THE PSYCHOANALYTIC CASE STUDY: TOWARD A METHOD FOR SYSTEMATIC INQUIRY

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This study represents a contribution toward the systematic and empirical investigation of psychoanalytic treatments. The method used, the Q-technique, allows the transformation of clinical data into a form amenable to quantitative analysis, thereby providing an empirical means to test theoretically and clinically derived understandings of psychoanalytic process. The treatment hours of a six-year analysis were audio-recorded and transcribed, and blocks of ten sessions were selected at regular intervals throughout the course of the analysis. Transcripts of these hours were then rated in random fashion by clinical judges with a Q-set designed to provide a standard language for the description and classification of analytic process. These descriptions of analytic hours, as structured by the Q-set, proved highly reliable, demonstrating the method's promise for addressing the long-standing problem of achieving reliable clinical judgments. Results suggest that subjecting the traditional psychoanalytic case study to systematic inquiry can contribute to establishing an empirical science base for some psychoanalytic propositions.

There has been a great deal of discussion about whether or not the central propositions of psychoanalysis can be verified through empirical methods of hypothesis testing generally accepted by the scientific community. Formal research on psychoanalytic ideas cast in the experimental paradigm, such as laboratory studies of dreams (Foulkes, 1978), has been mostly peripheral to the central constructs of psychoanalysis, and has had little influence on either theory or practice in the field (Wallerstein, 1986). This state of affairs may be explained by

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the fact that psychoanalysis can be viewed as still in the naturalistic-observational stage of investigation, and that formal hypothesis testing may be premature (Wallerstein and Sampson, 1971).

The central research instrument in the naturalistic-observational model has been the clinical case study. Although the study of individual cases has long been a fundamental source of data in psychoanalysis, its usefulness for establishing the validity of psychoanalytic ideas has recently been strongly challenged. Grünbaum (1984), for example, has argued that clinical evidence derived from the consulting room is too vulnerable to epistemic contamination via suggestion, compliance, circular reasoning, and theoretical predilection. It is in fact widely held that the case study cannot be used to establish laws or principles, and that these can be achieved only by more formal, empirical inquiry (Grünbaum, 1984; Holt, 1978). While it is sometimes acknowledged that the case study method can be useful in the hypothesis-forming phase of a scientific endeavor (Chassan, 1979), skeptics question even its contribution to the process of discovery, let alone verification, citing a long list of shortcomings: the problem of assessing the reliability of case study data, the difficulty in choosing among alternative interpretations of the same observations, numerous sources of uncontrolled variation (such as events in the patient's life that have a significant impact on the course of an analysis), the problems in comparing one case study to another, and the difficulty in replication (Mendelsohn, 1979). Indeed, Grünbaum's (1984) critique is in part a reiteration of problems in the case study method already well known to empiricists (see Campbell and Stanley, 1963), but more specifically addressed to psychoanalytic case study data.

Empirically oriented proponents of the case study method are well aware of these problems, but remain convinced that the value of the method can exceed its liabilities. Edelson (1986, 1988) has argued for the validity of the case study method as a scientific activity, asserting that it can, under certain circumstances, provide evidence of causal explanation and hence serve as a proving ground for psychoanalytic hypotheses. Wallerstein

(1986) has called for a formalization of the case study method, and for systematic testing of psychoanalytic propositions with data derived from consulting rooms in ways that are consonant with the requirements of empirical science. Echoing a widely shared sentiment, he expresses reservations whether experimental (extraclinical) tests will be particularly helpful in illuminating the area of greatest interest, i.e., how psychoanalytic treatment acts to effect change and cure.

It would seem that some demonstration of the research utility of formalized case studies is needed to establish the applicability of clinical evidence in the testing of psychoanalytic constructs. The problem of the validity and reliability of clinical judgments has been widely remarked upon, and remains a key issue in psychoanalytic research, since it has been difficult to construct reliable methods to establish the "truth claims" of alternative formulations of clinical material. Strategies devised to attack this problem have thus far yielded disappointing results (see Caston, 1986). In the study described below, a methodology long known in psychological research, the Q-technique, is applied to this problem with promising effect.

In addition, the study explores whether certain theoretically important and clinically observable phenomena can be identified in a reliable manner. Psychoanalytic writers have long referred to phases, or time-related patterns or trends, in the natural history of analytic process, e.g., the opening phase, middle phase, and termination phase (see Glover, 1955). Although such terms may be too general to provide more than a broad designation of a patient's place in the course of an analysis, other important concepts, such as the development and resolution of transference neurosis, or working through, also imply certain phase-specific or time-related characteristics of analytic process. This study attempts to trace the evolution, or unfolding, of the "natural history" of a psychoanalysis in order to ascertain whether aspects of the psychoanalytic process can be identified and systematically tracked in an empirical manner.

A Method for Systematic Inquiry

Data derived from the psychoanalytic case are difficult to study in ways that are simultaneously clinically and scientifically relevant; the difficulty lies in preserving the depth and complexity of clinical material without putting it beyond the reach of objective and quantifiable realization. If psychoanalytic case studies are to be used in more formal research, a method of analysis is required that can (1) allow the wealth of observation typical of case studies to be reduced to objective and quantifiable dimensions, (2) capture the uniqueness of the individual case, and (3) permit comparisons among observers of the same case, as well as comparisons between cases.

An approach that attempts to solve these issues in a sophisticated manner is Q-methodology (Block, 1961; Stephenson, 1953). The Q-technique is a method of measurement whose range of potential applications is broad, but is particularly well suited for the description of qualitative data. A Q-set consists of a set of items, each of which describes a significant psychological or behavioral feature of an individual or a situation. The specific content of the items depends on the particular objectives of the research and the nature of the individuals (or situations) to be studied. For example, to investigate the adaptation of cancer patients to their illness, Mendelsohn (1979) included items concerned with patients' emotional states, interpersonal relations, expectations of the future, attitudes toward treatment, and the like. There is no standard Q-set; rather, the goal is to provide a set of items that can capture as comprehensively as possible the critical dimensions of variation among cases under study.

