Horst Kächele, Judith Eberhardt<sup>1</sup>, (Ulm) & Marianne Leuzinger-Bohleber (Frankfurt)

Expressed Relationships, Dream Atmosphere & Problem Solving in Amalia's Dreams - Dream Series as Process Tool to Investigate Cognitive Changes - A Single Case Study

1. Introduction: Dream series in clinical practice and in research
Even if most discussions about dreams in clinical practice are focused
around a single dream it is evident that reporting of dreams during a
psychoanalytic treatment belongs to one of the most regular and repetitive
phenomena of that kind of therapy. Patients dream more or less, and
analyst differ to the extent they use the dreams offered by the patient. As
a compromise formation a non-conscious, non-intential agreement on the
relevance od dreams for the treatments between patient and analyst is
established.

"Analytic therapy finds the analyst drawn into the intrapsychic as well as external communicative system of the dreamer" (Kanzer, 1955, p.265). Depending on the agreement a treatment may be based wholely on theanalysis of the dream material or the dreams are treated like any other material (Fliess 1953, p.123). The first analyst to emphazize the use of dream series for the evaluation of the course of treatment has been Stekel: "The dreams in their totality has to be studied like a novel in progress (Fortsetzungsroman). There is no such thing a an individual interpretation of dreams, there is only a serial interpretation" (1928). Without following Stekel's idea of the "prospective tendency" that he thought he would find in this serial interpretation it remains clinically impressive how the repeated observation is able to strengthen the understanding of a patient's dynamics.

In the United States one of the first to systematically study manifest dream content per se was Saul (1940); he discussed the "utilization of early current dreams in formulating psychoanalytic cases". A panel report on "The dream in the practise of psychoanalysis" already pleaded for

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systematic studies (Rangell L 1965). Recently "Working with dreams in psychotherapy" has even become a respectable topic for a recent president of SPR! (Hill 1996).

These discussions were preceded by the work of Thomas French who from 1952 onward published his five volumes on "The Integration of Behavior". In the second volume using a dream series of more than 200 dreams he shows "that every dream has also a logical structure and the logical structures of different dreams of the same person are interrelated, and that they are all parts of a single intercommunicative system" (French 1954) and in the third volume he applied this understanding for a thorough description of the re-integrative process within psychoanalytic treatment (French 1958).

The method of process studies using dreams series in the German psychoanalytic world was first elaborated by Enke et al. (1968¹); they were able to demonstrate that certain syndromes of affective developments in the dream series of psychosomatic patients, like increase of active-positive affective qualities with relative decrease of passive - negative were correlated to favourable outcome in inpatient psychoanalytic therapy (p. 32).

Our own experience with dream series analysis began with demonstrating the usefulness of Hall & van de Castle spotlight analysis (1966) studying two levels of transference constellations in a single case dream series (Geist & Kächele 1979). Later the study group by Leuzinger-Bohleber & Kächele at the SFB 129 implemented a project to study cognitive changes based on dream reports in five psychoanalytic treatments. In that investigation we used dreams from the beginning phase (session 1-100) and the terminal phase (100 session before the end) comparing the cognitive functioning by a content-analytic tool that was based on a model of cognitive-affective problem-solving developed by Leuzinger (1984, 1987) integrating two computer simulated models by Clippinger (1977) and Pauker et al. (1976). We did not evaluate the development over the whole of the treatments - as task we have taken up in this new study. We shall use the total dream material of one patient - the patient Amalia X that has been clinically described in Thomä & Kächele (1988, engl. 1991) and in Leuzinger-Bohleber write-up of the whole project in her second volume (1989).

<sup>1</sup>This publication was based on the doctoral dissertation of Ohlmeier (1962)

#### 2. Theory

Although memory concepts in actual cognitive science have been discussed and modified a lot during the last twenty years (see Leuzinger-Bohleber et al 1997) we still have found it useful for our descriptive purpose to continue with the model of Moser et al. (1980) that evolved during many years of work on sleep-dream simulation; they have developed very detailed item list for the description of the manifest content of dreams with respect to what Leuzinger-Bohleber in her model has termed the functions of the MOZART module.

There are three dimensions of the manifest dream content: *Expressed relationships*, *dream atmosphere and problem solving*. This has been described in detail already in the doctoral dissertation of Merkle (1988) that had been part of the afore mentioned project (SFB 129-B6). It is the declared intention of this study to use parts of the instrument as described by Merkle (1988) applying it to a larger data base of the patient I of this study, called Amalia X.

# 3. Method: Theory-Guided Complex Ratings

The tool for the description of the dream material has three parts:

# Part A Relationships

A.1 How does the dreamer happen to be in the dream?

A.2 Are there human partners in the dream?

(none = 0; one = 1; more than one = 2)

A.3.1 What kind of relationship between dreamer and dream partner do you find in the manifest dream?

A.3.2 Describe the relationships of the dream partner among them:

#### Part B Dream atmosphere

- B.1 Does the dreamer comment upon the atmsphere of her dreams?
- B.2.1 How do you judge the atmosphere in the manifest dream?
- B.2.2 How do you judge the atmosphere in the manifest dream?

#### C Strategies of Problem-Solving

- C.1 Is there one or more problem solving strategies?
- C.2 Is problem-solving successful

C.3 which kinds of problem-solving strategies do you find the in manfest dream content?

C.4 Are the problem-solvoing stratgies reflectung upn by the dreamer?

