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Interactional Structures of Therapist and Client Participation in Adult Psychotherapy: P Technique and Chronography

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In previous studies, the utterances of 6 clients and their therapists in early, middle, and late sessions were rated on 34 and 39 speech categories, respectively. P-technique analyses revealed 4 client and 4 therapist factors. For the present study, therapist and client utterances were assigned factor scores. A 17 × 17 correlation matrix was constructed, consisting of correlations across 4 lagged utterances (therapist–client–therapist–client), with each utterance represented by 4 factor scores and a score for the third from which the utterance was sampled. Principal-components analysis of this matrix revealed 4 therapist–client interaction factors: Mutual Therapeutic Engagement, Therapeutic Negotiation, Undirected Client Reminiscence, and Sustained Therapist Work. Unsuccessful cases deviated most from successful cases on at least 1 factor. Comparisons of interaction chronographs of episodes drawn from a successful and unsuccessful case revealed meaningful differences. Discussion highlights the power of P technique to reveal structures of psychotherapeutic discourse.

What is the structure of patient and therapist participation in the discourse of therapy? To answer this question, we have (1994, in press) applied chained P technique to over 10,000 patient and therapist utterances sampled from the beginning, middle, and last third of six therapies. Each utterance was scored on over 30 language categories. Stable structures of participation were identified and shown to vary across therapies and thirds of treatment, using traditional analyses of variance. P-technique factors identified for patients were Objective Information Exchange (CINFO), Performing Painful Self-Formulating Work (CW), Negotiating the Therapeutic Relationship (CRN), and Depicting Nonsignificant Others, Client Occupation, and Leisure (CNOOL). P-technique factors identified for therapists were Objective Information Exchange Seeking (TINFOS), Directing Insightful–Painful, Self-Formulating Work (TW), Therapist Self-Involving Disclosure (TISD), and Advice-Giving Orientation (TAG). These factors were related to theories of therapeutic processes and to findings stemming from studies using different methods and instruments. In addition, chronographs of utterance-by-utterance factor scores were plotted across sessions, revealing patterns of intrasession process changes that seemed clinically significant but tended to differ across the therapies. Such intrasession change in processes were not captured by traditional analyses.

Although advancing earlier P-technique methodology (e.g., Cattell & Luborsky, 1950), our studies (1994, in press) left key questions unanswered. Because the client and therapist data were analyzed separately, processes of interaction were not analyzed. What needs to be determined is (a) whether there are stable, meaningful structures of therapist and client interaction and (b) whether the quality of discourse differs across therapies. Because we have demonstrated how P technique can be combined with analyses of variance, emphasis will be placed on how the quantitatively driven P-technique factors and qualitative interpretation of verbatim transcripts can be integrated. Visual inspection of chronographs of the dyads' utterance-by-utterance discourse factor scores and interpretation of verbatim transcripts will be used to illuminate differences in forms of therapeutic discourse. This will be one of the first P-technique analyses to describe underlying patterns of therapist and client interaction. We hope to show how this methodology can address process questions that are currently receiving critical attention in the field of psychotherapy research (Russell, 1994).

Method

Participants

Six therapies were examined.[1] Therapists were male and all participants spoke German. The first therapist, a senior analyst, treated a 21-year-old female client who had anorexia nervosa (Th1–Cl1), a 31-year-old male client with borderline personality disorder (Th1–Cl2), and a 25-year-old male client who had obsessive–compulsive disorder (Th1–Cl3) in treatments that lasted 11, 68, and 29 sessions, respectively. The second therapist (Th2–Cl4), a beginning behavioral therapist, treated a

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This study resulted from a collaborative effort. Consequently, order of authorship does not reflect seniority.

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[1] Two of the therapies analyzed in the present study were provided by the PEP (Psychotherapie-Einzelfall-Prozessforschung) Project and were organized and processed by the Ulmer Textbank. We thank these organizations for their help and the participating therapists and clients for allowing us to study their treatments.

22-year-old male client suffering from anxiety and panic attacks in a therapy lasting 29 sessions. The third therapist, an experienced physician of eclectic orientation, treated a 32-year-old female client in 16 sessions for conflicts arising from familial strife (Th3–Cl5). The fourth therapist, a senior analyst, treated a 29-year-old female client who had bulimia in 89 sessions. Th1–Cl2 (the borderline case) and Th3–Cl5 (the familial strife case) were rated unsuccessful by therapists, clients, and external raters. The other cases were deemed successful.

Procedure

Stuttgart Interactional Category System (SICS). The SICS (Czogalik, Hettinger, Bechtinger-Czogalik, 1987) codes utterances along categories grouped in five classes: mode of involvement, assessing the affective–cognitive engagement of the speaker; mode of conversational techniques, assessing the type of speech act performed by the speaker's utterance; mode of conversational regulation, assessing the linkages that serve to chain utterances together; mode of thematic concern, assessing the utterance content; and mode of temporal orientation, assessing the temporal dimension of the utterance.[2] This multiple perspective strategy contrasts with the more typical single perspective used in therapy research (e.g., Elliott, Hill, Stiles, Friedlander, Mahrer, & Margison, 1987) but provides a more circumspect view of discourse. The SICS applies to utterances what speaker A says between the previous and subsequent speech of speaker B.

