Hypothesizing, Circularity, Neutrality
Three Guidelines for the Conductor of the Session

Mara Palazzoli Selvini, M.D.
Luigi Boscolo, M.D.
Gianfranco Cecchin, M.D.
Giuliana Prata, M.D.

This paper presents the results of our research focused on individuating and elaborating principles and methods that we have found highly productive in interviewing the family. We have synthesized these principles under the headings Hypothesizing, Circularity, and Neutrality, giving conceptual definitions, descriptions, and practical examples of their application. Our purpose is to aid the therapist in stimulating the family to produce meaningful information, which is indispensable to the therapist in making a therapeutic choice.

Our research in family therapy has been directed recently at the most correct and fruitful procedure for interviewing the family. We do not mean to imply that we have been unaware in the past of the great importance of this problem. However, as any reader of our book, Paradox and Counterparadox (6) will state, the impression often remains that our interventions at the end of the session have come out of the blue. Indeed, we have received correspondence from many readers in various parts of the world, all asking substantially the same question, "But how did you hit upon that particular intervention?"

Thus, shortly after the first publication of Paradox (in Italian in 1975), we decided to focus our attention and efforts upon this problem. Our primary goal was to individualize and elaborate certain fundamental principles of conducting the interview that would be coherent with the systemic epistemology we have adopted. From these principles we would then be able to develop precise methodologies that would serve as a sort of detailed guide to the therapist who ventures into the labyrinth of the family session. Our secondary goal was to cast off certain conceptually unclarified stereotypes that for decades have been passed from one professional generation to another in our field¾the sterotypes that endow the therapist with those intangible, personal qualities of "intuition," "charisma," "concern," etc., all of which, by definition, cannot be taught.

After some years of work, we succeeded in establishing three principles that we consider indispensable to interviewing the family correctly. We have tentatively called these principles Hypothesizing, Circularity, and Neutrality. We shall discuss each, first giving its definition and theoretic conceptualization, then its description, with examples and practical application.

HYPOTHESIZING 1 By hypothesizing we refer to the formulation by the therapist of an hypothesis based upon the information he possesses regarding the family he is interviewing. The hypothesis establishes a starting point for his investigation as well as

his verification of the validity of this hypothesis based upon specific methods and skills. If the hypothesis is proven false, the therapist must form a second hypothesis based upon the information gathered during the testing of the first.

We must keep in mind that a family therapy session always begins with the therapist possessing a certain amount of information concerning the family. In our practice at the Milan Family Center we have at our disposition, even before the first session, certain standard data recorded during the initial contact with either the family or referring doctor.1 Even in contexts different from ours, the therapist will always have a modicum of information on which to base an initial hypothesis. Let us consider an example.

A short time ago, we were invited by an institute specializing in family therapy to give a live demonstration of our style of work with families. Our first session was with a small family of two members, a divorced mother of 37 years and her 13-year old son. The information registered at the time of the family's initial contact with the institute was sparse: The mother had called several months before on the eve of the summer holidays requesting a consultation concerning her son, who, in her words, was difficult to control, rebellious, rude, and prone to delinquent behavior (he had stolen change from her purse). On the basis of this little information, our team formulated an hypothesis during our standard presession discussion: the behavior of the boy could be a way of trying to get the father to come back to the family. Conforming to this hypothesis, we decided to spend little time listening to the mother's complaints of the boy's misbehavior and instead to focus our questions on their relationship with the absent father. During the interview, this hypothesis was rapidly disproved, but we were able to formulate a second hypothesis: The mother was an attractive and charming woman, and, perhaps after all those years of maternal dedication, she had met "another man," and perhaps her son was jealous and angry and was showing it through his misbehavior.

Our second hypothesis hit the target. For the past few months, the mother had been dating a "friend." While she was telling us this, the boy, quiet until that point, began to get restless and seemed on the verge of crying. When questioned, he said, "Mom isn't the same with me anymore¾she's all wrapped up in herself¾she really doesn't listen to me like she used to ..." While her son gave vent to his grief, the mother remained silent and appeared confused and somewhat guilty. The therapeutic conclusion to this session was by now clear to us, pointed out by the behavior of both mother and son. Both of them had growing pains to deal with and should expect to suffer in the near future. They needed time to accept the prospect of separation without feeling abandoned or guilty.