The Psychotherapy Process Q-set

A Psychotherapy Process Q-set was constructed to provide a basic language and rating procedure for the comprehensive description, in clinically relevant terms, of the therapist-patient interaction in a form suitable for quantitative comparison and analysis. The instrument was designed to be applied to a record of a single treatment hour as the unit of observation. The use of verbatim recordings or transcripts of treatment hours has become virtually standard in therapy research outside of psychoanalysis, although Dahl (1974) has made a strong case for the use of transcripts in the study of psychoanalytic process, and indeed transcripts as a primary source of data are now being used with increasing frequency (see Weiss and Sampson, 1986). An obvious problem is how to manage the voluminous data produced by each treatment in a manner that retains the subtlety and complexity of clinical phenomena, while at the same time capturing salience and relevance in the mass of information. Some researchers have responded to this dilemma by fashioning methods that rely on narrow samples of portions of hours (e.g., Luborsky and Auerbach, 1969), while others have attempted to summarize ratings collected over hundreds of analytic hours (e.g., Dahl, 1983). The application of the Qtechnique to the analytic hour in its entirety has the advantage of allowing clinical judges to study the material carefully for confirmation of alternative conceptualizations, and to assess the gradual unfolding meaning of events within the analytic hour. It provides a means of objectifying the impressions and formulations derived from a substantial amount of clinical data, while at the same time summarizing the data through the ordering of a set of statements that describe various aspects of the analytic process.

The 100 items that comprise the Q-set represent an empirically guided selection from a pool of several hundred items garnered from existing process measures, as well as new items

^{&#}x27;Jones, E. E. (1985). Manual for the Psychotherapy Process Q-set. University of California at Berkeley, unpublished.

constructed by a panel of experts. Several versions of the Q-set were tested in a series of pilot studies conducted on scores of video- and audio-tapes of psychotherapy and psychoanalytic treatment hours. Items were eliminated if they showed little variation over a wide range of subjects and therapy hours, were redundant, or had low inter-rater reliability. Whenever some facet of therapy process judged to be important proved not to be captured or expressed by existing items, item revisions were made or appropriate items were added (see Jones et al., 1988, for a detailed description of the construction of the instrument). The final version of the Q-set captures a wide range of phenomena in the domain of analytic process, including transference manifestations, resistance, and reconstruction, as well as the analyst's activity (e.g., clarification, interpretation) and the patient's affective states, such as anxiety, depression, or other symptomatic behavior. A coding manual details instructions for Q-sorting and provides the items and their definitions, along with examples in order to minimize potentially varying interpretations of the items. The standard language for description and classification provided by the Q-set, the careful definition of terms, and its structured format, all serve to force clinical judgments in the direction of reliable, measureable statements.

After studying the transcript of an analytic hour, a clinical judge proceeds to the ordering of the 100 items, each printed separately on cards to permit easy arrangement and rearrangement. The items are sorted into nine piles ranging on a continuum from "Least Characteristic" (category 1) to "Most Characteristic" (category 9) with the middle pile (category 5) used for items deemed either "Neutral" or "Irrelevant" for the particular hour being rated. The number of cards sorted into each pile (ranging from 5 at the extremes to 18 in the middle or "Neutral" category) conforms to a normal distribution. This requires judges to make multiple evaluations among items, thereby avoiding either negative or positive "halo" effects; such a distribution also provides certain advantages for statistical analysis (see Block, 1961, for a full discussion of these issues).

The Q-items themselves are anchored, as far as possible, to behavioral and linguistic cues that can be identified in recordings of hours, and more abstract terms are avoided. For example, clinical judges are not asked to identify the presence or absence of a defense mechanism in the patient. The term "defense mechanism" connotes a type of mental functioning; it is a relatively abstract notion, and it is often difficult for clinicians to agree on the presence and nature of a particular "mechanism." Instead, clinical judges are asked to notice whether or not the analyst makes a defense interpretation; thus the items are tied to actual behavior that can be identified in a transcript. Judges are trained to look for specific evidence, as they are in the actual clinical comparisons made in sorting the Q-items. The Q-method rests, then, on structured clinical judgments about the configurational meaning of behaviors.

Some Psychometric Considerations

The limitations imposed on statistical inference by single-case designs are well known. However, many of these constraints are transcended when the individual case is considered, by means of repeated measurement with the same scales or variables, as a population of instances, or a sampling of events. In the present study, each observation (that is, Q-sort) of a transcript of an analytic hour could be considered a separate data point, thereby yielding a "population of occasions" suitable for the application of some statistical procedures (see Chassan, 1979, for an extended discussion of data-analytic strategies suitable for N=1 designs).

The 100 items that comprise the Q-set are more or less independent measures of specific process variables. The use of a greater number of variables allows for a more complex description of therapeutic process, but the large number of correlations the instrument yields does increase the risk of making a Type I error (accepting as true a relationship that is actually due to chance). Although statistical procedures exist which re-

duce the probability of Type I errors, such procedures conversely increase the risk of making a Type II error (rejecting a true relationship as being a result of chance). In order to avoid premature rejection of potentially important variables in this beginning stage of empirical investigation of the psychoanalytic process, a relatively liberal selection criterion was chosen, offset by the adoption of several safeguards, including aggregations (i.e., averaging Q-item rankings across judges and blocks of hours), and by taking into account the size of correlations, as well as their statistical significance. In addition, Q-results are typically interpreted through item patterns or configurations, so that the influence of chance findings involving one or a few items is greatly attenuated.

The Case of Mrs. C.

