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From Psychoanalytic Narrative to Empirical Single Case Research.
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Prelimary version

1. PSYCHOANALYTICAL THERAPY PROCESS RESEARCH[1]

Introduction

For many years he Ulm study group has implemented a research program to examine the material bases of psychoanalytic therapy. We were and are convinced that only the careful exploration of the patient's interaction with the analyst can illustrate the central aspects of psychoanalytic treatment and enable an empirically driven theory of the process. In a panel discussion about psychoanalytic process research at an annual meeting of the German Psychoanalytic Association on October 11th, 1968, in Ulm about psychoanalytic process research the senior of this group, H. Thomä, articulated the necessity of systematic examination as follows:

1. The psychoanalytic and the relevant psychosomatic research seems, as one can learn from literature, to move mainly in two directions which can simply be described as "process' and as "outcome" research. Process research mainly concerns the scientific evaluation of psychoanalytic treatments of single cases. However, in examinations that mainly deal with results of therapies, greater numbers of treated and non-treated cases are compared with on another. The two research directions overlap in many points because the result of the therapy is dependent on the course of the psychoanalysis. The differentiation of process and outcome dates back to the Marienbad Congress 1936 and in particular to a lecture by E. Bibring.

2. However, "one of the famous claims of analytical work is that research and treatment coincide" (Freud 1912e, p. 114); in another place Freud (1927a, pp. 256) speaks about a "precious encounter," an "inseparable bond between healing and research." But it should not be concluded eo ipso that treatment and research are identical. There is no assurance that the observation of the analyst and his theoretical conclusions drawn from observation are really reliable.

[1] *Horst Kächele, Joseph Schachter and Helmut Thomä*

3. Process research is the most original field in psychoanalysis. The psychoanalytic process is determined by the events in the psychoanalytic situation. The specific technical psychoanalytic means is the interpretation. In the interpretation, technique and theory are combined. Process research serves for the completion of the technique and the validation of the theory (Thomä 1968).

It has been argued that clinical case reports, especially Freud's case reports, have had a greater influence on psychoanalytic theory and practice than findings genrerated by formal research. That influence, however, has had negative as well as positive consequences. A number of case-report-based theories and practices have proven to be erroneous, such as the conception of infantile omnipotence, the conception of female sexuality and the belief that homosexuality was intrinsically psychopathological. Clearly, plausibility of the clinical implications of case reports is not a solid basis upon which conclusions can be drawn.

Wallerstein and Sampson (1971) concluded that it was necessary to conduct formalized and systematized examinations of therapeutic process in psychoanalysis: "Our central conviction is that the informal case study, in spite of its forceful power of conviction, has certain realistic and obvious scientific limitations" (p. 47). Pulver (1987a) demonstrated that analysts with different theoretical convictions vary widely in the analytic inferences they derive from case material, and Fosshage (1990) and Streeck (1994) could replicate this finding. Spence (1992) observed that "The clinician … tends to listen to the clinical material with a favorite set of theoretical predispositions" (p. 562). And concluded that "Interpretations in a clinical setting have an unfortunate tendency to reflect the therapist's expectation rather than the underlying facts of the matter" (p. 559). Masling and Cohen (1987), citing several clinical examples, even draw the conclusion that all psychotherapies generate clinical evidence that support their theoretical positions and so can be understood as "instances of therapists systematically rewarding and extinguishing various client behaviors" (p. 65).

In addition to these limitations in the usefulness of clinical case reports, there are analysts who cite the extraordinary difficulties in empirical study of psychoanalytic case material and believe that the result of such study is likely to be of little value to psychoanalysis (Green 2000), or may well be damaging (Perron

2006). Many analysts criticize non-clinial analytic research, argueing that formal research destroyes the uniqueness of individual patients.

Since in scientific terms there are serious limitations to the value of clinical case reports, progress in psychoanalysis should not rest solely on such reports. Clinical findings need to be tested by empirical research. Those critics fails to recognize that some sacrifice of the uniqueness of phenomena and individuals is necessary in order to conduct empirical studies. Krugman (2007) articulates this in the field of economics, explaining why the abstract conception of “economic man” is useful. It is easy, he notes, to make fun of such abstractions:

> You might ask, why not represent people the way they really are? The answer is that abstraction, strategic simplification, is the only way we can impose some intellectual order on the complexity of economic life. And the assumption of rational behavior has been a particularly fruitful simplification. (p. 27).