This example demonstrates how the two hypotheses formulated by the therapists and the questions asked in order to verify them led to the information essential for a choice of a therapeutic intervention.

What do we mean, therefore, by hypothesis? And what is its function?

General Definition of Hypothesis. Hypothesis, in the Greek etymon means "that which is under," or rather, the proposition at the base of a conceptual construction. According to

the Oxford Dictionary, hypothesis is "a supposition made as a basis for reasoning, without reference to its truth; as a starting point for an investigation." In the terminology of experimental science, an hypothesis is an unproved supposition tentatively accepted to provide a basis for further investigation, from which a verification or refutation can be obtained.

In the family session, the phenomena provoked by the type of hypothesis formulated by the therapist as a guide to his activity define such activity as experimental. The data of such experimentation derive from immediate feedback (verbal and nonverbal) as well as delayed feedback resulting from the prescriptions and rituals given by the therapist at the end of the session. These have as their aim further verification of an hypothesis that has so far proven plausible.

As we know, the classical procedure of the experimental method consists of three phases: observation, formulation of an hypothesis, and experimentation, The greatest mental effort occurs in the second phase; it is then that the mind must organize the observations it has gathered. An hypothesis can organize in a few lines a series of empiric facts whose cataloguing might require an entire volume. It is obvious that the brilliance (or lack of it) of any research pivots upon the formulation of the hypothesis.

The concept of hypothesis thus specified grasps the fundamental meaning of the term at its etymological root of supposition, explicitly excluding its truth or falsity.

Functional Value of the Hypothesis in General. The hypothesis, as such, is neither true nor false, but rather, more or less useful. Even an hypothesis that proves to be false contributes information in that it eliminates a certain number of variables that until that moment had appeared possible. For exactly this function of categorizing information and experience, the hypothesis occupies a central position among the means with which we discipline our investigative work. The essential function of the hypothesis consists therefore in the guide it furnishes to new information, by which it will be confirmed, refuted, or modified.

Functional Value of the Hypothesis in the Family Interview. The functional value of the hypothesis in the family interview is substantially that of guaranteeing the activity of the therapist, which consists in the tracking of relational patterns. It is quite probable that such patterns are provoked and brought into the open by the active behavior of the therapist. If the therapist were instead to behave in a passive manner, as an observer rather than a mover, it would be the family that, conforming to its own linear hypothesis, would impose its own script, dedicated exclusively to the designation of who is "crazy" and who is "guilty," resulting in zero information for the therapist. The hypothesis of the therapist, however, introduces the powerful input of the unexpected and the improbable into the family system and for this reason acts to avoid derailment and disorder. We shall try to explain this last concept.

Hypothesis, Information, and Negative Entropy. Gregory Bateson (1), in his metalogue, "Why Do Things Get in a Muddle?" states, "I know that there are infinitely many muddled ways, so things will always go toward muddle and mixedness."

If we transfer this assertion from a universal meaning to the restricted precincts of a family therapy session, we can by experience confirm its validity. Our sessions with the family would tend, without our activity based upon an hypothesis, to go toward a discouraging increase in disorder and muddle. But what exactly is disorder? Perhaps its clearest definition is that given by Schafroth (4):

It is, in fact, no such trival matter to define "disorder." Scientists exist who have the habit of piling up papers and books in a seemingly random fashion on their desks, yet know all the time how to find a given thing. If someone brings apparent "order" to this desk, the poor owner may be unable to find anything. In this case, it is obvious that the apparent "disorder" is, in fact, order and vice versa. You will easily see that in this sense the order in the desk can be measured by the information the owner has about its state. This example illustrates that, by trying to define "disorder" more precisely we return to the previous definition in terms of "lack of information"...