Coding. Each utterance was rated from transcripts by two coders on the five classes of interaction categories. In each class, coders selected 1, 2, or 3 categories as descriptive of the utterance, assigning 1 if they felt that categories were descriptive and 0 if not descriptive. Ratings of coders were summed. Thus, scores on each utterance for each category could range from 0 to 2: Unselected categories were scored as 0. Each coder was trained on transcripts of different therapists practicing different therapies (client-centered, psychodynamic, etc.). Training continued until coders agreed on at least 80% of their ratings on 500 nonvacuous utterances (e.g., utterances like "mhm" were excluded because they inflate agreement rates). Some categories were excluded from analyses because of very low frequencies of occurrence (e.g., mean scores of less than .08 on the 0–2 rating scales).

Samples. In the previous studies (Czogalik & Russell, 1994, in press), two samples of therapist and client utterances were taken, a primary and cross-validation sample. For each therapy in each of the two samples, three sessions were randomly selected: 1 in the beginning third of therapy, 1 in the middle third, and 1 in the final third. The first and last session were not included in any sample. Table 1 contains the P-technique factors for both client and therapist data. Coefficients of concordance (Harman, 1967), which assess the degree of factor similarity on the primary and cross-validation sample, are also reported. The reported values indicated a high degree of concordance.

Analyses. We assigned the relevant four factor scores, derived from the earlier studies, to each client and therapist utterance. We calculated correlations between the factor scores across interaction sequences of four lagged utterances (therapist–client–therapist–client), defining a 16 × 16 interaction correlation matrix. We also included a variable indicating from which third of therapy the utterances had been sampled. We thus obtained a 17 × 17 matrix on the basis of 1,338 therapist–client–therapist–client exchanges, which was submitted to a principal-components analysis with varimax rotation.[3] Factors were retained on the basis of visual inspection of the scree test, eigenvalues >1, easy interpretability, and relatively simple structure. The factor scores were then used in all subsequent analyses.

Results

Structure of Therapist–Client Interaction

Table 2 present results of the principal components analysis. As can be seen, four factors were retained, accounting for 40.1% of the total variance. Factor 1 was termed *Mutual Therapeutic Engagement* (MTE), because of high positive loadings on TW (.42) and CW (.70) on the first exchange; on the second exchange, loadings were .39 and .61 for TW and CW, respectively. Factor 2 was termed *Therapeutic Negotiation* (TN), because of high positive loadings on TSID (.44) and CRN (.64) on the first exchange; on the second exchange, loadings were .49 and .67 for TSID and CRN, respectively. Therapy third loaded (.33) on Factor 2 as well: Levels of Factor 2 tended to increase as therapy progressed. Factor 3 was termed *Undirected Client Reminiscence* (UCR), because of high negative loadings on TAG (−.46) and high positive loadings on CNOOL (.78) on the first exchange; on the second exchange, loadings were −.50 and .74 for TAG and CNOOL, respectively. Factor 4 was termed *Sustained Therapist Work* (STW), because of high positive loadings on TW (.35), and high negative loadings on CINFO (−.70) on the first exchange; on the second exchange, (loadings were .49 and −.69 for TW and CINFO, respectively), in addition to TINFOS (.38).

Differences Between Therapy Dyads and Thirds on Factor Levels

Because one therapist figured in three dyads, independence of utterance scores across cases cannot be assumed. This type of dependency is not an inherent problem of P technique. Differences between the dyads across therapy thirds do exist. Figure 1 presents the mean factor scores of the dyads across therapy thirds for MTE and TN, respectively. Observe that Th1–Cl2, in which the client has borderline personality disorder, is the most extreme in the amount of MTE present in each third. Similarly, Th3–Cl5, the family strife case, is the most extreme in the amount of TN. These dyads are nearly 1 standard deviation more extreme on these factors than many of the other dyads, especially in the middle and last third. Were our samples independent, differences this large would be statistically significant. In fact, effect sizes are better to report, because even small mean differences would be statistically significant because of the large samples of utterances.

Qualitative Chronographic Differences Between Episodes of Successful and Unsuccessful Therapies

Do representations of client–therapist discourse in chronographic form deepen our clinical understanding of therapy? To

[2] For detailed definitions of SIC categories, see Czogalik and Russell (1994).

[3] In our previous article on therapist participation (Czogalik & Russell, in press), it was indicated that the large number of utterances of the one therapist who saw 3 patients did not unduly bias the resulting P-technique factor structure. Canfield, Walker, and Brown (1991) also illustrated the use of cross-correlations in the analysis of contingency in and across client and therapist speech and demonstrated methods by which matrices can be statistically compared with each other through the use of LISREL (Jöreskog & Sörbom, 1986). In a related application, Russell, Bryant, and Estrada (1994) demonstrated how to use confirmatory structural analyses to assess hypotheses not only about matrix similarities but also about the invariance of their underlying factor structures.

