Interview developed by George et al. (1985).

The Adult Attachment Interview (AAI) is designed to elicit thoughts, feelings and memories about early attachment experiences and to assess the individual's state of mind in respect to attachment. 18 questions (semi-structured format) are about the relationship with parents in childhood, sorrow, illness, first separations, losses of significant others and threatening experiences like sexual or physical abuse. The interviews, transcribed literally, are rated along different scales e. g.: loving relationship with mother and father, quality of recall, idealization and derogation of relationships and most importantly coherence (Grice, 1975) of the narrative. The AAI measures the current representation of attachment experiences in terms of past and present on the basis of narratives. The questioning technique aims at the extent to which a speaker is capable of spontaneously recounting his or her childhood history in a cooperative, coherent and plausible way.

Therefore the Adult Attachment Interview (AAI) elucidates the construction of "attachment-representation" and its linguistic characteristics. Its strength is that it does not generalize to representations or mental strategies related to other relevant areas of life. That is, the AAI captures representation of attachment and not the mental representation of sexuality, aggression, or vocation. The AAI uses specification and concretization as the questioning technique to produce stress. In the AAI, the stress is specifically attachment-related stress; the AAI is said to activate the attachment behavioral system through questions that "surprise the unconscious" (Main, 1995).

From a conversational stance, an interview is a dyadic event. In the AAI, the interviewer's questions and specifications are not considered as a component of the text analysis of the transcript. The working assumption, an assumption that has been supported empirically, is that the interviewee's answers and way of speaking are not understood as an individual reaction to the interviewer's probing. AAI questions and probes are carefully designed to activate the interviewee's attachment system, thus produce memories, without interference from the interviewer. AAI probes are neutral, and interaction with the interviewer does not include

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[11] Anna Buchheim and Horst Kächele; based on Buchheim & Kächele (2007)

interpretation, exploration, or reflection; therefore, the interviewee's memories are "uncontaminated" by the interviewer's interaction.

The coherence of the discourse provides the leading criterion for the evaluation of the AAI. Main and her working group defined coherence for the purpose of evaluating the AAI transcript following linguistic communications maxims as formulated by Grice (1975). Following these maxims, coherence in the AAI assesses the extent a speaker is able to respond cooperatively to the interviewer's questions and is able to give a true (quality), adequately informative (quantity), relevant (relevance), and comprehensible (manner) portrayal of childhood experience. Therefore, the central interest in the AAI is evaluation of the story as a coherent whole versus only fragments of that story. The AAI also evaluates the interview discourse using rating scales for reported real experience (e.g., parent as loving, rejecting) and representational transformations of experience (e.g., idealization, involving anger, derogation of the attachment figure). The final product of the AAI, derived from evaluations of the interview patterns of these three categories of discourse evaluation (coherence, real experience, transformations) results in a classification that represents the individual's representational status regarding attachment: secure, dismissing, preoccupied, unresolved, or cannot classify (Main & Goldwyn, 1996).

The "unresolved" classification is designated based on evaluations of the interviewee's transient mental disorientation when describing experiences of loss through death or physical/sexual abuse. This discourse pattern suggests that these experiences are accessible to memory but not yet integrated to create a whole sense of self-representation. Sometimes references to or descriptions of elements pertaining to these traumatic events literally "erupt" during portions of the interview in which these memories are not relevant. Sometimes these memories have a spectral quality in which events are described as if the interviewee has returned to the scene, so to speak. Sometimes descriptions contain irrational convictions of the interviewee's own guilt or confusion (e.g., speaks as if the deceased is alive) (Main & Goldwyn, 1996). In sum adults with the classification unresolved show temporary lapses in the monitoring of reasoning or discourse during discussion of potentially traumatic events. Specifically, lapses in reasoning - for example, indications that a speaker believes that a deceased person is both dead and not dead - may indicate parallel, incompatible belief and memory systems regarding a traumatic event that have become dissociated.

George & Solomon (1999) propose that a major difference between psychoanalysis and attachment theory lies in the description of the defensive processes themselves. Traditional psychoanalytic models provide a complex constellation of defenses to interpret a broad range of intrapsychic phenomenon, including fantasy, dream, wish, and impulse (e. g. Horowitz, 1988;

Kernberg, 1994). According to George and Solomon (1999) Bowlby's perspective conceives defensive exclusion in terms of two qualitatively distinct forms of information processing: *deactivation* (similar to repression) and *cognitive disconnection* (similar to splitting). These two defensive strategies provide the individual (infant and adult) with an *organized* form of excluding information from conscious awareness or separating affect from a situation or person eliciting it. Regarding severe psychopathology Bowlby (1980) suggested that under certain circumstances these two forms of exclusion can lead to a *disorganized form* of representation, what he calls *segregated systems*. This is operationalized in the unresolved attachment status with respect to trauma and loss. George and West (1999) conclude: "In order to understand the relationship between adult attachment and mental health risk we need to examine the attachment concepts of defense and segregated systems, the mental processes that define disorganization" (S. 295). Suggesting that these representational structures have developed under conditions of attachment trauma (abuse, loss) the concept of segregated systems is fruitful to explain some forms of relationship-based psychopathology in adults (Kächele et al., 2001).