Ever since Glover´s questionnaire study to British analysts (Glover and Brierley 1940) interpretation was the first subject of manifold efforts to examine aspects of the treatment process in a formalized and clinical manner. Thomä and Houben (1967) picking up the long debate on interpretations as a central aspect in the analyst’s technique registered the patient’s reactions in order to estimate the effects and the ensuing reactions on the former. In the course of these examinations the problems concerning the effectiveness of interpretations and the related problem of truth resurfaced again and again.

In order systematically to record interpretations Thomä and Houben followed Isaac’s (1939) suggestion and designed a report-schema. This demanded that the analyst write an hourly protocol and localize his interpretations theoretically, and, in addition, to state exactly the patient’s reactions (for a precise description see Thomä and Kächele 1994b, pp. 22-23). In the course of the examinations it became obvious that the appropriate validation can be obtained only by empirical process and outcome research. In agreement with many authors the Ulm study group decided to perform a series of process studies within the intensive model design which is adaequate to meet Meissner’s (1983) characterization of psychoanalysis as the science of subjectivity. The positive assessment of the formal single case study in which Wallerstein and Sampson (1971) aimed at the reconciliation between clinical impressions and research, was the deciding methodological suggestion developing

their research strategy. If one follows the their recommendation, the systematic single case study provides the intersection of clinical and scientific work.

Davison and Lazarus (1994) also commented positively about the possible advantage of an intensive case study:

- A case study can raise doubts about a generally accepted theory.
- A case study can be a valuable heuristic for following better controlled examinations
- A case study allows the examination, even if not really controlled, of a seldom but important phenomenon
- A case study provides the possibility for new principles and ideas to be tested in a new way.
- A case study can in certain circumstances allow enough experimental control of phenomena to provide scientifically acceptable information
- A case study can supply meat for a theoretical skeleton.

In exploring these arguments, the case study methodology was rediscovered also in academic psychology (Bromley 1986). Furthermore new methodological approaches and the new appreciation of qualitative research (Frommer and Rennie 2001) have produced in the meantime a lasting impact on social science in general and on the field of treatment research in particular (Hill and Lambert 2004, p. 102). Today there is more emphasis on what kind of questions must be examined by which methodological approach in order to find interesting answers that enrich the field (Kächele 1986). The purpose of these approaches is both “to do justice to the subjective factor in social sciences and to focus research efforts on the individual fate” (Leuzinger-Bohleber 1995, p. 446).

Research in Contemporary Psychoanalysis

The psychoanalytic culture differentiates between »research in psychoanalysis« vs. »research on psychoanalysis«. Scientific investigations in psychoanalysis orginate in the therapeutic situation. In a rather optimistic stance it is assumed that the clinicians apply the psychoanalytic method in a critical vein and thus fulfill the requirement of scientific thinking.

The English language allows a play of WORDS: Wallerstein (2001) distinguishes between <search> and <research“. Analysts are constantly

<searching>, but in order to come from search to research a certain degree of formalisation and systematic categorization has to be applied. In the prevailing vignette-culture most psychoanalytic authors limit themselves to the description of transference and countertransferences processes thus leading to the rather extreme stance of subjectivism.

The prevailing representation of treatment reports is characterized by reference to essential psychoanalytic concepts. Insofar research-minded analysts are in opposition to clinician who prefer to remain <*on-line*>, an expression introduced by Moser (1991) that characterizes an analyst´s stance in the evenly hovering attention in the clinical situation; it is in contrast to the objectifying <*off-line*>- position of a clinician outside the consulting room or of a researcher. Both figures of speech grasp the pendulum from subjective experience to objectifying reflection within and outside the session. Already when writing session notes the analyst leaves the <on-line> position; and when case reports are published another basis of collegial and interdisciplinary discussions is reached.

Research in psychoanalysis thus refers to the mother ground (Schlesinger 1974), of the therapeutic situation and always includes the analyst, his thinking and his actions, which is not only reflected by himself, but also by others, from the outside. Therefore the contrasting of »research in psychoanalysis« and »research on psychoanalysis« separates what belongs together (Perron 2003). Both perspectives refer to intraclinical research (in contrast to extra- or non-clinical research!). In order to raise clinical reports to the rank of single case studies detailed and reliable criteria have to be made explicit.

Non-clinical psychoanalytic research has two large realms, independent from each other. The application on all topics of culture knows no boundaries; therefore the interdisciplinary exchange with all humanities covers a wide field, we would be unable to cover it here (see section VI of a recent „Textbook of Psychoanalysis“ (Person et al. 2005)). However we will mention some points with regard to extraclinical, experimental research about psychoanalytic topics.