The analytic case we investigated was that of Mrs. C., an analysis that had been studied by means of a different methodology by other researchers (see Weiss and Sampson, 1986). At the beginning of treatment Mrs. C. was an attractive, married social worker in her late twenties who complained of lack of sexual responsiveness, difficulty experiencing pleasurable feelings, and low self-esteem. She had been married less than two years to a successful businessman and was the second of four children born to a mother who was a housewife, and a professionally employed father.

Mrs. C.'s chief complaint concerned her sex life. She did not enjoy sex, did not have orgasms, and indeed was reluctant to have intercourse. She sought treatment at the insistence of her husband, who had threatened to divorce her if she did not overcome her sexual difficulties. There were other complaints as well: she was unable to relax and enjoy herself, felt tense and driven at work and at home, was very self-critical, and worried whenever she made even a minor mistake. Mrs. C. experienced herself as emotionally constricted, and inhibited and fearful in her behavior. She felt she was unable to hold her own opinions, that she did not have the strength of her own convictions; especially difficult was disagreeing either with her parents or her husband. She was uncomfortable with her co-workers and her clients, especially her male clients, with whom she believed herself to be overly strict and impatient [Weiss and Sampson, 1986, pp. 155-156].

The analysis was conducted over a six-year period, or for approximately 1,100 hours; its outcome was considered to be satisfactory, or even very good, by both analyst and patient. All of the analytic hours were audio-recorded, and some were transcribed. Blocks of 10 sessions were selected from each year of the analysis at roughly corresponding intervals: from the first year, hours 91-100; from the second year, hours 258-267; from the third year, hours 429-438; from the fourth year, hours 596-605; from the fifth year, hours 765-774; and from the sixth year, hours 936-945. The purpose of this design was to allow an examination of analytic process in a longitudinal framework, and in this way identify the change or variation in analytic process over time.

Reliability of Clinical Judgments

Transcripts of the analytic hours were independently Q-sorted in completely random order by four clinically experienced judges, of whom two were analytic candidates, one a psychologist in private practice, and the fourth a Ph.D. candidate in clinical psychology. Reliabilities calculated for the pool of transcripts attained .88 (Pearson R), with a range of .58 to .95 (Spearman-Brown corrected). The consensus among judges about their descriptions and formulations of analytic hours as structured by the Q-set was, then, highly satisfactory. Such strong consensus in clinical judgments is particularly notewor-

thy in light of the long-standing difficulty in achieving reliability among clinical raters in psychodynamically oriented research.

Looking at the Data from Different Viewpoints

The Q-data for Mrs. C. were examined from two different perspectives: the first strategy, quite straightforward, provides a "static" picture of the analysis; the second, which required more formal statistical procedures, offers and "in-motion" view of the analytic process with Mrs. C. The first procedure involved identifying Q-items the judges consistently rated most and least descriptive of the analytic process throughout the course of the treatment. These times were identified by simply calculating the mean value of each Q-item across all judges and all analytic sessions. An additional criterion was that these items were to show little or no change in mean value across the 10-session blocks (nonsignificant ANOVAS at .05 p level), and hence show little variability (i.e., were stable) over the entire course of the analysis. These items provide, then, a general characterization of Mrs. C.'s analysis. The Q-item numbers below refer to the items in Table 1.

The items that emerged portray the analyst's stance as neutral (Q 93), accepting (Q 18), and self-assured and nondefensive (Q 86), while not supportive (Q 45), reassuring (Q 66), or advisory (Q 27), and the patient's posture as anxious and tense (Q 7), active in initiating dialogue (Q 15), yet neither controlling (Q 87) nor demanding (Q 83). The analyst was judged to perceive the analytic process accurately (i.e., effectively understand the patient's experience of the analytic relationship, her emotional state, and the nature of the interaction between them, Q 28). Countertransference was judged to be largely absent, or at least not apparent in a way that could be identified by the raters (Q 24). The analyst's basic orientation was not intended to avoid upsetting the patient's emotional balance, nor did he intervene to help the patient avoid or suppress disturbing feelings or ideas (Q 89). On the contrary, the analyst characterist-

Table 1 MOST Descriptive

<u>Q-item</u>		<u>Mean Value</u>
#63	Patient's interpersonal relationships are a major theme	7.57
#93	Analyst is neutral	7.00
#28	Analyst accurately perceives therapeutic process	6.84
#18	Analyst conveys a sense of non-judgmental acceptance (vs. disapproval, lack of acceptance)	6.70
# 7	Patient is anxious or tense (vs. calm or relaxed)	6.59
#86	Analyst is confident or self-assured (vs. uncertain or defensive)	6.33
#82	Patient's behavior during the hour is reformulated by the analyst in a way not explicitly recognized previously	5.94
#81	Analyst emphasizes patient feelings in order to help her experience them more deeply	5.90
	<u>LEAST Descriptive</u>	
#89	Analyst acts to strengthen defenses	1.27
#15	Patient does not initiate topics; is passive	1.73
#66	Analyst is directly reassuring	2.23
#45	Analyst adopts a supportive stance	2.46
#24	Analyst's own emotional conflicts intrude into relationship	2.79
#83	Patient is demanding	2.84
#27	Analyst gives advice and guidance (vs. defers even when pressed to do so)	2.86
#87	Patient is controlling	3.54

ically emphasized the patient's feelings in order to promote a deeper experience of them (Q 81), and interpreted her behavior during the hour in ways that allowed the patient to experience herself differently (Q 82). These findings are not surprising;

the description they provide is one that could be expected of an analysis conducted in a conventional manner. However, these results are valuable in demonstrating the validity of the Q-technique and its capacity to distinguish reliable descriptors derived from a large amount of process data. These results also provide evidence confirming the presence of an analytic process in this case.