The Adult Attachment Interview with Amalia X.

To clarify some current personal problem the now 65 years old lady contacted our department where her former analyst had been the head of the department. Referring her to a colleague in private practice to work through her current problem, she was willing to take part in an investigation with the AAI. We did not have an AAI from the time when her analysis started 30 years ago, nor had we an AAI from the time of termination 25 years ago.

In the counter-transference the interviewer (AB) felt overwhelmed by the speed of Amalia's way to remember many details of her childhood memories. She was clearly dominating and the interviewer had a hard job to structure the AAI. There was no AAI question, where Amalia hesitated or made a pause in order to think about what she wanted to say. Sometimes she gave consistent summaries of her childhood experiences with an amazing metacognitive knowledge, then she skipped into a somewhat "crazy" voice with an exaggerated, partly irrational quality, which was frightening. In the end of the AAI the interviewer could join Amalia's self-description as being a kind of „witch". She came as a sophisticated old lady, and went away somewhat like a ghost. This counter-transference was influenced strongly by the last part of the interview, where Amalia was talking about the losses of her mother and her father. This part had definitely a spooky quality.

In this interview the descriptions of her parents were quite contradictory. Amazingly she described her mother as "very, very caring", and a "beautiful women", who was much more

interesting and attractive for her than her father. She remembers having "adored" and "courted" her mother. As a child Amalia always wanted to *please* her and she became extremely sensitive what her mother needed ("I was there for her, she could use me")

Her father was described by her as "weak", saying "of course I was his darling"; he was "caring", but "not interesting at all for me", "he couldn't be sufficient for us", and "there was cotton wool between us". The grandmother was described as "stern" and "strict", but much more supporting, encouraging and not as intrusive as her mother.

Analyzing the transcript with respect to discourse quality and coherence criteria, there is considerable evidence for a contradictory picture of her childhood experiences, which indicates a preoccupied state of mind. Amalia is oscillating between an extraordinary positive evaluation of her mother's caring qualities, and at other parts of the interview she is talking about abandonment, cruel separations, and long lasting tormenting fantasies about being in hell as a child. Sometimes Amalia values the integrity of her father ("he always supported me when I had troubles at school"), then she skips into a devaluating, derogating speech ("I didn't like his lovely care when I was ill, and his way of asking me "How is my little patient today, I hated that"). Amalia seemed to be unable to move beyond a sense of the self as entangled in the early relationship with her mother. She presents a passive speech with run-on-sentences, interruptions, and the inability to complete sentences. In consequence there is a notable lack of a sense of personal identity in the first half of the interview, and an inability to focus fruitfully, objectively during the interview. Sometimes Amalia seems caught up in memories of youth and childhood and unable to move beyond these episodes to an objective overview at the semantic or abstract level. Her overview is characterized by oscillatory tendencies (see above). She sometimes has a hallowed view of her childhood, and negative evaluations may disappear in contradictions. On the other hand she sometimes impresses the interviewer with transgenerational knowledge, when being asked about the influence of childhood experiences on her personality development or about why she believes that her parents behaved like they did. Though she has obvious capacities, like "mind reading" regarding her mother, the overall evaluation leads to a "preoccupied" state of mind with respect to attachment. In the end of the interview her lifelong struggle for autonomy leads to unusual attempts to become an autonomous adult person, starting an inner dialogue with her dead parents in the present tense.

We cite some typical statement from the transcript the kind of which lead to this "preoccupied" classification (Amalia = A; Interviewer = I):

I: How would you describe the relationship with your mother, when you were a child?

A: I have adored her, this feeling lasted long after her death, I have adored her, I wanted to do all the best for her … I always tried to find out, what she wants. … She needed me, she has loved me very very warmly, as a child I always felt everything is ok, what she is doing …She was there for us in an extraordinary way, she was the untouchable … I loved to learn at school, and wanted to show her how I learned to write an "A", and I wanted to be praised by her, … and she reacted kind of angry and told me that such a daughter doesn´t fit to her, I was hurt by that, and at the same time provoced to try to get some praise from her.

I: you said your mother was extremely caring, could you remember a specific event from your childhood?

A: I can´t describe, nobody will believe me. My mother always asked me (when she was an adult) "May I cook for you", and when I had back problems, she took the next train and brought me sacks of potatoes, though we had potatoes, and she said "No".

I: Are there some memories from earlier stages of your childhood, where your mother was very very caring?

A: Yes for us all. She has collected fir cones for us in the forest. She had a lady bicycle, and she drove into the forest with my brother and came back with a very big bag, we had two fire places at home, and she collected these fir cones, and now there was the question how to handle it? And I still see her coming with this bag, we were standing at the window, and then she has cooked for her children, such things, she always was full of fantasy, and has cared for us extremely well.