Table 1
Factors and Factor Loadings of the Stuttgart International Categories for Therapist–Client Interaction

Category	Factor 1	Factor 2	Factor 3	Factor 4
Mode of Involvement				
Positive evaluation	.07 (.11)	.13 (.18)	.33 (.12)	.12 (.16)
Negative evaluation	.03 (.07)	.49 (.46)	.16 (.06)	.01 (.06)
Neutral description	.75 (.68)	.04 (−.42)	.07 (.04)	.34 (.11)
Cognitive appraisal	.03 (.13)	.47 (.63)	.37 (.15)	.34 (−.07)
Positive affect	−.00 (.04)	.21 (.17)	.21 (.01)	.04 (.17)
Negative affect	.02 (.00)	.53 (.52)	.01 (−.07)	.02 (.14)
Minimal display of involvement	−.80 (−.86)	−.37 (−.35)	−.34 (−.10)	−.18 (−.16)
Conversational Techniques				
Reflecting	.22 (.08)	.23 (.08)	.01 (.07)	−.18 (−.13)
Informing	.79 (.75)	−.24 (−.29)	.10 (.02)	.08 (.19)
Confronting	−.09 (−.02)	.46 (.03)	.26 (.54)	.04 (.06)
Exploration	.10 (.00)	.90 (.59)	−.01 (.08)	.04 (−.13)
Minimal technical activity	−.80 (−.88)	−.38 (−.37)	−.34 (−.09)	−.19 (−.17)
Interpreting	−.07	.48	.14	.05
Advising	−.02	.08	.09	.75
Disclosing	−.09	.01	.72	.07
Comprehending	.01	.60	.13	.01
Conversational Regulation				
Initiating	.14 (.00)	.03 (.11)	−.08 (.37)	.46 (.16)
Continuing	.39 (.48)	.06 (.33)	.46 (−.19)	.07 (.31)
Affirming	−.25 (−.35)	.07 (−.08)	.03 (−.01)	−.13 (−.20)
Questioning	.54 (.09)	.06 (−.12)	−.61 (.47)	.07 (−.12)
Answering	−.00 (.10)	−.04 (−.11)	.16 (−.05)	.15 (−.11)
Disaffirming	.04 (.04)	.07 (.11)	.21 (.16)	−.02 (−.15)
Back channel regulators	−.65 (−.57)	−.29 (−.22)	−.31 (−.06)	−.11 (−.04)
Directing	−.04	.65	.22	.30
Temporal Orientation				
Distant past orientation	.18 (.12)	.32 (−.11)	−.15 (−.19)	−.13 (.30)
Recent past orientation	.27 (.14)	.31 (.15)	−.05 (.08)	−.04 (.69)
Present orientation	.48 (.61)	.40 (.38)	.49 (.18)	.27 (−.38)
Future orientation	.15 (.21)	−.10 (−.09)	.00 (.09)	.60 (−.09)
Lacking indication of temporal orientation	−.80 (−.87)	−.39 (−.39)	−.34 (−.10)	−.20 (−.17)
Content				
Therapy parameters	.05 (.13)	.08 (.03)	.19 (.52)	.71 (−.07)
The person of the therapist	.01 (.05)	.04 (.04)	.73 (.63)	.12 (−.02)
The person of the client	.21 (.30)	.68 (.65)	.17 (.01)	.11 (.03)
Significant others	.25 (.16)	.03 (−.01)	−.09 (−.15)	−.08 (.17)
Work or leisure	.27 (.15)	−.01 (−.12)	−.07 (−.00)	−.00 (.51)
Objective events	.49 (.49)	−.24 (−.35)	.14 (−.14)	−.10 (−.21)
Therapist–client interpersonal relationship	−.02 (.02)	.21 (.13)	.25 (.63)	.55 (.01)
Significant-other–client interpersonal relationship	.18 (.12)	.41 (.26)	−.14 (−.20)	−.05 (.20)
Nonsignificant-other–client interpersonal relationship	.15 (.05)	.16 (.04)	−.08 (.03)	−.05 (.50)
Contentless verbalizations	−.80 (−.87)	−.38 (−.39)	−.34 (−.10)	−.20 (−.17)
Percent of total variance	21.4 (19.7)	8.2 (7.4)	5.5 (6.0)	3.9 (3.8)
Coefficient of concordance	.99 (.98)	.99 (.98)	.99 (.98)	.99 (.98)

Note. Client factor loadings are given in parentheses. For the therapist: Factor 1, Objective Information Exchange Seeking; Factor 2, Directing Insightful Painful Work; Factor 3, Self-Involving Disclosure; Factor 4, Advice-Giving Orientation. For the client: Factor 1, Continuing Objective Information Exchange; Factor 2, Performing Painful Self-Formulating Work; Factor 3, Negotiating the Therapeutic Relationship; Factor 4, Depicting Nonsignificant Others, Client's Occupation, and Leisure.

indicate the power of chronography, we compared two episodes in the middle session, one from the unsuccessful borderline case and one from the successful anxiety case.

The six dyads were most different from each other on MTE and TN in the middle third, on the basis of their mean levels of these factors. We are now interested in comparing the variability around these means, and the means for UCR, to detect differences in discourse patterns that cannot be detected in differences between means (as in Figure 1) or in standard tests of the homogeneity of group variances. It may be that "some-

Table 2
Interactional Exchange Structure

Discourse turn and P-technique factor	Factor 1	Factor 2	Factor 3	Factor 4
Therapy third	.09	.33	.17	−.05
Exchange 1				
TINFOS	−.50	−.12	−.12	.09
TW	.42	−.12	−.07	.35
TSID	.01	.44	−.02	.23
TAG	−.10	.34	−.46	.03
CINFO	.09	−.14	.04	−.70
CW	.70	−.05	−.02	.05
CRN	.01	.64	−.05	−.09
CNOOL	−.01	.04	.78	−.02
Exchange 2				
TINFOS	−.52	−.14	−.07	.38
TW	.39	−.12	−.07	.49
TSID	−.07	.49	−.10	.25
TAG	−.07	.29	−.50	.06
CINFO	.01	−.12	.00	−.69
CW	.61	.05	−.01	.05
CRN	.09	.67	−.15	.05
CNOOL	−.05	.11	.74	−.03
Variance	12.6%	10.5%	8.8%	8.1%