Although the experimental approach is the most appropriate method for examining hypotheses (Campbell 1967), manipulation of the examined object is not possible in the clinical situation. Non-clinical studies examining the diverse aspects of basic psychoanalytic theory though often largely unknown to clinicians have attracted many experimental psychologists. Quite extensive compilations and

secondary analyses by well meaning critics have been compiled (Hilgard 1952; Fisher and Greenberg 1977, 1996; Kline 1981; Kächele et al. 1991).

There is no reason to view the clinical situation as a deficient version of the experiment; a formerly popular way of saying was that the psychoanalytical treatment situation is a quasi-experimental event. Already Shakow (1960, p. 88) criticised this view and preferred to speak about the psychoanalytical interview as a semi-naturalistic approach. The proper methods of examination are therefore not experimental methods, but methods of the systematic, social science based analyses of material as Allport (1942) already had documented. The single case study can be handled with exactness and procedures that are suitable to the examined materials. Edelson especially emphasized in his book: “Psychoanalysis — a theory in crisis,” the possibilities of the single case research to surpass the heuristic discovery orientated perspective (1988, p. 231ff). Generally speaking it is remarkable how many papers are published about problems of doing research and how few substantial reports about systematic studies performed are available.

Conceptual Research

Recently a new genre has been created for which Dreher (2000, 2005) has coined the expression “conceptual research”. It is fair to say that conceptual clarifications have constituted not a small bulk of analysts´ efforts to come to grip with the ongoing change of terms and their referents (f.e. Compton 1972; Pine 2006). A recent overview concluded that “if IJP {International Journal of Psychoanalysis}accurately reflects the international viewpoint, conceptual research is a central issue in current psychoanalytic research” (Leuzinger-Bohleber and Fischmann 2006, p. 1361).

Concepts characterize the cosmos of psychoanalytic theory and its change. Therefore the range of concepts and their relationship to clinical experience, their operationalization in the widest sense of the word, has been in the center of the psychoanalytic profession for a century. Written definitions determined what pychoanalysis was and is. One easily can consult using a conceptual dictionary; fr example the highly appreciated „Vocabulary of Psychoanalysis“ by the French analysts Laplanche and Pontalis (1967in), the APsaA sponsored „Glossary of Psychoanalytic Terms and Concepts“ (Burnes et al. 1968) or „The Dictionary of Kleinian thought (Hinshelwood 1989). However what psychoanalysts make out of these definitions in their practical works, remains opaque. In our view pure

conceptual research without empirical underpinnings remains sterile and may even hinder progress.

The Contemporary Version of Freud´s Inseparable Bond Thesis

The scientific study of single cases, not the clinical reports, constitutes in our view the *Contemporary Version of Freud´s Inseparable Bond Thesis*. In this sense Freud´s beneficial effect, the therapeutic success, represents a pragmatic criterion of truth. It requires from the clinician to spell out his hypotheses on structure and dynamics and to look for *independent* criteria, to refute or confirm these.

Clinical inferences from the material of a case history may be valuable sources of hypothesis development as Blatt (2004, p. 4) beautifully argued recently by pointing out the importance of his two initial psychoanalytic cases for his later thinking about anaclitic and introjective types of depression, but are not of scientific value for hypothesis testing, largely because clinical inferences are diverse and notoriously unreliable. Clinical material from a case history is almost invariably viewed very differently by different analysts A prominent scientist notes that it is ironic “that psychoanalytic authors attempt to employ clinical data for just about every purpose but the one for which they are most suitable – an evaluation and understanding of therapeutic change” (Eagle 1984, p. 163). However for the assessment to be scientific it must be based on reliable measurements.

A first striking example was provided by Luborsky who, working together with Cattell, introduced P-Factor-Analysis for intraindividual repetitive measurements in understanding psychotherapeutic change (1953; see also his re-evaluation in 1995). Twenty years later the Penn Study Group (Graff and Luborsky 1977) reported on the study of four analytic treatments. Each treating analyst filled out a checklist assessing transference (defined as material overtly or covertly related to the analyst) and resistance (the patient's associations are general, defensive or oppositional). Results indicated that two patients with favorable therapeutic outcomes showed rising transference (as defined here) and diminishing resistance over the course of the treatment. The two patients with poorer therapeutic outcomes showed more parallel curves for transference and resistance; the patient with the poorest outcome showed a high resistance curve.