The second standpoint from which we examined our data was through a comparison of analytic process in successive years. Looking at the data from this vantage point allowed us to capture episodic changes and developments in the analytic process. This was achieved by comparing the averages of all the Q-ratings in a 10-hour block to those in the next block with a Wilcoxon Signed Ranks Test, allowing us to identify those items that demonstrated a statistically significant shift (in either the more or less characteristic direction) from one period in time to the next. By permitting a more differentiated view of the change in the analytic process over time, these comparisons made possible the detection of more specific phases in the treatment. Although several statistical comparisons were conducted, for reasons of space only three such comparisons are presented here: change in process early on in the analysis, i.e., from the first year to the second year (hours 91-100 to 258-267); change in process during the middle phase, i.e, from the third year to the fourth year (hours 429-438 to 596-605); and change in process later in the analysis, i.e., from the fifth year to the sixth year (hours 765-774 to 935-946). These comparisons are presented in Tables 2-4. The Q-data are preceded by a narrative summary, written by the authors, of the transcripts of each block of 10 analytic hours. The narrative summaries are obviously the product of a particular "reading" of the transcripts. These synopses have been written to remain as true to the patient's own language as possible. Another observer could well have a different reading of the same material, which is of course precisely the issue concerning reliability of clinical judgments and case formulations, and the very problem which the Q-set was designed to address. Still, with this issue clearly in mind, the synopses of the transcripts can provide a context for the more tersely phrased and formal Q-descriptions.

Change in Process Early On

Analytic process in the first year: narrative summary of hours 91-100. An important theme of these hours is Mrs. C.'s conflicts. Her husband wants to have intercourse, but she usually does not, finding it dirty, unpleasant, and distasteful. She restricts her sexual activity to weekends, and can only have intercourse in the position where she is on top. She feels she is cold to her husband, that she punishes him for his sexual demands. She often has the feeling she would like to hurt his penis. If she finds herself spontaneously enjoying having intercourse, and realizes it, she suddenly loses her ability to enjoy it, or becomes nauseated. She sometimes provokes her husband into treating her roughly, and finds herself almost enjoying it; it is as if she were asking him to make her submissive. In a way, she would like to be submissive, but cannot be, and in fact cannot respond sexually to her husband when he is, in her view, not being submissive, that is, on the bottom during intercourse. Her sexual conflicts are also reflected in preoccupations with a fear of being raped.

Interwoven with these feelings are fantasies, memories, and fears. For example, Mrs. C. finds she is attracted to male film stars who play masterful, aggressive roles in which they make women submissive. She describes her father as having been a tyrant, as frequently criticizing her, or being cross with her. Her mother was passive; she gave in, and let the patient's father make all the decisions. Mrs. C.'s sense of guilt emerges quite strongly during these hours. If she has a positive thought about herself, she feels she will be punished, and purposely thinks bad things about herself. She has memories from adolescence of being hateful toward her mother, and childhood memories of fighting with her sister and making her cry.

Mrs. C. felt anxious and uncertain during these hours, and worried about being able to go through the analysis successfully. She expresses confusion, frustration, and the feeling she is not getting anywhere, or is uninvolved. She complains that she cannot get a hold of what she should be doing in analysis, that she feels stupid. She wishes she could feel more relaxed and freer about being herself. On his part, the analyst interprets her resistances, e.g., that she may be avoiding something, or that her feeling of uninvolvement serves as a defense against frightening, angry fantasies or sexual feelings. He also draws connections between Mrs. C.'s feelings of fearfulness, powerlessness, and difficulty in talking in social encounters, to long-standing reactions toward her father.

Analytic process in the second year: narrative summary of hours 258-267. This block of 10 analytic hours contains many of the themes already apparent in earlier hours, as well as newly emerging ones. Although Mrs. C. sometimes wants her husband to make love to her, it is more out of a need for reassurance than a desire to respond physically. If she does respond physically, she feels angry and does not want the feeling. Conflicts about sexual feelings begin to extend into concerns about sexual identity, being a woman, and becoming pregnant. She expresses, for example, the idea that if she thinks of herself as a woman, she will never be confident; her parents favored her brother, and she feels inadequate and unacceptable because she is female and not male. She has the fantasy of having a penis, and through getting a penis becoming good, competent, and competitive in a masculine way. Making love makes her more aware of not having a penis. She keeps switching between feeling masculine, cold, and dominating, to feeling warmer, softer, and more feminine. She wonders if becoming pregnant would prove she could function in a feminine way and be a wife and mother.

During the analytic hours, Mrs. C. reports that her contradictory attitudes leave her feeling inadequate and confused. She is aware of avoiding talking about certain things; she cannot

remember what she talked about during the previous hour; she wonders if she has come late on purpose; she feels nervous; she cannot seem to get anywhere. The analyst confines himself primarily to interpreting her resistance to talking. For example, he comments on her silence and her "thinking to herself" rather than out loud; he also interprets her avoidance of thoughts about becoming pregnant.

Q-descriptors of change in the analytic process from the first to the second year of analysis. Q-descriptors demonstrating a statistically significant shift in mean value, and hence capturing change in analytic process early on in the analysis, are displayed in Table 2. The Q-item numbers below refer to the items in the tables; the word "reversed" or "r" in connection with a Q-item number indicates that the item was reversed in its wording in order to be oriented comparably in the narrative. During this phase of analysis, Mrs. C. begins to feel less shy and embarrassed (Q 61, r), more trusting and secure (Q44, r), and less concerned about how the analyst might judge her (Q 53, r). She talks less of wanting greater distance or a sense of independence (Q 29, r), has become more comfortable with her dependence on the analyst (Q 8, r) and, indeed, increasingly relies on him to solve her problems (Q 52). The patient externalizes less (Q 34, r) and is better able to talk both about how she views herself (Q 35) and about her ambitions in life (Q 41). An aspect of Mrs. C.'s conflicts that is captured in the narrative summary of the analytic hours taken from the second year (above) is clearly reflected by the shift in Q-descriptors: her intense, emerging sense of inadequacy and inferiority (Q 59), and her corresponding greater difficulty in expressing angry or aggressive feelings (Q 84, r).