Note. Factor 1, Mutual Therapeutic Engagement; Factor 2, Therapeutic Negotiation; Factor 3, Undirected Client Reminiscence; Factor 4, Sustained Therapeutic Work. P-technique therapist factors are abbreviated as follows: TINFOS = Objective Information Exchange Seeking; TW = Directing Insightful Painful Work; TSID = Self-Involving Disclosure; TAG = Advice Giving Orientation. P-technique client factors are abbreviated as follows: CINFO = Continuing Objective Information Exchange; CW = Performing Painful Self-Formulating Work; CRN = Negotiating the Therapeutic Relationship; CNOOL = Depicting Nonsignificant Others, Client's Occupation, and Leisure.

times we learn more from what we see than from what we compute..." (Cohen, 1990, p. 1305).

Figure 2 presents the chronographs of Factors 1, 2, and 3 over the first 62 exchanges for the middle session of the successful Th2–Cl4 anxiety case and the unsuccessful Th1–Cl2 case involving borderline personality disorder. Note that these dyads were more similar to each other than to any other dyad on mean levels of Factor 1 and more different from each other than almost any other dyad on mean levels of Factor 2 in the middle session. They differ substantially on both factors, as indicated by their nearly three fourths standard deviation difference (see Figure 1). They were also substantially different from each other in their mean levels of Factor 3, UCR. When viewing Figure 2, note that zero values on the *y* axis represent the mean factor scores across all dyads and that 4 standard deviations separate these three means. Each point of the *x* axis represents an exchange consisting of the four lagged utterances, therapist–client–therapist–client.

The chronographs of Th2–Cl4 and Th1–Cl2 in Figure 2 reveal striking differences. In the anxiety case, there are four episodes of elevated MTE (utterances 10–14, 28–32, 43–45, and 50–54), most approximately five exchanges long, each about 1 standard deviation above the mean, separated by brief returns to the mean and slight elevations, for the first half of the therapy. This mutual engagement is carried out in a context of little TN, indicated by Factor 2 hovering around 0.5 standard deviations below the mean. Similarly, UCR hovers at or below the mean until approximately Exchange 26. The remainder of the session appears organized around UCR in the context of further MTE, which begins to spike and grade positively above the mean after Exchange 44. Note that the extremities of the factor scores spike above 1 standard deviation over mean levels only about five or six times on Factor 1, zero times on Factor 2, but extensively on Factor 3, which has values near 2 standard deviations above the mean quite frequently in the last two thirds of the session. This session can be characterized as follows: In the context of a secure therapeutic relationship, patient and therapist engage in consistent work on formulating the clients' understanding of specific anxious or hostile behaviors in his past.

In the case involving borderline personality disorder, we were confronted with a different factor pattern. There are several extended exchanges on MTE that are consistently over 1 standard deviation from the mean (roughly, Exchanges 7–10, 12–22, 37–43, 46–52, and 54–59), with extreme spikes over 2 standard deviations from the mean in over 10 instances. The intensity of this therapeutic engagement occurs in the context of extreme patterns of TN, indicating resistance or a problematic therapeutic relationship. Finally, there appears to be relatively little interest in UCR until about the 40th exchange. The first 62 exchanges may be characterized as follows: In the context of a problematic relationship, patient and therapist engage in extreme patterns of self-formulating work involving, for the most part, levels of reminiscence that are slightly lower than the mean level and episodes of intense therapeutic negotiation.

For a better contrast of differing chronographic patterns, one episode from each session was selected; translations of the verbatim German transcripts are provided in the Appendix. For the anxiety case (Th2–Cl4), Exchanges 40–53 are presented, and for the case involving borderline personality disorder (Th1–Cl2), Exchanges 1–8 are presented. These episodes share some content features. In the anxiety case, the therapist and client are working to understand how the client's feelings are (or are not) expressed assertively in relation to his girlfriend and colleagues. In the case involving borderline personality disorder, the client and therapist are also working to understand the client's feelings of being too reserved, but on the other hand, of also exploding attackingly at work colleagues.

Returning to the chronograph, we note that in the context of a better-than-average therapeutic relationship (Factor 2), the anxious patient and therapist work on understanding a past episode and interpersonal collegial relationships (Factor 3). They use this mutual work to formulate an understanding of the client (Factor 1) in more general terms near the close of the episode. By reading the transcript, one gets the sense that the therapist is working to direct the client to understand his feelings and one is able to witness the client's momentary struggle to take on and develop the therapist-proffered "swallowing-your-feelings" metaphor. In the end, the client helps to complete the metaphor by expressing the wish to have a faucet to let out what he has swallowed before it erupts inappropriately. One can see adequate tracking across the exchanges, with anchoring in descriptions of behavioral events and reactions thereto. This therapist and client seem to work well together, although they make several adjustments in descriptive terms (e.g., "question" vs. "interrogate").

