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A Basic Interpretative Strategy in Psychoanalytic Treatments¹

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¹ In loving memory of Hartvig Dahl

An Interpretative Strategy in Psychoanalytic Treatments²

Abstract

The paper reviews previous work using computer-based vocabulary analysis based on Dahl's emotion theory; it then tests a finding from own previous studies on short term therapies on a textcorpus of four long term psychoanalytic treatments. The study confirms that in all four treatment though in different degrees a systematic change from negative ME-emotions to negative IT-emotions can be demonstrated.

Although Freud's remark that "nothing takes place in a psycho-analytic treatment but an interchange of words between the patient and the analyst" (1916/17, p. 17) most probably was framed for didactic reasons, a research perspective that focuses on the systematic investigation of these words seems justified, given the particular importance of the verbal exchange processes for the majority of psychotherapeutic interventions. The rationale, that verbal interaction is substantially determined by the words that are used to construct it, led after some initial pilotwork (Kächele et al., 1975) to the development of computer-supported procedures for analyzing vocabularies (Kächele, 1976) incorporated within the "ULM TEXTBANK" (Mergenthaler & Kächele, 1991).

Initial studies on vocabularies of verbatim material from the Penn Psychotherapy Project = PPP (Luborsky et al., 1980; Luborsky et al., 1988) showed that "most successful" therapists tend to accomodate more to the verbal behavior of their patients in terms of vocabulary measures than "least successful" therapists (Hölzer et al., 1996). These "most successful" therapists in particular responded to their patients'

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words with an emotional connotation. Therefore the development of a systematic method for analyzing these emotional vocabularies looked promising and economical (Kächele et al. 1975).

A computer-based measure for investigation of affective vocabularies is based on a quantitative analysis of single words with an emotional connotation, i.e. parts of speech that are particularly characteristic for psychotherapeutic dialogues. Working on and close to the patient's emotions has been identified as an important therapeutic strategy, by several researchers in the field. Thus Greenberg and Safran (1987) as well as Kemmler and her group (1991) emphazise the work on emotions as a common denominator of different therapeutic schools. Initiallypsychotherapeutic research methods, focusing on linguistic variables or language parameters reflecting emotions, had to use human raters for coding (e.g. Gottschalk & Gleser, 1969). Following the lead of Spence (1970) on "computer

Gottschalk & Gleser, 1969). Following the lead of Spence (1970) on "computer attempts to decode symptom language" and Dahl's (1974) "measurement of meaning in psychoanalysis by computer analysis of verbal context"

we have developed a series of computerized measurement devices. One of them the "Affective Dictionary Ulm (ADU) (Hölzer et al., 1990) is based on a classification scheme, in which the coding of an emotion word on three independent dimensions leads to a total of eight different emotion categories (Dahl & Stengel, 1978). Whereas the Gottschalk-Gleser approach was confined to the coding of anxiety and aggression (as well as their respective subcategories) the classification schema of Dahl and Stengel comprised a theoretically derived spectrum of positive and negative emotions (Dahl, Hölzer, Berry 1992). The application of this tool to the most and least successful cases of the PENN Psychotherapy sample partially confirmed two hypotheses: 1. therapists verbalize more emotions than their patients, and 2. "most successful" therapists will name more emotion words than their "least successful" collegues. Furthermore, we found that - in comparison with their initial levels - at the end of treatment "most successful" therapists tended to verbalize emotions of the subcategory "anger". These represent emotions where according to Dahl's emotion theory a subject attributes the "focus of control" of a situation towards the self.

In a next step we tested this findings from the PENN sample in the PEP-project³ comparing two treatments; one psychoanalytic short term and one cognitive-behavioral. Our findings were that the CB therapist tended to pick up the patient's complaints (negative ME-emotions); thus creating an understanding attitude. The psychoanalyst, on the other hand, did not only follow the patient's negative ME-utterances, but clearly "translated" negative ME-emotions such as complaints about the feelings of tiredness and depression into negative Itemotions such as anger, envy and contempt (Hölzer et al., 1990). Since this is a clinical interpretative strategy fitting well into the psychoanalytic understanding of how internal conflicts should be worked on, it seemed logical to take a next step and to hypothesize that this kind of translation of complaints into accusations should be identifiable even more disctinct in high frequent long term psychoanalytic treatments.