Our raters judged the analyst's communications as more direct, clear, and evocative in the second year of treatment (Q 46), and there were also fewer silences (Q 12, r). Patient and analyst more frequently concentrated on distinguishing Mrs. C.'s fantasies and objective reality (Q 68). On his part, the analyst increasingly challenged the patient's view (Q 99) and in-

terpreted her feelings of guilt (Q 22). A quality of the analyst's style that is not easily brought out in a narrative summary of analytic sessions, but is captured nicely by the Q-items, is the tone or nuance of the analyst's remarks: the analyst becomes a bit more tacktless (Q 77) and patronizing (Q 51). Despite the increase in mean ratings for these two items, they remain in the fairly uncharacteristic to somewhat uncharacteristic range and probably reflect the analyst's increasing tendency to challenge Mrs. C., as well as her greater dependency and reliance on him. Interestingly, there is less in the way of memories and reconstructions of early life (Q 91, r), and the analyst makes fewer transference interpretations (Q 100, r).

Change in Process during the Middle Phase

Analytic process in the third year: narrative summary of hours 429-438. This block of hours includes the period immediately preceding, and just following, the birth of the patient's first child, and spans a six-week interruption in the analysis around the time of delivery. The patient is disappointed; she had the idea that everything will change now that she is pregnant. There is no escape; she will be responsible for a child that did not answer what she wanted; she has been feeling awful, like crying, which she connects to thoughts of killing the child, ripping it out of her. Her husband could not be nicer, but Mrs. C. fears that if she cannot respond he will turn away from her to the baby. She fears missing her sessions during the delivery and recalls having the fantasy the last time the analyst was away that he had a new wife and was making love to her. She remembers feeling left out as a child when her parents spoke to one another in private. The analyst connects Mrs. C.'s feeling of being left out in relation to him, her fear of being replaced by the baby with her husband, and thoughts of wanting to hurt the baby, with how she must have felt as a child when her mother was pregnant with her brother.

The focus in the analysis after its resumption was Mrs. C.'s

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		First Year	Second Year
Q-item	l	Mean	Mean
	MORE Characteristic		
Q 35	Self-image is a focus of discussion	6.5	8.4***
Q 41	Patient's aspirations or ambitions are topics of discussion	5.2	6.5***
Q 51	Analyst condescends to, or patronizes the patient	2.1	3.2***
Q 77	Analyst is tactless	2.2	3.6***
Q 68	Real vs. fantasized meanings of experience are actively differentiated	5.6	6.7***
Q 46	Analyst communicates with the patient in a clear, coherent style	5.5	6.2**
Q 52	Patient relies on analyst to solve her problems	3.4	4.8**
Q 59	Patient feels inadequate and inferior (vs. effective and superior)	7.0	8.0*
Q 22	Analyst focuses on patient's feelings of guilt	3.7	4.6*
Q 99	Analyst challenges the patient's view	5.7	6.2*
	LESS Characteristic		
Q 34	Patient blames others or external forces for difficulties	4.8	2.9***
Q 8	Patient is concerned or conflicted about her dependence on the analyst (vs. comfortable with dependency, wanting dependency)	5.3	4.7***
Q 53	Patient is concerned about what analyst thinks of her	6.9	5.8**
Q 61	Patient feels shy and embarrassed (vs. un-selfconscious and assured)	5.7	3.7**
Q 91	Memories and reconstructions of infancy and childhood are topics of discussion	6.6	4.9**

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Q 29	Patient talks of wanting to be separate or distant	5.7	4.6**
Q 23	Dialogue has a specific focus	5.0	3.6**
Q 44	Patient feels wary or suspicious (vs. trusting and secure)	3.1	2.2*
Q 84	Patient expresses angry or aggressive feelings	6.9	5.8*
Q 100	Analyst draws connections between the therapeutic relationship and other relationships	5.2	3.9*
Q 12	Silences occur during the hour	7.9	7.1*

***p < .001; **p < .01; *p < .05

fluctuating and contradictory emotions about her new female child and her husband. She is glad the baby is here, loves her, enjoys her, and feels bonded to her; yet she also feels the opposite, resents feeling absolutely necessary to the baby, wishes the infant were not there, that she could get rid of her. Mrs. C. is disappointed at not having a boy, and does not want to admit it. She feels inferior because she did not produce a boy first; she felt jealous of another woman in the hospital who had a boy. She is afraid something might happen to the baby, some catastrophe. Throughout these hours, the analyst persistently interprets Mrs. C.'s disappointment at not having a boy, and her antagonistic feelings toward the baby.

Analytic process in the fourth year: narrative summary of hours 596-605. In these 10 sessions, Mrs. C. more than once arrives late. The hours are punctuated by frequent, lengthy silences. They are characterized by a kind of pattern: Mrs. C. fluctuates between feeling defiant and angry, and wanting to avoid the analysis and her marital problems, and feeling guilty for it, and that she should be punished. One day, for example, Mrs. C. wonders if the analyst is Jewish, claiming that this would create a barrier between them, since then he could be neither her father nor her lover. She comments that Jewish people are different, inferior, and then reports a fantasy of making love

to a Jewish acquaintance who is a psychiatrist. During the subsequent hour there are many silences as she guiltily wonders if what she said offended the analyst, or during which she has the fantasy that something will happen to her husband on a plane trip he is planning. On one occasion, Mrs. C. states openly that she is angry with her husband, and feels bossy and cold toward him, is hateful to him, and feels driven to beat him down, to be superior to him, to control him, and to be a sexual tease toward him. In the following hour Mrs. C. feels she has displeased and disappointed the analyst with her defiance and rebelliousness and fears he will show his disapproval by being cold and withdrawing. She wants to be nice, to make amends, wants the analyst to notice her appearance, and wants to make love during the hours. She feels guilty; something is wrong with her, and she should be punished. Other themes that are woven into Mrs. C.'s discourse are her belief that she is masculine and the analyst is not; that the way she feels about men has to do with wanting a penis, her desire for the analyst's words to give her something, and her wish to defiantly prove it is all right to be a female.