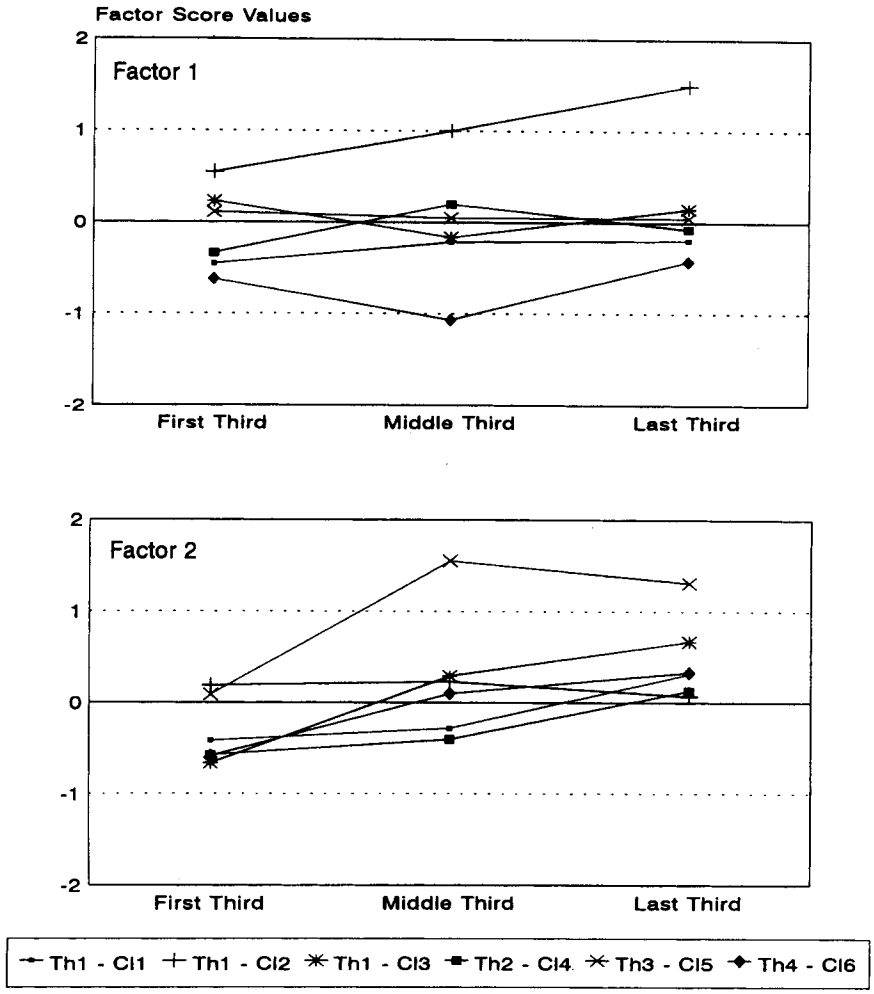

Figure 1. Mean score values for Factors 1 (Mutual Therapeutic Engagement) and 2 (Therapeutic Negotiation) for the six dyads across sessions sampled from the first, middle, and last therapy. The six therapies examined are represented as follows: Th1-Cl1 = Therapist 1 (a senior analyst) and a 21-year-old female client who had anorexia nervosa; Th1-Cl2 = Therapist 1 and a 31-year-old male client with borderline personality disorder; Th1-Cl3 = Therapist 1 and a 25-year-old male client who had obsessive–compulsive disorder; Th2-Cl4 = Therapist 2 (a beginning behavioral therapist) and a 22-year-old male client suffering from anxiety and panic attacks; Th3-Cl5 = Therapist 3 (an experienced physician of eclectic orientation) and a 32-year-old female client in therapy with regard to familial conflicts; Th4-Cl6 = Therapist 4 (a senior analyst) and a 29-year-old female client who had bulimia.

In contrast, the chronograph of the borderline episode portrays a pattern of difficult therapeutic negotiation, with relative extremes of mutual therapeutic engagement occurring near its end (Exchanges 6–8). By reading the transcript, one gets a sense of the difficult struggle the patient and therapist have in connecting in a therapeutically productive way, and a certain oppositionality can be sensed in their discourse. The therapist seems confronted with relatively lengthy, abstract descriptions of the client's reported sensational changes. In their wake, the therapist attempts to tie them to specific behavioral events or relationship episodes either within the immediate "transferential" relationship or in the client's recent past. After little success, the therapist proffers an interpretive description of the client's reported behavior as being overwhelmed by a feeling, which turns out to be nothing but "noise and smoke." Because of the fluctuations in the all-or-none patient descriptions, the therapist ends up conveying disbelief in the client's extreme verbal depictions. On the client's side, there is, on the surface, the disclosure of several powerful experiences, ones described in rather holistic, abstract, and sensational terms. These seem to receive little confirmation from the therapist, and what the therapist offers is rejected. One senses that client and therapist are confronting each other, and in this episode, at least are unable to cooperate in a productive therapeutic manner.