The disorder, disorganization, lack of patterning, or randomness of organization of a system is known as its entropy. The decrease in entropy can be taken as a measure of the amount of information. It was noted by Wiener and Shannon that the statistical measure for the negative of entropy is the same as that for information, which Schrödinger (5) has called "negentropy." Wiener has demonstrated that the concepts of "information" and "negentropy" are synonymous.

However, De Beauregard (2) later defined more precisely the rapport between the two concepts of negative entropy and information on the basis of two meanings that are illuminating to our research.

Cybernetics is led to define "negentropy" and "information" with a sort of subjective doubling, and to admit the possibility of a transition in two senses:

Let us note that the meaning of the word information is not the same in the two senses: in the direct transition negentropy ® information, "information" signifies acquisition of knowledge ... In the reciprocal transition information®negentropy, "information signifies power of organization.

The Hypothesis Must be Systemic. A fundamental point to emphasize is that every hypothesis must be systemic, must, therefore, include all components of the family, and must furnish us with a supposition concerning the total relational function. Let us consider an example.

A mother telephoned our center asking for a consultation. The family, belonging to the working class and living on the periphery of Milan, consisted of six members: the parents, both in their fifties; a 20-year-old boy, Paolino, who worked as a plumber; a 17-

year-old girl, Francesca, who had recently received a secretarial diploma and was looking for a job; a 12-year-old schoolboy, Stephano; and the designated patient, Regina, 14 years old.

Regina, blind since birth, at about the age of 4 began to present psychotic behavior so marked that it later prevented her admission to a local school for blind children. For this reason, at the age of 6, she had been admitted to an institution in central Italy that cared for a conglomerate of psychotic, organically impaired, retarded, and handicapped children. Despite the long trip, the mother had visited Regina nearly every month, bringing her home during Christmas and summer vacations. The periods Regina spent at home, however, rendered family life a virtual hell. During the previous summer, Regina, still manifesting her psychotic behavior, had become very attached to her mother and no longer wanted to leave her. She made no further progress in the institution. In fact, after an initial period of adaptation over a number of years, during which she had reached a certain rapport with the nuns and the other children and had scholastically achieved the level of third grade, she had progressively isolated herself. After the last summer vacation she had enveloped herself in a blanket of negativism. The psychologist of the institute, during one of the mother's monthly visits, seems to have discouraged a further stay for Regina and had given the mother the address of our center. The mother knew neither the name of the psychologist nor why he had suggested our center. However, she formulated the following explicit request: "When we come, we have to decide if it's better for Regina to stay at the institute or come home to stay with us."

This was the information entered on the family's chart at the time of the telephone contact, and an appointment was made for the Christmas holidays, when Regina would be home from the institution.

During the meeting preceding the session, our group reviewed the chart and discussed the information already received, with the purpose of formulating an hypothesis. The fundamental question was: What was the systemic game posed by Regina's return to the family, her psychotic behavior unchanged after so many years of seclusion in a distant institution? And further: In what way had some change in institutional politics, represented by the unknown psychologist who had advised the mother, converged with a change in the politics of the family, which pose for itself the dramatic (and sudden) question: "Is it better for Regina to come home to stay with us?"

We agreed upon the hypothesis of a convergence of two different motivations deriving from two subsystems. One was that of the institution. Italy, at that time found itself in the midst of an ideological controversy, sociopolitical and anti-institutional in nature, resulting in the conviction that the return to the family is always the best solution. To us, however, it seemed that the expulsive move of the institution would not have been responded to had it not coincided in some respect with the homeostatic imperatives of a family sytem in danger of change. It was necessary to hypothesize the nature of this danger. From the family chart, we knew that Regina had two elder siblings: Paolino, 20 years old and already working, and Francesca, 17 years old, just graduated and in search of a job, a step that would end her dependence on the family. Regina's reurn to the family

at this moment would be the most effective way of ensuring the cohesion of the group. Because of her blindness, not to mention her psychotic behavior, Regina would require constant care and watching. Francesca would probably have to give up plans for a job so that she could stay at home to help her mother. There would be additional expenses and another mouth to feed, and most likely Paolino would have to contribute more heavily to the maintenance of the family, perhaps sacrificing plans for vacation, girlfriends, outings, etc. The team thus reached an agreement as to the formulation of the following systemic hypothesis: The family, having perceived this as a dangerous moment for its homeostasis, "discovered" the duty of taking Regina back into the family. This return could be essential in keeping Francesca or Paolino, or both, from turning to the outside world.