The work of the research group of Joseph Weiss and Harold Sampson from the Mount Zion Psychotherapy Research Group became well known. Their first study

examined two competing theories concerning defense analysis in the case of Mrs C (Sampson et al. 1972). In the following years they applied their newly developed concept of the Control-Mastery Theory to the same case (Weiss and Sampson 1986) as well as to shorter therapies (Silberschatz et al. 1989). The former examination utilized the completely tape-recorded psychoanalytic treatment created by Hartvig Dahl (New York). A journalist, J. Malcolm (1980), was successful in seducing the analyst-author, to claim the authorship for this first “specimen hour” that Dahl was to published as “Anonymous” (1988).

Meanwhile a good number of psychoanalytic scientists who cooperated with Dahl could use this material of his “specimen case” (Bucci 1988, 1997; Horowitz 1977; Spence et al. 1993, 1994; Jones and Windholz 1990). The most recent use of the collected materials was presented by Ablon and Jones (2005) identifying the notion of ‘psychoanalytic process’ in terms of Jones´Q-sort methodology (p. 554-558). Further process research focusing on individual cases was reported by Waldron et al. (2004a, b) and Porcerelli et al (2007).

Overviews on the methodology of single case studies have been presented by Kazdin (1982), Hilliard (1993), Fonagy and Moran (1993). The latter summarized the topic distinctly:

> Individual case studies attempt to establish the relationship between intervention and other variables through repeated systematic observation and measurement .....The observation of variability across time within a single case combines a clinical interest to respond appropriately to changes within the patient, and a research interest to find support for a causal relationship between intervention and changes in variables of theoretical interest. The attention to repeated observations, more than any other single factor, permits knowledge to be drawn from the individual case and has the power to eliminate plausible alternative explanations. (Fonagy and Moran 1993, p. 65)

Comparison of Single Case and Group Studies

Inappropriate use of statistical methods with single cases led to the view that single case studies were not applicable for clinical research:

> In the clinical field the opinion persisted for a long time that comparisons between groups of patients are the sine qua non of the statistical valid scientific clinical research and the single case study is attributed at best to the status of intuition and clinical insight which is not accessible for statistical tests and

> attempts for validations … (This opinion) has unfortunately immortalized, the by nature superficial methodology, as the only scientific prototype in clinical research. (Bellak and Chassan 1964, p. 23)

Practical reasons led to a rediscovery of the single case methodology which utilized new theoretical and statistical evaluations (Bortz and Döring 1995). It is important to realize that there remains a limitation to all statistical inferences based on data from groups. A result may be judged significant if the finding is unlikely to be found on the basis of chance alone (with the error possibility *a*), but a result which statistically could be a function of chance cannot necessarily be attributed to chance, but to an unlikely but significant finding and this is especially relevant in small unreliable compiled groups. The first kind of risk, *a,* which is set arbitrarily by the scientist and directly determines the significance of a result, provides the probability that the alternative hypothesis will be accepted even though the null-hypothesis is accepted. Thus the null hypothesis states that the result is due to chance alone; rejecting the null hypothesis claims that the result is not random, but significant. Next, there is also the risk of a second kind, *b*, that shows the probability that the null hypothesis is accepted although the alternative hypothesis is correct. This risk, *b*, is – when risk *a* is the same – less in larger samples than in smaller samples. In relation to small, non-homogeneous samples it may occur that in the material available significant differences cannot be proven because of the high *b* risk*;* i.e. that the result could be interpreted as being present, although not significant statistically. Also, the absence of independence of observations, which in clinical research is almost always the rule, can exert unfavorable statistical effects.

To avoid these difficulties Chassan (1979) proposes the intensive examination of individual patients and he especially points to the statistical study of the psychoanalytic situation:

> The long-term commitment for therapy between patient and therapist and the regularity of the scheduled psychotherapeutic sessions, whether they be on a weekly, semi-weekly, or daily basis, provide an ideal opportunity for the collection of relatively large quantities of data for the testing of hypotheses within one or another framework of psychoanalytic theory. (p. 258)

The gain of information rises with the number of uncontrolled variables (Edwards and Cronbach 1952). A refining of the measurements can lead to the same gain as an enlargement of the sample size. As a theoretical model the single

case study can be described as an “intensive model” in comparison to use of large samples which constitute an “extensive model” (Chassan 1979). A prerequisite for the meaningful examination of the single case is that the examined feature varies over time, within the patient. The variable is observed under various conditions. Marginal conditions such as age, sex, personality and previous experience of the patient remain relatively constant and are therefore better controlled than in a large sample. On the other hand, through intensive scrutiny of the case the marginal conditions are well known to the investigator, who can choose to include them in the examination. Chassan emphasizes that study of the single case can be arranged dynamically; the design of the study can be changed, side effects can be considered and additional questions introduced which in large samples requires considerable expenditure.