Discussion

We demonstrated how first-order P-technique factors of therapist and client participation could be used to (a) identify struc-

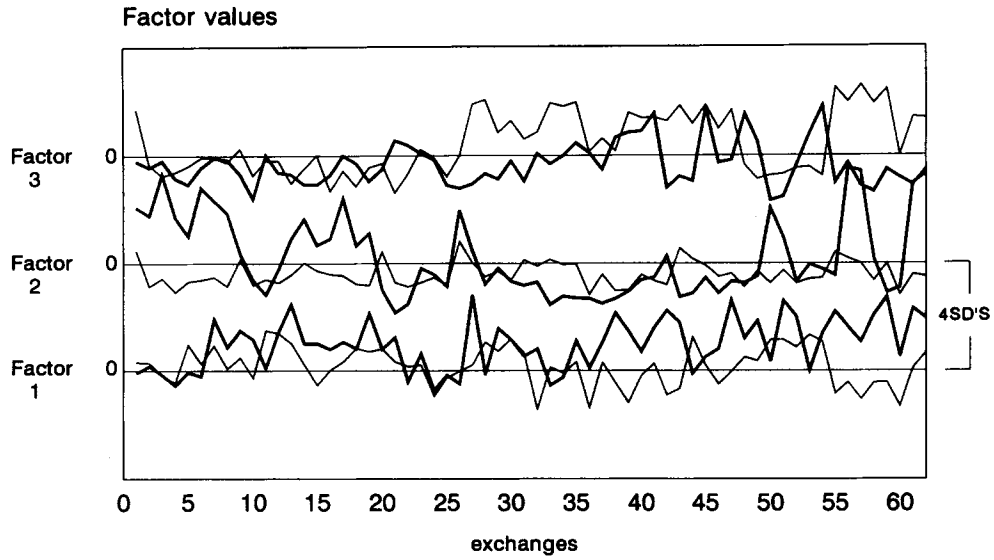

Figure 2. Chronographs of Th2–Cl4's and Th1–Cl2's levels of Factors 1 (Mutual Therapeutic Engagement), 2 (Therapeutic Negotiation), and 3 (Undirected Client Reminiscence) across 62 exchanges sampled from the middle third of therapy. SD's = standard deviations. Th1-Cl2 = Therapist 1 (a senior analyst) and a 31-year-old male client with borderline personality disorder; Th2-Cl4 = Therapist 2 (a beginning behavioral therapist) and a 22-year-old male client suffering from anxiety and panic attacks. Thick line represents Th1-Cl2; thin line represents Th2-Cl4.

tures of therapeutic interaction extended over four lags of therapist–client discourse and (b) pinpoint differences between cases and between episodes. We suggested how P technique, with appropriate independent samples, could be joined with effect size analysis to detect differences across cases and across phases of therapy. Our main focus, however, was to demonstrate how chronographic representations of P-technique-derived factor values could link quantitative and qualitative studies of therapeutic processes.

Structure of Therapeutic Discourse

In terms of the structure of therapeutic discourse, we identified four factors that have face validity, that empirically describe constructs of therapeutic process whose importance has been demonstrated in previous theory and research, and that appear to be meaningful clinically. Factor 1 described an interactional process in which the therapist directs and facilitates the painful work of client self-formulation and the client explores and discloses in the cognitive and affective task of formulating a felt understanding of self. We described the structure of this discourse process in microanalytic detail (see Table 1), showing that it typically extends over at least two exchanges. MTE describes the technical core of therapy, with the therapist using valuative and technical interventions that seem to prompt patient emotional disclosure, exploration, and self-understanding. This particular structure has been described in Orlinsky and Howard's (1986) generic model, but the empirical validity of their diagrammatic representation of the mutual participation of therapist and client in the technical work of therapy has not been directly corroborated at the "structural" level. The present findings lend empirical support both to the individual descriptions of client and therapist participation but also to their structural relationship over the course of therapies.

Moreover, the difference in the magnitudes of the dyads' mean levels of MTE were substantial, especially in the middle phase of therapy. This makes good clinical sense. Therapies involving different therapists and clients with different disorders would be expected to diverge in their levels of mutual therapeutic engagement. Such divergence should be expected to occur in the middle phase of therapy, where such work should be a central focus of the therapist–client discourse. The unsuccessful borderline case was distinct from the other cases in its very extreme scores on this factor. This too makes good clinical sense: It frequently is reported that the therapeutic work involved in the treatment of borderline cases is especially arduous, even in successful cases.

Similarly, Factor 2, TN, described a structure of discourse centered around the deliberate negotiation of the therapeutic relationship and the defining parameters of the treatment. The therapists' role in this negotiation was characterized by self-involving disclosures and appraisals concerning the continuing topics of discussion; that is, therapists indicate how they feel and think about the current contents of conversation. These contents (i.e., the therapeutic relationship and parameters of treatment) are highlighted by clients in their confrontations and questions of the therapists. This factor pertains to the therapeutic bond, the working relationship, and resistance, as well as to the therapeutic contract (Orlinsky & Howard, 1986). Importantly, levels of this factor tended to increase as therapy progressed, as indicated by the positive loading of therapy third on

this factor. This makes good sense: Work on the relationship, especially in analytic therapies, would be expected to increase gradually over the course of therapy, as it did for each case except that of the borderline (see Figure 1).

Disclosures of therapists' appraisals of the relationship and parameters of treatment were important constituents of therapeutic negotiation. Previous studies of therapists' verbal behavior using speech act systems reported very low frequencies of disclosures and also reported that therapists of different orientations were not differentiated on the basis of their mean levels of disclosure (Elliot et al., 1987; Hill, Thames, & Rardin, 1979). The findings presented here indicate that such disclosures are importantly involved in therapeutic discourse, as Essig and Russell (1986) have found by using a linguistic system of analysis. The findings also locate the disclosures' interactional role in the particular structure of therapeutic negotiation, revealing that they figure prominently in relationship and contract management and in working through resistances or ruptures.