In accord with this hypothesis, we decided that the session must, above all, involve Francesca and Paolino, their relationships with the various members of the family, their eventual projects, their opinions concerning Regina's possible return, and the effects they thought this eventual return would have upon their lives. The hypothesis was confirmed by the feedback observed during the interview: The family crisis centered upon the adolescence of Francesca who seemed to be just as afraid of it as the others. The problem, therefore, was quite different from the one posed by the mother.

The hypothesis described above, in addition to being coherent with the systemic epistemology, is suggested by two types of information:

1. certain data acquired in the research on families presenting psychotic members. Often the schizophrenic crisis of one member coincides with the threat that one of the other members, often an adolescent, is about to leave the family. This function can be hypothesized, as in the above case, when we observe a sudden change in family politics.

2. specific information concerning the family under observation. Entering the session already provided with a hypothesis, the therapist can take the initiative, proceed with order, regulate, interrupt, guide, and provoke transactions, all the time avoiding being innundated by a flood of meaningless chatter.

CIRCULARITY

By circularity we mean the capacity of the therapist to conduct his investigation on the basis of feedback from the family in response to the information he solicits about relationships and, therefore, about difference and change.

The acquisition of such an ability demands that therapists free themselves from the linguistic and cultural conditioning that make them believe they are capable of thinking in terms of "things" so that they may rediscover "the deeper truth that we still think only in terms of relationships" (3, p. 173).

In 1968 Bateson had already explained and demonstrated this concept.

The same general truth¾that all knowledge of external events is derived from the relationships between them¾is recognizable in the fact that to achieve more accurate perception, a human being will always resort to change in the relationship between himself and he external object. If he is inspecting a rough spot on some surface by means of touch he moves his finger over the spot, thus creating a shower of neural impulses with definite sequential structure, from which he can derive the static shape and other characteristics of the thing investigated ... In this sense, our initial sensory data are always "first derivatives," statements about differences which exist among external objects or statements about changes which occur either in them or in our relationship to them ... What we perceive easily is difference and change¾and difference is a relationship. [3, p. 173]

That which we call circularity is therefore our consciousness, or better yet, our conviction of being able to obtain from the family authentic information only if we work with the following fundamentals:

1. Information is a difference.
2. Difference is a relationship (or a change in the relationship).

This is not enough, however. Yet another device is needed to help the therapist face the complexities of the family: Every member of the family is invited to tell us how he sees the relationship between two other members of the family. Here we are dealing with the investigation of a diadic relationship as it is seen by a third person. One will readily agree that it is far more fruitful, in that it is effective in overcoming resistance, to ask a son, "Tell us how you see the relationship between your sister and your mother," than to ask the mother directly about her relationship with her daughter. What is perhaps less obvious is the extreme efficiency of this technique in initiating a vortex of responses in the family that greatly illuminate the various triadic relationships. In fact, by formally inviting one member of the family to metacommunicate about the relationship of two others, in their presence, we are not only breaking one of the ubiquitous rules of disfunctional families, but we are also conforming to the first axiom of the pragmatics of human communication: In a situation of interaction, the various participants, try as they might, cannot avoid communicating.

Consider the case of the designated patient invited by the therapist to describe her perception of the relationship between her father and younger sister. Suppose she shows disapproval of certain behavior of the father in relation to the sister. It would make a big difference in regard to the information concerning the triadic relationship (that is, including the person questioned) if the other two became confused, or if each reacted in the same manner, or if only the father were to protest in indignation while the sister remained cryptically silent or showed a marked hostility or scorn.