When studying large samples, even when a significant result is obtained, nothing can be said about the contribution of the individual patient and nothing about the variation in the examined variable of the individual patients. This limits the implications of any finding for enhancing treatment. As claims about whole populations are always based on limited samples, generalization of findings from group studies are limited. Furthermore the information from group studies does not reveal individual differences, which is not the case with the single case study.

Chassan (1979) argues that if one specifies the variable in the single case study, the results can be generalized to a population with the same variable. The possibility to generalize is better in the single case because the variables are better known. The representativeness of findings derived from a sample depends on the randomness of selection of the examined groups, which in clinical research often is not assessed. Further, often the selection criteria for the sample are included in the examination, so that no population remains for reference. By case comparison and case contrasting the findings from an individual case can be extended to a population; however one has to work step by step in order to avoid over-generalization.

Our purpose is to warrant the utility of empirical single case research, not to assert that studies of population samples are of no value. Although the literature has had proponents of individual studies and proponents of group studies, there is no reason to consider these two approaches to be in conflict. They are complementary. Individual researchers may have a predilection for one or the other, but to assert that

one is *better in general* than the other is unnecessary and seems unfounded. The ultimate test is the demonstration by each approach of the production of findings that enhance psychoanalytic theory and practice. Perhaps one approach may be more effective with certain classes of variables and the other approach more productive with other classes of variables. To paraphrase Chairman Mao's aphorism, let both approaches bloom.

The centre of several methodological discussions about the problems of single case studies concerns the question of whether it is possible to draw valid conclusions from "one case" or from "N=1" findings for the whole population. One has to note that the aims of a mathematically statistical analysis are considerably more modest and that the term "case" takes on quite a different meaning in the clinical and statistical context. In a psychotherapeutic single case study one often works with a sample of several sessions that are to be viewed as an observation of statistical cases. Through the sequence of the sessions the statistical samples carry the "untoward" dependence of the observed cases. The variable "time", made operational, for example, by the date or the session number, offers at the same time the chance to control statistically this dependence (Grünzig 1988). The "population" to which one refers by the help of statistical techniques, is built through the entire amount of all sessions with the examined person (of the clinical case), during the therapy or the therapy phase. The *a*-mistake of the applied statistical tests informs us of the safety by which the conclusions can be drawn. The total sample is thereby represented through the examined object; that is through the examined patient-therapist-couple.

Even in the case in which all sessions of the therapy are examined, the view of the *a*-mistake gains another meaning. For a human observer it is generally difficult to differentiate between the lawful and the random. In this differentiation, statistical methods can give valuable help; the *a*-mistake thereby connotes rather "relevance" than "significance" of a finding. Part of the statistical results of a single case study presets the question of whether this is transferable to other clinical cases. This principally possible and desirable generalization is however no longer of mathematical statistical nature. The rumour that Freud's recordings of his own dreams grew to be the basis of psychoanalysis became a historical example in the well regarded textbook of research methods for social scientists by Bortz and Döring (1995, p. 299).

The scope of the single case study can be characterized as follows:

> In a single case study a unit of examination is precisely investigated and described in which observational methods frequently play an important role. The qualitative single case observation helps in answering questions concerning individual processes and courses. Therefore it is very important in the clinical area to exactly observe the development of a patient during psychotherapy with the purpose of drawing conclusions about the success of the intervention. (Bortz and Döring 1995, p. 298)

The case-specific and non-transferable part of the results possesses a complementary meaning. The group-orientated research namely focuses on the property that is common to most of the individuals of the examined population. The, for one human unique, phenomena constituting his individuality thereby fall, for example, on a common ground which is termed “the non-explained variance of mistake.” Since this is valid for all the participants of the examined collective, the perspective of group-orientated studies neglects the individual matter systematically. To investigate this dimension of the unique and the individual and to appreciate this is a task for which the single case study is especially qualified.