The analyst emphasizes her feeling that she should be punished for her wish to be defiant. He also interprets her wanting to make amends as a way of hiding that she is angry with the analyst for calling attention to the objectionable feelings she has toward her husband, and interprets her sexual fantasies about him as a way of avoiding talking about her problems with her husband. The patient often shifts to less charged topics in response to these interpretations, such as buying clothes for herself and the child, although on occasion she is able to acknowledge wanting to avoid talking about these things and is able to voice her angry and destructive feelings more directly.

Q-descriptors of change in the analytic process from the third to the fourth year of analysis. There are far more striking changes in the analytic process in this phase of the treatment than occurred between the first and second year (see Table 3). In the fourth year of analysis, Mrs. C.'s resistances heightened dra-

matically (Q 58), and she was less capable of introspection (Q 97 & 35, r). She began to have difficulty beginning the hour (Q 25), the number of lengthy silences increased (Q 12), and she was seen by our judges as being less committed to the work of analysis (Q 73). Although these findings are consistent with the narrative summaries of these sessions, the Q-data actually provide the stronger evidence of the emergence of intense resistances. Moreover, they allow us to make such observations in a verifiable and reproducible way. One manifestation of Mrs. C.'s resistance was that she remained at a greater distance from her feelings than previously (Q 56), or struggled more to keep them under control (Q 70). Very likely this represented an effort to ward off the difficult, painful feelings she was actually experiencing with greater intensity (Q 26), including ambivalent (Q 49) and erotic (Q 19) feelings toward the analyst as well as wishes for greater intimacy (Q 10). The analytic dialogue was judged by raters to be more diffuse (Q 23, r) and, consistent with a virtual absence of talk about early experience (Q 91 & 92, r), much less in the way of significant material emerged (Q 88, r). The analyst did not attempt to actively elicit more from the patient (Q 31), and did less in the way of reality-testing the patient's fantasy life (Q 68); nor did he, despite the obviously difficult nature of his interactions with the patient, accommodate in an effort to ease matters (Q 47). Instead, the analyst increasingly made the treatment relationship (Q 98) and the transference (Q 100) the focus of his interpretive work. Mrs. C. struggled with and resisted feelings about the analyst. The analyst interpreted the transference and drew parallels between the analysis and other relationships (identified in the narrative summary as primarily the relationship with her husband). The patient resisted knowing this, but also, and even more than earlier in the analysis, accepted his interpretations (Q 42, r).

Change in Process Later in the Analysis

Analytic process in the fifth year: narrative summary of hours 765-774. In this block of 10 hours, from the fifth year of the analysis,

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Table 3

COMPARING PROCESS IN THE THIRD YEAR AND THE FOURTH YEAR OF ANALYSIS

Third Year Fourth Year Q-item Mean Mean MORE Characteristic Patient resists examining thoughts, Q 58 reactions or motivations related 3.2 6.0*** to problems Patient has difficulty beginning the hour 7.4*** 5.7 Q 25 7.9*** Silences occur during the hour 6.6 Q 12 Q 26 Patient experiences discomforting or 5.6*** troublesome (painful) affect 4.9 Q 56 Patient discusses experiences as if distant from her feelings 3.2 5.5*** Q 98 The therapy relationship is a focus of 8.1*** 5.8 discussion Q 100 Analyst draws connections between therapeutic relationship and other 6.9** 4.9 relationships Q 19 There is an erotic quality to the therapy 6.2** relationship 4.9 Patient experiences ambivalent or con-Q 49 flicted feelings about the analyst 5.0 6.2** Q 70 Patient struggles to control feelings 5.8** 5.0 or impulses Patient seeks greater intimacy with Q 10 5.5* 4.7 the analyst LESS Characteristic Q 88 Patient brings up significant issues 6.5*** and material 8.5 Patient is introspective, readily brings Q 97 up thoughts and feelings 5.7*** 7.8 5.7*** Self-image is a focus of discussion 6.8 Q 35 Analyst asks for more information or Q 31 6.2*** 7.4 elaboration 4.4** 5.4 Dialogue has a specific focus Q 23

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Q 33	Patient talks of feelings about being close to or needing someone	5.4	4.1**
Q 91	Memories or reconstructions of infancy and childhood are topics of discussion	6.3	5.3**
Q 92	Patient's feelings and perceptions are linked to situations or behavior of the past	7.9	6.6**
Q 68	Real vs. fantasized meanings of experiences are actively differentiated	7.0	5.9**
Q 42	Patient rejects (vs. accepts) analyst's comments and observations	3.0	1.8**
Q 47	When the interaction with the patient is difficult, the analyst accommodates in an effort to improve relations	3.8	2.9**
Q 73	Patient is committed to the work of therapy	6.5	5.6*

^{***}p < .001; **p < .01; *p < .05

Mrs. C. struggles with aggressive feelings and guilty remorse both toward her clients at work and toward her husband. Feelings of guilt dominate the emotional tone of these hours. Coupled with these feelings is the patient's idea that she may play stupid in order to get people to feel sorry for her. The analyst repeatedly interprets Mrs. C.'s avoidance and denial. Following a description of how she and her husband were making love while the baby was asleep in the bedroom, the analyst interprets Mrs. C.'s confused, stupid feeling and her muddled thoughts as connected to the memory of her parents making love, and wanting to play dumb about it. He also connects to this her earlier report of her father's angry reaction when she, as an adolescent, came to the dinner table in a slip. Mrs. C. replies that she cannot accept what the analyst suggests.