Therefore in this study we investigate the relationship of negative ME and negative IT emotions in four psychoanalytic tape-recorded psychoanalytic therapies.

Goal of this Study

The question investigated in this study was, whether analysts' verbalization of emotion, operationalized by a computer measure, can be used as an indicator of a specific therapeutic strategy in psychoanalysis.

Hypothesis

We hypothesized that at the beginning of psychoanalysis the affective vocabulary of the analyst would be dominated by negative ME emotions (such as "depression" and "anxiety"), reflecting the empathic stance of the analyst and his focusing on symptomatic complaints of the patient. Throughout analysis negative IT emotions should increase more and more to indicate the interpretative strategy of the analyst and his attempt to link "depression" and "anxiety" to underlying and not yet adequately resolved interpersonal problems.

Method

³initiated by H. Kächele & K. Grawe in 1986

The "Affective Dictionary Ulm" (ADU) as a computer measure for the investigation of affective vocabularies yields a quantitative estimate of single words with emotional connotation. The ADU is based on a classification scheme, in which the coding of an emotion word on three independent dimensions leads to a total of eight different emotion categories (Dahl & Stengel, 1978), thus comprising a broad spectrum of positive and negative emotions words.

figure 1

Material

Extensive verbatim transcribed samples from 4 different psychoanalytic cases treated by two different psychoanalysts (two by each of the analyst) were investigated. The material was provided by the ULM TEXTBANK (Mergenthaler & Kächele, 1991). The 4 patients were diagnosed as severly disturbed but still neurotic cases. The psychoanalytic treatments lasted between 380 to 700 hours. For matters of anonymity each case was labeled by a pseudonym: Franziska X (108), Gustav Y (53), Amalie X (120) and Christian Y (75), the numbers in brackets indicating the number of sessions which were sampled for each case. Extensive clinical descriptions of these four cases have been provided in the second volume of the Ulm textbook on psychoanalytic therapy (Thomä & Kächele 1991). However to secure the clinical basis of this comunication a short note will be provided:

The patients and the analysts:

Analyst 001 then a senior analyst with more than twenty years of clinical experience treated patient Christian Y suffering from a severe narcissistic personality pathology five times a week for approximately 700 sessions and switched the treatment regime to a low dose intermittent maintenance regime for another 13 years. He also treated patient Amalia X suffering from a psychic sequelae of a somatic disturbance - hirsutism – which led to obsessional and depressive symptoms connected with a female identity problem in an analysis three times a week for a total of 531 sessions of which 517 have been recorded.

Analyst 011 at the time of the recordings in training treated patient Franziska X suffering from generalized anxiety disorder connected with problems in her professional tasks in a four times a week psychoanalysis for a total of 380 sessions. He also treated patient Gustav Y suffering from a incapabilitating inability to work in a four session per week analysis for 420 sessions.

The available recorded and transcribed sessions - that were taken from the tapes in regular intervals of 25 sessions were analyzed in junks of 5 sessions each - called periods here - . The idea using these periods instead of each session by its own, was to stabilize the stochastic feature of vocabulary. Means were calculated for these five sessions and were correlated with time of treatment (measured by session number) e. g. the 75 sessions of Gustav Y result in 15 points of time in the figure.

Results

The figures 2-5 show the changes in negative IT emotions and negative ME emotions throughout the treatments. The regression lines for the two classes of emotions support our hypothesis. Table 1 reports the correlation coefficients (Person r) between the emotion categories of the analyst interventions and "time in treatment" We find significant correlations between the - mathematically symmetric - quotient: Neg. It emotions/ (Neg. It emotions + neg Me emotions) and "time". (Pearson r; * = p < .05,** = p < .01,*** = p < .001)

Case	N period	Nsess	Neg IT	Neg ME	Neg IT/Neg ME
Amalie	24	120	.18	27	.36*
Christian	15	75	.37	64	.70**
Franziska	26	130	.49	.05	.50**
Gustav	11	55	.79	03	.65**

Table 1: Correlation coefficients (Person r) between the emotion categories and "time"

Discussion

The role of analysts' contribution to the developing analytic process has largely focused on individual moments of the therapeutic interaction reported in many clinical vignettes. The question of trans-individual strategies has not been systematically evaluated. The advent of computer technology has provided an access to study psychoanalyst's contribution on a microscopic level yet covering at the same time a large scale data base.