The Pro and Contra of Tape Recordings

Namely it is an advantage for the clinical discussion if an analyst later on gives detailed information about how he feels and thinks during a session and records this written in a protocol; this also allows other colleagues to develop the possibility of alternative views. However, the systematic weakness of such reports was repeatedly noticed. The most recent statement about this issue puts that matter succinctly:

> Disagreements about the meaning of case material are commonplace in clinical work and constitute important grounds for criticism regarding the scientific status of psychoanalytic methods for acquiring knowledge. A particular problem is that clinical observers may vary a great deal in the concepts they use in their descriptive language. Observers of the same case material may not arrive at the same conclusions; indeed, they may not even consider the same dimensions. This issue of handling differences in inference or judgment among clinical experts is particularly important since there are alternative theoretical models in psychoanalysis. (Ablon and Jones 2005, p.543)

The weaknesses in studies that are supported by non-formalized treatment protocols are by now sufficiently known. Spence (1986) shows that analytical

narratives are often described on the basis of covert up psychodynamic assumptions. In addition it is very often impossible to extract the contribution of the analyst; generally only a few interpretations are communicated selectively. It is not possible to find out what has been omitted or reproduced differently. For scientific examinations it is not sufficient to rely on the memory of the analyst only — a viewpoint which should generate immediate evidence in analysts. Therefore, through the introduction of the tape recording in the psychoanalytical situation a new research paradigm was created). Providing a personal view Merton Gill makes a strong plea that “process research should be done with some kind of recording of the orignal exchange. I believe that transcripts of audio recordings will suffice” (Gill 1994, p. 152).

This device is no longer controversial in the scientific community of research-orientated psychoanalysts (Thomä and Kächele 2004b, p. 26ff). Certainly one must agree with Colby and Stoller (1988, p. 42) that a transcript is “not a report about what really happened, but only a report of what has been recorded”. Our answer to this warning limitation could only be to find out which picture of the “true” psychoanalytical progress can be reconstructed on the basis of transcripts. The main progress which this tool provides is that it allows independent observers — may they be analysts or scientists of other disciplines — to make independent findings about what happens in the treatment room. From the outset on it has been recognized that of the two participants “the therapist is more chronically disturbed by the procedure. Unlike the patient he does not think of the situation as one in which exposure of himself is an intrinsic and necessary evil” (Knapp et al. 1966, p. 404).

The advantage however is that a multitude of social scientific methods for the study of the psychoanalytical process can be applied. It is in this vein that Fonagy (2002b) recommends that

> imaginative studies making use of the advances in recording and coding techniques and particularly phonetic and linguistic speech analysis could undoubtedly advance our understanding of the psychoanalytic process (Fónagy and Fonagy 1995). To ban such procedures outright is to tie our hands behind our back in competing with other psychotherapeutic procedures. To me the issue of recording depends strongly on the research question asked. (p. 23)

We certainly agree that one has to keep the perspective that it is one of many window on the process; again the matter will be which kind of findings do materialize from that particular window.

Testing of Process Models

Beyond the basic aim of the Ulm group´s research work to generate a self-sufficient access to the in-vivo material of psychoanalytical treatments, the task was to examine aspects of the clinical psychoanalytical theory. In our view this entails to find out how analysts transform their thinking into the therapeutic situation.. We must be able to provide a systematic description of what analysts say and feel and which role the patients play in this dialog. For this the tape-recordings provide a sufficiently good enough basis; more extravagant recording possibilities are certainly viable, but for such questions not compellingly necessary[2].

First of all one has to discuss many theoretical and methodological questions in view of the extra- or intraclinical testing of clinical hypotheses (Chapter 2 in this volume). In spite of many difficulties we have become convinced that many characteristic concepts of clinical psychoanalysis relate to areas that manifest themselves in the verbal mode. Although, unconscious processes can be very well examined in experimental arrangements and have been examined diversely (Shevrin 2000, 2005), the Ulm group examined natural non-experimental material of psychoanalytical sessions. We basically make the assumption that in the course of treatments the data are produced that support or refute clinical assumptions (Hanly 1992). Therefore we decided to examine properly recorded psychoanalytical treatments.

Process models of a psychoanalytic treatment are not theoretical, abstract matters; they are factually more or less part of the day by day work of the psychoanalyst. These processual models are handed on from one generation of analysts to the next; they entail, often only in metaphoric expressions, unexpressed theories. Sandler (1983, p. 43) rightfully demands that the private dimension of these concepts should be explored. When such examinations are conducted, it is surprising what great variety of meanings are assigned to the concept “psychoanalytic process” amongst analysts (Compton 1990).

[2] Video recordings as they are extensively used by Krause (1988; 1989) for face-to-face therapy are not yet convincing for couch analyses. The reason lies in the minimal activity in the face of the resting patient (oral rcommunication F Pfäfflin).

In the first volume of the Ulm textbook Thomä and Kächele (1994a) illustrated a few common models of process (Chapter 9.3); they sketched our their model of process which is based on the "focus concept." By a focus they mean the centrally created interaction topic of therapeutic work that results from the material of the patient and the understanding of the analyst. Since single focus points remain connected through a central conflict with one another, this process model can be applied for shorter as well as for longer treatment. Beyond this it is compatible with various theoretical conceptions. They concluded that: "We conceptualize, therefore, psychoanalytic therapy as a continued, timely, not limited focal therapy with changing focus" (1994a, p. 347).