The patient misses the following hour, and at the next meeting reports feeling guilty and having wanted to come. She describes a nervous feeling building up, as though she might fall apart. The analyst connects this tension to the discussion of the previous hour. Mrs. C. goes on to report a memory of, as a teenager, going into her father's room while he was dressing and wanting him to make love to her instead of to her mother, and give her a baby. Subsequent hours include further discussion of her "playing stupid" as a denial of knowing about or having witnessed her parents having intercourse, as well as denial of her own sexual desires. The analyst comments that in some ways Mrs. C. views orgasm as an aggressive, hostile exploding, and the sexual act as a man attacking a woman. Following this interpretation, the patient describes how she has to get her husband angry before she gives in and makes love, and reports fantasies of sexual attack and rape.

Analytic process in the sixth year: narrative summary of hours 936-945. Salient in these hours, taken from the sixth year of the analysis, are Mrs. C.'s feelings toward the analyst, as well as her relationship with her husband. Although she continues at times to talk about making love as a burden and a duty, she also reports, during other hours, enjoying having made love. She is clearly in much closer contact with her sexual feelings and fantasies. She has fantasies of being attacked or stabbed from behind. Related fantasies are of the analyst plunging something into her, or putting his penis in her from behind. Mrs. C. now begins to talk directly about her sexual wishes toward the analyst: she wants a close, intimate, sexual relationship with him; she wants him to be both a father and a lover. She does not want the analysis to end. She feels ambivalent about her husband, and experiences coming into the analysis not only as a way to be with her analyst, but also as a way of escaping or getting away from the problems in her marriage.

The analyst's interpretations revolve around Mrs. C.'s resistances. He quickly interprets any evidence of avoidance of her fantasies about him, or any retreat from her sexual wishes toward him, or any other fantasies (usually sexual), and persistently exphasizes her desire to have an intimate, sexual relationship with him. Mrs. C. readily admits her desire, and indeed often expresses these feelings spontaneously; she experiences these wishes so strongly that she fears saying it will

make it so. The analyst also points out that the fantasies she has about others coming between herself and her husband are similar to her using him, and her feelings toward him, to come between her and her husband.

Q-descriptors of change in the analytic process from the fifth to the sixth year of analysis. The analytic process again shifted markedly over this 150-hour period (see Table 4), and in a manner that signifies the resolution of transference resistances and anticipates the termination phase. Mrs. C.'s dream and fantasy life are now much more accessible to her (Q 90), and she speaks with increasing frequency of her sexual (Q 11) and romantic (Q 64) feelings. She experiences, and can express, strong sexual desires (Q 19) and a need for greater closeness in the analytic relationship (Q 10). She is also more aware of her need for independence outside of the analysis (Q 29). In contrast to earlier periods, Mrs. C. is now open and direct about her positive and friendly feelings toward the analyst (Q 1). Talk about the analytic relationship comes to dominate the dialogue (Q 98), and the analyst interprets the transference (Q 100) and unconscious or warded-off ideas and feelings with greater frequency and persistence (Q 67). In turn, the patient has less difficulty in understanding the analyst's comments (Q 5, r) and, in what is probably a related finding, increasingly feels understood (Q 14, r) and accepts, or attempts to work with, his interpretive remarks (Q 42, r). Probably as a reflection of a greater ease and fluidity in the analytic process, the analyst's interpretations were judged by our raters as especially clear, comprehensible, and evocative (Q 46). Q-items judged as less characteristic over this phase in many respects already presage the successful outcome of the analysis. Mrs. C. has become significantly less self-accusatory and guilty (Q 71, r); she experiences markedly less painful affect during the analytic hours (Q 26, r), and is at the same time less intellectualizing and rationalistic (Q 30, r). The patient's long-standing sense of inadequacy and inferiority were alleviated (Q 59, r), and she appeared less anxious and tense (Q 7, r).

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Table 4

COMPARING PROCESS IN THE FIFTH YEAR AND THE SIXTH YEAR OF ANALYSIS

		Fifth Year	Sixth Year
Q-item		Mean	Mean
	MORE Characteristic		
Q 10	Patient seeks greater intimacy with the analyst	4.4	6.9***
Q 90	Patient's dreams or fantasies are discussed	5.6	8.1***
Q 19	There is an erotic quality to the therapy relationship	5.6	7.9***
Q 64	Love or romantic relationships are a topic of discussion	5.7	7.5***
Q 29	Patient talks of wanting to be separate or distant	4.0	5.8***
Q 98	The therapy relationship is a focus of discussion	6.8	8.2***
Q 46	Analyst communicates with the patient in a clear, coherent style	4.9	5.9**
Q 67	Analyst interprets warded-off or un- conscious wishes, feelings or ideas	6.5	8.1**
Q 11	Sexual feelings and experiences are discussed	6.9	8.2*
Q 100	Analyst draws connections between therapy relationship and other relationships	5.2	6.8*
	LESS Characteristic		
Q 71	Patient is self-accusatory; expresses shame or guilt	7.2	5.3***
Q 5	Patient has difficulty understanding the analyst's comments	3.6	2.0***
Q 1	Patient verbalizes negative feelings (e.g., criticism, hostility) toward analyst (vs. makes approving or admiring remarks)	4.6	3.2**
Q 26	Patient experiences discomforting or troublesome (painful) affect	6.3	5.4***

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Q 59	Patient feels inadequate and inferior (vs. effective and superior)	7.0	5.9**
Q 30	Discussion centers on cognitive themes	5.5	4.5**
Q 42	Patient rejects (vs. accepts) analyst's comments and observations	3.1	2.0**
Q 7	Patient is anxious or tense (vs. calm or relaxed)	6.9	5.9*
Q 14	Patient does not feel understood by analyst	3.1	2.1*