The analyst's vocabulary constitutes a sub-clinical entity that rarely comes to our professional awareness (Kächele et al., 1999). The choice of words that seem suitable in any given moment is dictated by the analyst's understanding of his patient's needs. "Tracing a thought stream by computer" - to refer Donald Spence's work in an experimental study on how the mind of an analyst works (1972) - is a particularly fine example of what can be achieved using these textual parameters.

In our study the distinction of IT and ME emotions in Dahl's category system is particularly valuable since symptomatic negative ME emotions such as "depression" and "anxiety" drop significantly compared to negative IT emotions, such as "anger and "fear" over the course of all four psychoanalytic treatments.

The "Affective Dictionary Ulm" as a research tool is a able to reflect changes in analysts' vocabulary throughout psychoanalytic therapy that can well be interpreted as "strategic". They are likely unintentional in any given moment, meaning that we do not assume that an analyst consciously reflects on what emotion to focus. However we would like to claim that our observation of the

four cases underscores that there is logic to it. To focus on object relations and relationship conflicts by using emotion words that are connected to negativ IT instead of Negative ME is in good agreement to our present understanding that the mechanism of change in psychoanalysis works by identifying unconscious self-other schemata following the Freudian aim that the transformation of patients´ "complaints" into "accusations" represents a core psychoanalytic strategy of treatment.

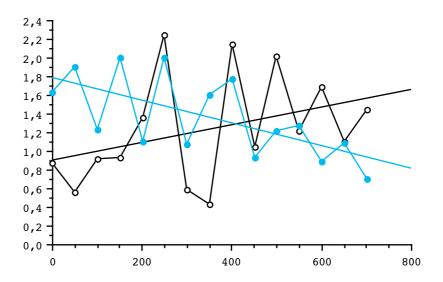
References

- Dahl, H. (1974). The measurement of meaning in psychoanalysis by computer analysis of verbal context. *Journal of the American Psychoanalytic Association, 22*, 37-57

 Dahl, H. (1998). The voyage of el Rubiyat and the discovery of FRAMES. In R. Bornstein, J. M. Masling (Eds) *Empirical studies of the therapeutic hour.*, (pp.179 227) Washington, DC: American Psychological Association Press
- Dahl, H., Hölzer, M., Berry, J.W. (1992). *How to classify emotions for psy-chotherapy research*. Ulm: Ulmer Textbank.
- Dahl, H., Stengel, B. (1978). A classification of emotion words: a modification and partial test of de Rivera's decision theory of emotions. *Psychoanalysis and Contemporary Thought*, 1, 269-312
- Giovacchini, P. L. (1972). *Tactics and techniques in psychoanalytic therapy*., London: Hogarth
- Greenberg, L. S., Safran, J. D. (1987). *Emotion in Psychotherapy*. New York: Guilford Press.
- Hölzer, M., Scheytt, N., Pokorny, D., Kächele, H. (1990). Das "Affektive Diktionär". Ein Vergleich des emotionalen Vokabulars von Student und Stürmer. *Psychother Psychol Med DiskJournal 1: 1*
- Hölzer, M., Scheytt, N., Kächele, H. (1992). Das Affektive Diktionär Ulm" als eine Methode der quantitativen Vokabularbestimmung. In C. Züll, P. Mohler (Eds), *Textanalyse*. *Anwendungen der computerunterstützten Inhaltsanalyse*. (pp.131-154), Opladen: Westdeutscher Verlag.
- Hölzer M., Pokorny, D., Kächele, H., Luborsky, L. (1997). The verbalization of emotions in the therapeutic dialogue: A correlate of therapeutic outcome? *Psychotherapy Research*, 7/3, 261-273
- Kächele, H. (1976) *Maschinelle Inhaltsanalyse in der psychoanalytischen Prozessforschung*. Ulm: PSZ-Verlag
- Kächele H., Thomä H., Schaumburg C. (1975). Veränderungen des Sprachinhaltes in einem psychoanalytischen Prozeß. *Schweizer Archiv für Neurologie, Neurochirurgie und Psychiatrie, 116*, 197-228
- Kächele, H., Hölzer, M., Mergenthaler, E. (1999). The analyst's vocabulary.. In P. Fonagy, A. M. Cooper & R. S. Wallerstein (Eds), Psychoanalysis on the