This concept of Ulm's model of process concerning the course of psychoanalytic treatment was the result of assimilating the findings of the developing field of systematic therapy research (Luborsky and Spence 1971, 1978). More then ever we are convinced that psychoanalytic process research must ignore the subjective position in which all theoretical approaches are regarded as equal in therapeutic potency. We think that this conclusion of Pulver (1987c, p. 289) is premature. Clinical psychoanalysis must be freed from a *narrative self-misunderstanding* – to paraphrase Habermas' verdict regarding Freud's scientistic self-miss-understanding (Habermas 1971a; see chapter two) – and become a science that works on therapeutic grounds with empirical methods (Kächele 1990).

This goal requires descriptive examinations of the therapeutic interaction as well as examinations of the analyst's (Meyer 1988) and the patient's inner thoughts and feelings, including specifically the process of internalizing the therapeutic experience as it is recorded in the Intersession-Questionnaire (Orlinsky and Geller 1993; Arnold et al. 2004). Fundamental for this are studies of how unconscious fantasies are expressed both verbally and non-verbally (Krause and Lütolf, 1988; Krause et al. 1992). We see the necessity of thorough and reliable description as a basis of theoretical generalization and as a precondition of etiological reconstruction.

Examining the interactive foundation of the course of treatment involves not only our reacting differently to the same material, but also includes analysts being personally touched by the patient's material. Expressed in clinical terms, we often find that the countertransference precedes the transference. In the language of research, one would say that the cognitive-affective conception of the analyst provides the semantic and pragmatic domain which the patient can use. The actual

degree of an analyst´s involvement can first be identified through tape recordings. If an analyst hands over a transcript of a session to a colleague, it is amazing how many of the analyst's own problems became evident because the transcript exposes easily how much had evaded his/her self-evaluation. For the analyst there is a significant discrepancy between his/her own professional ideal and his/her daily, routine performance. Kubie (1958) was the first to point out this; more recently Fonagy (2005) spoke in the same vein.

Dahl et al. (1978) demonstrated that analysts were selective in their perceptions of patient material, and that attempts at free floating attention provide only limited protection from the effect of the analyst's expectation structures. Moreover, it can even promote unconscious effects concerning role expectations (Sandler 1976). These various references on the problems of the development of the analyst's judgment and the creation of evidence substantiate the bi-personal foundation of the psychoanalytic situation in which valid descriptions versus fantasized descriptions are difficult to distinguish; they must be understood as constructions in a social realm (Gergen 1985; Gill 1994).

Inner psychic conflicts are expressed at least in part in the patient-analyst interaction, and they are, therefore, a function of the dyadic process. Its form is unique for every therapeutic dyad; each psychoanalytic treatment constitutes a singular history. However, many process models do not do justice to this historic uniqueness. The range of conceptualizations can be illustrated by Freud's model of the treatment process. His comparison with the chess game (Freud 1913c, p. 123), clarifies that rules of a game gives rise to an infinite variety of moves which influence the potential paths of the interactions which exist independently of each dyad's special circumstances. Chess is, after all, played all over the world by the same rules. Furthermore, there are strategies and tactics that can be useful in different phases of the game, such as the opening or end phase. This varies according to the individual technique of each player and influences the dyadic interactions in which the players gauge the expected strengths and weaknesses of each other. In addition, although it is controversial, some psychoanalytic groups are essaying modifications in the fundamental rules of the game. `

In psychoanalysis is there something like a fixed set of rules independent from the unique dyad? In chess it is easy to determine which moves conform to the rules and which break the rules; in psychoanalysis such differentiations are difficult

(Thomä and Kächele 1994a, p. 215). Many psychoanalysts still believe that the rules in the psychoanalytic situation can be determined regardless of the interactions in a particular dyad. Freud's conception of psychoanalytic treatment describes how the transference neurosis develops independently of the analyst's behavior:

> He introduces a process of the disintegration of the existing repression; he can supervise, promote, remove obstacles and certainly also ruin much about it. In all, however, the process, once introduced, goes along its own way and neither lets itself be told the direction nor the sequence of the points it affects. (1913c, p. 130)

We find much ambiguity in Freud's assertion. Freud hoped to formulate technical rules that were as close as possible to an experimental ideal. Many analysts tried to maintain Freud's ideal, but that has not been possible (Swaan 1980). It was not ever and is not possible for the analyst to be a non-human, neutral entity who has no impact on the patient-analyst interactions, although, for a long time this was the central utopian fantasy of psychoanalysts. We don't find useful the assumption that every analytic treatment runs in linear (developmental) phases from early to late as some process model imply. Instead of simple linearity, we conceive of a sequence of foci resulting from a bargaining process between the needs and wishes of the patients and the analyst's choice of interventions: this real issue is "what works at what time with what analyst" (Schachter 2005).