As importantly, the other unsuccessful case, the eclectic therapist working with the women with familial disturbances, was also more extreme on this factor than any other case. One can at least speculate that the defective interpersonal learning that had taken place in the family made it difficult to negotiate the relationship productively in therapy. The borderline personality disorder and obsessive-compulsive disorder cases were the next most extreme on this factor, dovetailing with clinical lore and some studies about how difficult it is to establish and maintain relationships with these types of clients (Orlinsky & Howard, 1986).

The third factor, UCR, pinpointed a structure of therapeutic discourse that is often talked about but has received little empirical attention, namely, the narrative sifting through of the client's recent past experience with work, leisure, or nonsignificant others in the absence of direct technical intervention on the therapist's part. Partly, this structure seems to capture a more free-associative or everyday discourse concern with past events, or a sort of respite from the more technical aspects of therapy that focus on self-formulating work or negotiating the therapeutic relationship. This structure should not be dismissed as containing no therapeutic working ingredients. Narration inevitably helps to construct the past, and through it, a sense of the person and the future (Russell, 1992), even if focused on less therapeutically volatile contents.

The fourth factor, STW, described an interactional structure in which therapists increase therapeutic work as clients give less objective information or vice versa. We see that therapists' work takes place in at least two interactional contexts—one in which the client also focuses on self-formulating work (Factor 1, MTE) and one in which the client is oriented toward objective information giving. This attests to the complexity of therapeutic work and the differing forms it can take. Importantly, mean levels of STW were relatively similar across dyads, indicating both a qualitative structural and quantitative level similarity.

Qualitative Findings

In a chronographic comparison of the unsuccessful case involving borderline personality disorder with the successful anxiety case, several interesting findings emerged. We saw dramatic differences in the organization of their discourse, although they shared surface content features. Although both discourses seemed to be organized episodically, the extremity of factor values differed along each of the three factors, and, most importantly, the interrelationships of the factors varied. A chronographic narrative was constructed from the pictorial representation of the factor values over time. The chronographs provided a more sensitive depiction of the differences between the cases than could be achieved when comparing means quantitatively.

In addition, when the verbatim texts were interpreted clinically, differences emerged in terms of the "tenor" of the discourses. In particular, stark differences appeared in the quality of the therapeutic work being accomplished in the context of very different therapist–client working relationships. The quantitatively driven chronographic representation and the qualitatively driven clinical interpretation seemed to be mutually corroborating. Consequently, P technique and chronography seems to provide a creative way in which the quantification of therapy processes and their clinical interpretation can be productively linked. In other words, P-technique applications such as those demonstrated here may provide a way in which the often-noted gulf between research and practice can be bridged.

Development of the P technique will make its use more productive. First, work should be conducted to determine what sample size of randomly selected utterances is sufficient to characterize the factorial structure of the population of utterances. Coding every utterance in a case along 20–40 variables seems just too time-intensive. Second, research needs to be conducted to determine what kinds of deviations from mean factor levels are necessary to "flag" clinically meaningful episodes. Third, prototypic chronographic patterns may be developed as a means to identify processive changes of likely clinical import. Such developments will make P technique easier and more meaningful to use. Finally, confirmation of the factorial structure of therapeutic discourse will have to be pursued across samples of different clients and therapists.

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Appendix

Verbatim Interactional Exchanges

Verbatim Interactional Exchange of Th2–Cl4

Session 40. And then, when I told her [my girlfriend, that she could have at least said hello to me], it was actually... *Then you felt good?* Well, for a moment in the bar I was angry. Then I went home with a colleague. *In the bar you were angry? How did you show that?*

Session 41. Ah, I didn't say another word, so to speak; just sat there and had nothing to do with anyone, like when you're in a "kiss my ass" kinda mood. *More like, a little put out?* Yes. *And when your colleagues asked you, "Hey you, what's up with your girlfriend?"*

Session 42. (laughs quietly) Ah, I told them that we had a fight on Saturday. *Hmhm.* And then they were all quiet. Then they were satisfied... yeah, when someone says something like that (laughs quietly) they don't ask what and why and how. *How was it for you, when you had to say that? When they asked? When they noticed that [your silence]?*

Session 43. You mean, that they noticed? *Hmhm.* Ah, they almost had to notice, I don't know... *Hmhm.*

Session 44. Ah, I sometimes think... Sometimes I would most like to say "Maybe, ah, it's none of your business." You know? I do have to... On the other hand, you have to admit, that you could be happy that anyone even cares or asks... *Mmhm.* "What's bothering you?" *Hmhm... you appreciated their asking? Or not necessarily? Would you rather...*

Session 45. Well in that respect, actually I'd rather not. *You'd have preferred not to be interrogated? Hmhm.* Well, they didn't exactly interrogate me. They just asked, "What did you quarrel about?" *Hmhm.*

Session 46. I wouldn't call that interrogation, so, ah... *Hmhm.* I just said I got angry. *You would rather not have been asked at all?*

Session 47. Well, on that... In any case, just, ah... *On what?* That (unintelligible)... That it started rising up in me again (gestures presumably toward throat [where he has had symptomatic constriction when anxious]). *Yes, it's rising up again?*

Session 48. Yes... *You have that tension here too? It's rising up again? And you feel the tension here again. And often you swallow it back down again, when you get angry. Is that too complicated? Or is it still too unclear when I say it that way?* Oh, no. *Or, what comes to mind?*

Session 49. Ah (sighs) it's exactly... Yeah... Nothing's coming to mind, I don't know anything else to say about it. *Hmhm... How would you say it in your own words?* Ah, I get that tension because I always swallow it down. *Yes.*

Session 50. Well, always? Ah, sometimes. Sometimes I also explode, but... *Yes.* But most of the time I swallow it right down. *Yes.*

Session 51. And then somewhere I let it out again. *Hmhm... These tensions come as an expression of what's really already there?* It's like a water basin that one's filling up, and then it gets higher and higher and the pressure gets higher and higher. Yes.