Three judges - two of them medical students (M.E. & M. B.) and one of them a psychoanalytically oriented experienced clinical psychologists with more than ten years of clincial experience (L. T) - were intensively trained to understand Moser's model of cognitive processes. In several pretests they were acquainted with the kind of material to be rated. The training was very time-consuming; the interrater relaiblity achieved were quite impressive The three raters judged 1/3 of all identified dream reports (N = 117/93); one of the raters, J.E. rated all material.

Inter-Rater Reliabilities: Overall results: 0.80 across all ratings!

#### Material

Out of a total of 517 sessions of Amalia X tape-recorded psychoanalytic treatment 218 sessions had been transcribed for a variety of other studies on this case; these were used in this study. One of us (J.E.) checked through all of the transcribed material and identified reported dreams.

Part 1; sessions 1-45, 51-55, 61-62, 71-80, 98-99: total 63 sessions

Part 2: sessions 100-105,109-116,126-130,150-157,172-179,181,202-209,213,221-225, 236-237,241-243,246-256,276-280,286-287,297-299: total of 76 sessions

Part 3: sessions 300-304,326-330, 335, 339,343-346,348-357,376-383; total of 34 sessions

Pat 4: sessions 401-404,406,421-425,431-433,435,442-449,476-480,482,489, 501-508,510-517; a total of 45 sessions

This work led to the identification of 93 dream sessions that were distributed fairly even across the sample of sessions; for the sake of comparison with the formner study we distinguished four parts:

Part 1: 63 sessions contained dreams No 1-18

Part 2: 76 sessions contained dreams No 19-54

Part 3: 34 sessions contained dreams No 55-70

Part 4: 45 sessions contained dreams No 71-93

In some sessions more than one dream was identified; a total of 111 dreams were rated.

# 4. Hypothesis

The basic question of this study pertained to the issue whether the standard pre-post design is able to generate reliable statements on the development of psychological functioning that needs time to develop. Do we have to observe the development over the course on treatment. Particularly for the long term treatments what kind of models do we have to map the process.

In our work in the long term treatment processes we have seen different courses for different variables (Kächele & Thomä 1993); from these experiences we assume that a linear trend model for changes in basic cognitive functioning is the most plausible.

To test this assumption we need more than data from beginning and end phases of a treatment. Therefore this study should fill a gap in our understanding of cognitive changes process in long term treatments. At least in using a single case design (Fonagy & Moran 1993) we might find out which of the descriptive categories are more likely to develop in the assumed linear order.

## 5. Results

From the summary of the results on Amalia X as established in the earlier study (Leuzinger-Bohleber & Kächele 1988, p.301; Leuzinger-Bohleber 1989) we quote the main features:

Changes in Problem-solving Cognitive Processes: Interactions among Cognitive Modules

The problem-solving cognitive processes of the patient over the course of the treatment peaking to the end of her psychoanalysis can be characterized by a high degree of flexibility, by an enlarged cognitive range, an associative and "gestaltlike" way of thinking, and by a capacity for a functional and realistic style of problem-solving. Different information could be perceived and worked on at the same time and led to a process of generating and testing hypotheses that could compete with, modify, or contradict each other. Cognitive dissonances were recognized, reflected, and influenced, among other things, the decision-making process.

Unpleasant affects had an important function as signals indicating cognitive processes to be taken into account in the problem-solving process. In terms of our model, we found: (1) increased cognitive and affective knowledge used in a functional way in different modules, (2) interrupt programs that functioned well

and corresponded better to reality, and (3) an uninhibited interaction of cognitive processes in the different modules.

The changes within the MOZART Module -*Changes in what was attended to* - led to the following results:

The later the sessions in the treatment the more the following changes were observable:

- -More of the text of the dreams was attended to and worked over cognitively.
- -The context of the dreams was taken into account.
- -The analyst's interventions were part of the patient's dream associations.
- -The patient pursued hypotheses about their dreams more systematically.
- -The process of generating hypotheses took place easily, without much hesitation.
- -The patient considered more than one hypothesis about the meaning of a dream.

In a separate assessment Merkle (1988) investigated the following systematic changes in three dimensions of the manifest dream content, based on the model by Moser et al. (1980): Expressed relationships, dream atmosphere and problem solving. Comparing initial and final phases of treatment she observed the following:

# Expressed Relationships:

- -The dreamer expressed better relationships with both his objects and himself.
- -The range of interactions in these relationships was increased e.g. in the late dreams she was more often alone, as well as interacting with one or more partners.
- -Although the relationships were more often tender and friendly than in early dreams, to our surprise, they were also seldom neutral, and included conflictual relations an indication, to us, that the range had been increased.

#### Dream Atmosphere:

- -The variety and intensity of affects in the manifest dream content was increased.
- -The atmosphere was more positive with less anxiety, but aggressive, sad and frightened moods were also expressed. This contradicted our original hypothesis that a single positive mood would prevail.

### Problem solving:

- -More problem-solving strategies were recognizable.
- -Problem solving was more successful than not and the dreamer was more active in doing it, and seldom avoided it.
- -The range of problem solving was greater in later than in early dreams.

She found less concern with the major psychopathological symptoms in the patient. In the later dreams the content was more personal, with a greater variety

of expressed activities. Moreover, the patient's dream interpretations were more "dialogue oriented," more convincing and more directed at understanding the unconscious meanings of the dream. The associations were more constricted early and more varied in the late sessions. These are hints that the range of attention of the successful patients was enlarged.

The detailed results of this new study on Amalia's dreams will be presented in the lecture!

## 6. Summary

We shall report on the results of a study designed to extend a former investigation about changes in problem-solving cognitive processes of a patient during her psychoanalytic treatment. The findings will demonstrate that the increases we have described comparing begining and end of treatment mainly follow a linear path over the course of the psychoanalytic treatment.

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