This characteristic passage about the relationship with her mother shows her ambivalence. On the one hand Amalia gives examples where her mother was caring, though with a functional quality (cooking, potatoes, collecting of fir cones) and intrusive elements; on the other hand, she had to struggle as a child to be recognized and accepted by her. Amalia's speech is exaggerated ("very, very") and does not seem objective. She is not really able to integrate positive and negative feelings in a convincing manner, due to the defensive cognitive disconnection, i.e., the splitting of good and bad. There are positive wrap-ups, and subtle negativity at the same time without direct expressions of anger.

According to Main & Goldwyn's (1996) criteria, an individual should be classified as "unresolved", when during discussions of loss (or abuse), he or she shows striking lapses in the monitoring of reasoning or discourse:

The category "Unresolved" in the AAI is given when the following coding criteria are fulfilled:

Loss:

- *Indication of disbelief that the person is dead*
- Indication of confusion between self and dead person
- Disorientation with respect to time and space
- *psychologically confused statements*
- extreme behavioral reaction to a loss

Amalia shows two parts of these aspects in the AAI, which are an indicator of her unresolved state of mind: She shows many indications of disbelief that her parents are dead, and at the same time there are psychologically confused statements in the discourse spoken with a spooky voice. The crucial passages are underlined.

A: "hm, very strange was, my father was dying in 1996, and then he was flying with me one night long to his Italian favorite places, and I had a terrible night full of guilt feelings. And then he was away. Then my mother was living a while and was not talking about him at all. And I tried to pamper her a bit and go on journey with her, and so. And when she was dead, I suffered a lot, and I had to sell the house, everything was very bad.

I: How old were you?

A: I was in the end of my fifties, and she was dying before I became 60 years old. In any case she died in 1998 in spring time, and I was fighting with her and had struggles with her over nearly 4 years, that was so cruel, and when I was beginning to fight with her, then he came wonderfully and he protected me and gave me advice, that was like a dialogue and I have seen him, now he is away again. And then I said this year to my mother: Now I am fed up, finally, it has to have an end with this competition.

I: And you have talked with her internally?

A: … since this year I am able to be myself and since that time there is peace … I have fighted with my mother when I was an adult, but I never believed that it will be as cruel after her death. … I am talking with my parents wherever I am, and graves don´t mean anything to me. …Now I am peaceful. And sometimes she smiles at me, and after her death she suddenly told me: "Let me alone" and she was driving fast somewhere in the sky; my father was traveling with me one night long, but at the

<u>same time these guilt feelings, but it was just one night long</u>. And then, she was living, and the father was away. And this came after her death. That was …. <u>And now in 2002 she begins to talk with me in a friendly manner</u>, and now I don't need it so much any more.

Evidence for the continuing unresolved/disorganized responses to loss are characterized by lapses of monitoring of reasoning, and discourse or reports of extreme behavioral reactions. Main and Hesse (1990) linked lapses in *monitoring* - and this is what Amalia has shown in the passages about loss – to the possible intrusion of dissociated or partially dissociated ideation. George & West (2001) state, that across methodological contexts, unresolved attachment has been linked to the expression of not integrated attachment trauma that is ascribed to the underlying dynamic of segregated systems (George & Solomon, 1999) or multiple models of attachment (Main, 1991; Liotti, 1999). Unresolved attachment has been consistently associated with the sudden, "unmetabolized" emergence of disorganized thought. In the AAI, individuals must demonstrate a moderate to high degree of unresolved thinking in order to be judged unresolved; minor lapses in monitoring traumatic material do not automatically yield an unresolved designation.

Amalia describes herself as a witch, and that she had spiritual qualities since she was a child. The expression of religious beliefs in the context of loss experiences deserves special consideration. If it is presumed that the dead person is in heaven or will be met again in another life with the convincing knowledge that the person is truly dead now, this is coded as a metaphysical consideration, which is not unresolved. In Amalia's case there are no indications for the interviewer that she shows cooperation (Grice, 1975) or metacognitive monitoring (Main, 1991) to perceive how strange it must be for the interviewer to listen to such psychological confusing phrases without any objectivity. This kind of long and repetitive passages of "making the dead parents alive" are quite rare.

In the clinical context we would have to discuss what this could mean for this special person:

What Amalia probably wanted to say was that all the fights with her dead mother in the present time lead to a new autonomy and inner peace. Clinically we might conclude that she found her way as an older, sophisticated lady, who at least has achieved an internal independence from a dominant, intrusive mother. But the way she describes this struggle is strange; it has a somewhat psychotic or dissociative quality, and induced in the interviewer a mixed feeling of being amused and frightened at the same time. We can raise the question: How can we

understand this disorganized discourse with respect to a clinician's impression of Amalia's mental development up to now?

Although unconscious and deactivated, Bowlby emphasized that segregated systems (threatening experiences like losses) are, in and of themselves, organized representational systems that can, when activated, frame and execute plans. *Upon activation*, however, behavior, feeling and thought are likely to appear *chaotic and disorganized*. This is what probably happened with Amalia: Unconsciously she has found a way to master the traumatic experience of having lost her parents without having resolved her painful feelings of abandonment, and intrusive interactions with them when they were alive. From an attachment point of view we should examine when and how this "dissociative mastering" becomes maladaptive.

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