Session 52. Because you can't let it out anywhere, you know? *Hmhm.* That's the way I see it. *Hmhm.*

Session 53. There should really be a faucet built in. (giggles). *Hmhm... where would you start to look for that? The faucet?* The best would be at the bottom. (giggles) No, just ah, just that I can say again what I want, you know? *Hmhm.*

Verbatim Interactional Exchange of Th1–Cl2

Session 1. Yes, that's it (sighs). What I just noticed is, that I'm still reserved most of the time. *Reserved?* Reserved, yes. *Don't quite understand what you mean.*

Session 2. Well, ok, good, that I... hm... that I'm still in reverse, that I don't shift into drive but I'm like, how should I put it... was a feeling just now. *Hmhm and so... it sounds like a kind of warning, "Listen up! Careful, I'm still reserved."* No, not directed at you now, not, that's not right, it's not directed toward you perhaps it does have something to do with you but... I notice it in myself that it, that I... that I'm still not going forward like is actually in me to do... that is really funny as if it went back and forth, I notice that I that I that I dress up, that I... still hold... like I said that I still hold myself back, that I don't leap forward. *Hm, hmhm, hmhm. When do you leap forward? If you pay your own way?*

Session 3. Oh good question, no I don't believe that works... that won't change at all. I don't think, I don't think so, that anything helps. If it helps then it does because of my own attitude, or... yes, now I've said attitude, because of my, of my trust perhaps... That is really funny Dr. and in fact it's been on my mind all the last few weeks now... Yes, the last 2 weeks it's especially occurred to me... the very sentence that you said to me, it was so earthshaking for me, that is, that is **the** sentence for me, that really was it, for me that sentence is so revolutionary it changed my life, it, it alone changed my life completely. *Hmhm* (quietly). I can, I can, since then I... since that sentence has been in me, since it affected me, it's really thrown me for a loop, like I doubt everything. I think that just because of that sentence I find beginnings that I never dreamed of, in all kinds of ways. For me, nothing is true anymore for me; everything that counted before... my ways of relating, my way of life... that that that all gets, gets shaky that all gets, that all changes, just through that sentence because I see that my relationships are shaped by the past, but that that doesn't have to be that way, it **was** like that but it **isn't** any more, it doesn't **have** to be like that, it can truly be completely different, it doesn't fit with me at all. *And where... do you see this concretely? Where does this have an effect? Can you give me a concrete example?*

(*Appendix continues*)

Session 4. Here [in therapy]? *Not just right here.* Yes. *But where you think, "Oh yes, here's where I did do something different."*

Session 5. Well when I've made a special step forward because of... I've established that it's a fight for me, to go into new territory is a fight. That has, that has to do, that has to do with fear of social contact; with the excitement of new things and also of the unknown. The old ways are, the old ways were driven in, and somehow count, somehow don't count anymore and so the new and so the new ways... it's all unknown so it means feeling things out. I can also maybe say that with, with, with coming here, I must say I'm still reserved but al-also its the same way. I have an incredible... yes, well an example from work... I've realized... that I attack people, today I, like this afternoon I, my buddy, my work colleague wanted to tease me, he succeeded in getting a rise out of me, but when he came in later, I said, "You can get away with that once 'cause of friendship, right? But don't ever tease me like that again." So from that... So I can... I'm making forward progress, I don't hold myself back anymore but I attack, I notice I, I'm up in arms, I notice I get more enraged when I don't succeed at something, that that that I, that my own brakes still hinder me... more to make something of, to make something of the situation... Since it's still new territory I'm going into, it's still baby steps but... but the the breakthrough hasn't come yet. That's about how I see it. *Hm, you know that I am very interested, not only that you can describe things in words, but that you notice "A-ha, then and there... that's something"; like with the colleague, that I find very important that there you...* Yeah that's the way I feel. *Something that you* ***do*** *turned out differently.*

Session 6. Yes, yes... *That you're overwhelmed by a feeling...* No, that, that, that... *It turns out to be nothing but noise and smoke.*

Session 7. No, it's not just noise and smoke. It could, I can, it could be m... it could be much more, but, but it's not enough for me, it's **not,** (laughs) to be honest it's really not enough for me. *Your words, because your words are very shaky there...* But yes, it really is **not** enough. *So on that... so there you still switch back and forth from one moment to the next.*

Session 8. Ah ha. *Since it goes... and that was just now an example, you plunge directly into the feeling "It's enough, I'm satisfied" and in the next moment that falls flat of course because you see that that's just nonsense, right?* No, that's not true. *So that's why I don't trust your words alone, and would rather see actions in order to see it expressed.*

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