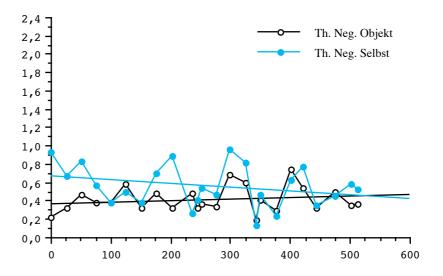
- move: The work of Joseph Sandler (pp. 217-229). London, New York: Routledge,
- Kemmler, L., Schelp, T., Mecheril, P. (1991). Sprachgebrauch in der Psychotherapie. Emotionales Geschehen in vier Therapieschulen. Bern: Huber.
- Mergenthaler, E., Kächele, H. (1991) The University of Ulm: The Ulm Textbank Research Program. In L. E. Beutler, M. Crago, M. (Eds), Psychotherapy Research. An international review of programmatic studies (pp 219-225). Washington: American Psychological Association,
- Spence D (1970) Human and computer attempts to decode symptom language. *Psychosomatic Medicine*, *32*, 615-625
- Spence D. P., Lugo M. (1972) The role of verbal clues in clinical listening. *Psychoanal Contemp Sci* 1,109-131
- Thomä, H., Kächele, H. (1991) *Psychoanalytic Practice. Vol. 2: Clinical Studies*. Berlin, Heidelberg, New York, Paris, London: Springer. Paperback edition by Jason Aronson, 1994

Hö Po Kä strategy

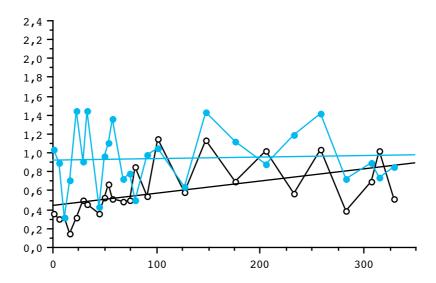


Christian Y

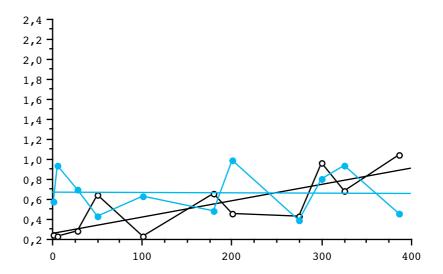
— Th. Neg. Objekt



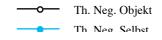
Amalia X



Franziska X



Gustav Y



	Positive	Negative
CBJECT	active - positive - object "Love" (affectionate, esteem, love, pity, sympathetic, tolerant, tender,) passive - positive - object "Surprise" (Amazed, amused, astonished, fasci-	active- negative - object " Anger" (Agressive, anger, cruel, dislike, furious, hate, envious, rage,) — — — — — — — — 5 passive - negative -object "Fear" (Afraid, aversion, dominated, fear,
	nated, impressed, surprise,)	humiliated, scared, shocked,)
SE	passive - positive - self "Contentment" (Calm, contented, pleasant, quiet, safe, satisfaction, secure,)	passive - negative - self " Depression" (Alone, bad, despair, depression, helpless, lonely, miserable, sad,)
L F	active - positive - self " Joy" (Adventurous, bold, courageous, elated, optimism, vigorous,)	active - negative - self "Anxiety" (Anguished, anxiety, frustrated, nervous, panicky, troubled,)

Figure 1. The eight categories of the "Affective Dictionary Ulm" (= ADU). Prototypic examples - used as category names - are printed bold; e.g. "anger for the category "active - negative - object" (adapted from: Dahl et al., 1992).