Our Methodological Approach

The goal of the studies presented in this volume was to establish ways to systematically describe long-term psychoanalytic processes in various dimensions and to use the descriptive data obtained to examine process hypotheses. This entails the generation of general process hypotheses as well as the specification of single case process assumptions. It should go beyond general clinical ideas as to how a psychoanalytic process should unfold and specify for each patient what kind of material has to be worked on in order to achieve change in various dimensions of specified theoretical relevance in each particular case — be it structural properties or symptomatic (verbal) behavior. Our approach did not include the recording of external measures in order to limit the intrusions on the clinical process (Kächele 1988).

Our methodological conception – inspired by Sargent´s (1961) conception - consists of a four level-approach; on each level different material involving different levels of conceptualization are worked on:

A–level: clinical case study

B–level: systematic clinical descriptions

C–level guided clinical judgment procedures

D–level: computer-assisted text analysis

This multi–level approach reflects our understanding that the tension between clinical meaningfulness and objectification cannot be creatively solved by using one approach only.

For the A–level we have provided typical examples on the patient Amalia X in the second volume of our textbook (Thomä and Kächele 1994b).

For the B–level we have exemplified our understanding of what constitutes a systematic clinical description in Chapter 4. In Chapter 5.1 the treating analyst contributes to this level by adding his advice on how to advance “comparative psychoanalysis” illustrating this by excerpts from two significant sessions.

The C-level:

Clinical descriptions performed by two or more observers maintain the nature of the data on a qualitative level. In psychoanalysis the step from transforming the rich qualitative though unsystematic knowledge into quantitative assertions has barely begun. The tool to perform this transformation consists in a simple representation of a dimensional aspect of the concept under study on a scale. A scale is an elaborate version of the primordial “yes” or “no” distinction that marks the beginning of any measurement operation (Knapp et al. 1975). Luborsky (1984) aptly calls these operations “guided clinical judgment procedures,” which catch the process of narrowing down the clinicians’ capacity of recording complex data and thereby enabling reliability of observations. On this level of our research approach various studies were performed.

The D–level Text Analysis

The fourth level in our research model introduces the methodology of computer-based text analysis as tool. The use of the computer has developed from content analysis to text analysis, a process which has been described in detail elsewhere (Kächele and Mergenthaler 1983, 1984; Mergenthaler and Kächele 1988, 1993). Other linguistic methods also are placed on this level.

Conclusion

Psychoanalytical therapy research is still a stepchild of our profession; the number of those who seriously occupy themselves with this is not great. It is bound to scientific institutions since only there is the infrastructure that makes its implementation possible. Today its emphasis lies in the comprehensive comparative evaluation of various forms of psychoanalytical therapy as well as in the microprocess analysis of psychoanalytical action. A stringent empirical demarcation of “proper psychoanalysis” from other psychoanalytical treatments has not been demonstrated. Besides the existing variance within what is internationally designated as psychoanalysis, there exists great variability of the person-bound psychoanalytical technique which are implemented in bi-personal interaction structures (Czogalik and Russell 1995; Ablon and Jones 2005, 564ff). The number of potential interaction structures is huge; the various combinations of patients and analysts provide for a psychoanalytic variability which only artificially can be divided into neat categories (Fonagy 2002a). It may be more helpful to identify essential dimensions of psychoanalytical therapeutic action and to find out, at each time for and with the patient, what mixture and which doses are good for him.

The individual psychoanalyst is called upon more ever to contribute through careful, methodological and sophisticated case studies that his intervention can be portrayed as well-founded. Teller and Dahl (1995) describe the requirements for scientific study in any discipline: „a thorough grounding in the relevant methodologies, familiarity with computational tools, and access to a standardized body of data" (p. 44). Because nowadays the “common ground” according to Gabbard (1995) consists of many thousands of counter transferences it is to be demanded that the highly subjective self-perception is portrayed at least as therapeutic action. Critical clinicians are then on their way to provide their contribution to making psychoanalytic therapy objective. Freud’s worry that the therapy could kill the science will then be invalid; then every individual case can contribute to the increase of the psychoanalytical knowledge.

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