^{***}p < .001; **p < .01; *p < .05

Discussion

The Q-data provide a chronicle of the course of Mrs. C.'s analysis based on reliable descriptive categories. They show, through the accumulation of information at different points in time, change and evolution in the analytic process. Over the years the patient's discourse was less intellectualized and dominated by rationalization, and increasingly reflected greater access to her emotional life and a developing capacity for free association. The analyst became more active in challenging the patient's understanding of an experience or an event, identifying recurrent patterns in her life experience and behavior, interpreting defenses, and emphasizing feelings the patient considered wrong, dangerous, or unacceptable. The data also allowed us to characterize particular periods in the analysis. Certain Qitems clearly emerged as far more important descriptors of the analytic process later in the analysis than early on. In the fourth year of the analysis, for example, there is evidence for the emergence of a transference neurosis. Q-descriptors signified a remarkable heightening of Mrs. C.'s resistances and symptoms, as well as an increase of disturbing affect during the analytic hours, especially defiance, guilt, and the emergence of intense hostility toward the analyst. Even at this difficult point in the analysis, the patient clearly made active efforts to work constructively with the analyst's interpretations. Our data from

the later period of the analysis suggest a resolution of transference resistances, signaled in part by the patient's greater openness about her desires, feelings, and fantasies, including sexual desires and a need for intimacy. There was, as well, a significant alleviation of the patient's long-standing feelings of inadequacy, guilt, and anxiety.

There is a growing awareness of the importance of more formal, empirical studies of psychoanalysis. There remains, however, some perhaps warranted skepticism about what such studies contribute beyond what can be learned through the traditional case study, already a powerful investigative tool. This study of the case of Mrs. C. demonstrates that psychoanalytic case material can be studied in a formal, systematic manner. It illustrates that clinical impressions can be placed on a reliable, verifiable basis, and that clinical knowledge can be documented in a form that potentially allows replication. Disagreements about the validity of differing interpretations or formulations of the same case material are commonplace in clinical work, and constitute important grounds for criticism about the scientific nature of clinical psychoanalytic methods for acquiring knowledge. This investigation represents an effort to respond to some of these critiques. In particular, it illustrates the usefulness of such methods as the Q-technique in achieving reliable clinical judgments through specification of the domain of events that should be considered in conceptualizing analytic process, and by narrowing to a manageable scope the amount of clinical information that needs to be considered for a given judgment task.

Our method for studying the case of Mrs. C. contributes, in addition, to a formal and reliable description of analytic process. Aspects of the analytic process and characteristics of the patient became more salient through our data than they would have through a reading of transcripts of analytic hours, and perhaps even through the more usual case study. For example, Q-analysis demonstrates that during the early phase of

the analysis Mrs. C. becomes more trusting of the analyst, more dependent on him, less self-conscious and more self-assured, a conclusion that would not be obvious even to a sensitive reader of the text of the transcripts. Such nuances of patient behavior and emotional state are vulnerable to the "reading in" of impressions by observers. With the Q-technique, such observations can be made reliably. Similarly, in the middle phase of the analysis, a simple reading of the transcripts does not convey the full sense of the strengths of Mrs. C.'s resistances and the worsening of her symptoms. It was a significant shift in the Q-descriptors that alerted us to the importance of this development in the analysis, and to identify it as a transference neurosis phenomenon. Informal case studies typically report summary impressions without clear specification of the dimensions used to reach conclusions. Moreover, observers may vary greatly in the concepts they use and their descriptive language; they may not even consider the same dimensions. As a descriptive language, the Q-technique provides a set of categories shared across observers, guiding observers' attention to aspects of the clinical material that might have otherwise gone unnoticed, and allowing them to emerge from the background.

There are, of course, limitations to the Q-method. It cannot provide complete information about the content of the analytic discourse, i.e., what was actually talked about. Without such content, it cannot offer definitive evidence in support of competing dynamic formulations about the case. Previous investigators have constructed alternative formulations of the case of Mrs. C. (Weiss and Sampson, 1986). One group of researchers held that Mrs. C.'s difficulties crystallized after the birth of her brother, when she was six. Mrs. C. felt her parents preferred her brother because he had a penis, and that her primary unconscious wish was to redress her castrated state. She envied men and attempted, both in analysis and life, to obtain a penis of her own and to deny men pleasure in theirs by aggressively withholding sexual response or by criticizing and attacking

them. The alternative formulation argued that Mrs. C.'s problems arose primarily not from unconscious envy but from unconscious guilt. According to this view, she perceived her parents as fragile and vulnerable, unconsciously felt superior and contemptuous of them, and protected herself from hurting them by making herself weak, constricted, and helpless. Her conflict was between her wishes to be strong, independent, loving, and uninhibited and her guilt for wanting these things. In this formulation, Mrs. C.'s penis envy was largely conscious and served as one means among several by which she attempted to belittle herself and restore others.

The Q-data do not provide decisive evidence for or against either of these competing formulations and, indeed, are consistent with both points of view about the case. It needs to be emphasized that correlational data, such as those provided by the Q-method, cannot determine strong causal relationships of the kind implied in dynamic formulations (see Chassan, 1979, for a discussion of this question). Still, the Q-description of the case could be considered a kind of framework for working models about the patient, since any formulation constructed would need at least to be consistent with our empirical data. This is not to say that the Q-method cannot be used to reject a hypothesis or a clinical impression about analytic process. Our study discovered, among other things, some evidence for the development of a transference neurosis during Mrs. C.'s analysis. The accumulation of an archive of psychoanalytic cases to which the Q-technique might be applied could, through replications and methods of "pattern recognition" of particular configurations of Q-items, provide empirical data bearing on the question of whether transference neuroses or similar phenomena are essential for successful analytic treatments. In other words, this, and other, empirical methods can be used to systematically investigate various aspects of psychoanalytic process which are purportedly causally linked to treatment outcomes. The psychoanalytic literature is extraordinarily rich in theoretical writings and clinical case studies. There has, however, been very little in the way of reliable, descriptive data about the analytic process or other efforts to establish an empirical science base for psychoanalytic constructs. Our formal, sytematic inquiry into the case of Mrs. C. represents a contribution toward that end.

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