We had such a case, in which the designated patient, describing her perception of the relationship between her father and sister, Marina, included in her comments the story of a recent significant episode. She ended by turning to her father with the following accusation, "I had the impression that you made her miserable, and that you do it often."

The contrast between the biblical indignation of the father and the expressionless silence of Marina, who neither agreed nor contradicted her sister, permitted us to make certain observations and therefore formulate new hypotheses concerning the relationship between the two sisters (who, until then, had appeared friendly toward one another), the rapport of each with the father, the rapport of the father with each of them, etc., etc. At the same time, the therapists, and, even more so, the observers of the session, took notice of the behavior of the mother, who, with shakings of the head and disapproving glances toward the girl, showed an alliance with her husband in his anger. Needless to say, the next sequence of questions included the mother: "And now, Marina, how do you see the relationship between your sister and your mother?"

In this way, regardless of the limitations imposed upon us by language and cultural conditioning, we can go beyond the triad and the sum of the various triads within the family. Thus the warp will pass through the woof, until the design will be clearly seen in the fabric, without the necessity of posing the most expected, and therefore the most feared and defended against question: "But Marina, how do you see the relationship between your mother and father?"

Other Practical Methods for Collecting Information. In respect to the triadic modality of investigation of relationships and the fundamental principle that information is a difference and that the difference is a relationship (or a change in the relationship), we shall here present some practical methods we have discovered to be extremely valuable in soliciting information:

1. in terms of specific interactive behavior in specific circumstances (and not in terms of feelings or interpretations)¾for example, the transaction initiated by the therapist with the oldest son of a family of four, in which the youngest son, Lorenzo, presented crises of violence during which he struck his mother.

Therapist: When Lorenzo begins to loose control and pushes your mother, what does your father do? And how does your mother react to what he does (or doesn't) do? And what do you do? etc., etc.

2. in terms of differences in behavior and not in terms of predicates supposedly intrinsic to the person for example a conversation between therapist and child concerning the paternal grandparents who live with the family.

Son: We live together with my grandparents, and they're real naggers.
Ther.: What do they do that makes them naggers?
Son: They keep interfering with our parents, telling them what to do with us.
Ther.: Who interferes the most, your grandfather or your grandmother?
Son: Grandpa.
Ther.: Whom does he interfere with the most, your mother or your father?
Son: With my father.
Ther.: And who gets bugged the most when your grandfather interferes, your father or your mother?

Son: Oh, Mom of course! She wants Dad to tell him off...

3. in terms of ranking by various members of the family of a specific behavior or a specific interaction. This invitation to make a classification should be offered to more than one member of the family.

Ther.: Classify the various members of the family in reference to their tendency to stay at home on Sundays. Begin with whoever stays at home the most.
or else:
Ther.: It seems that your mother cries a lot at home, that she's very unhappy. Emily, tell me who can cheer her up the most when she's sad¾your grandmother, father, brother, or you? Make a scale.

This method of classification by the members of the family serves as an important source of information in that it not only reveals the position of the various members in the "family game," but it also eventually exposes interesting discrepancies among various classifications.

4. in terms of change in the relationship (or better in behavior indicative of change in the relationship) before and after a precise event (diachronic investigation).

The following example is taken from the first session with a family of four. The mother had asked for help concerning the rebellious and aggressive behavior of her 12-year-old son, Marco. There was also a younger sister, Sissy. Nearly every day, violent fights exploded between mother and son. The precise event the therapist began to ask about was the father's heart attack, after which he had left his work and obtained an invalid's pension.

Ther. (to Sissy): Your mother said that Marco has always been a difficult child. But according to you, did your mother and brother fight more before or after father got sick?
Sissy: Oh after, after. Mommy get much angrier, and she's more nervous too ... It's just that at a certain point she has to stop ... when Daddy puts his hand over his heart.

5. in terms of differences in respect to hypothetical circumstances.

Ther.: If one of your children should have to stay at home, without getting married, who do you think would be the best for your father? Who do you think would be the best for your mother?

All of these methodologies are used by us during the investigation of the symptom, even in the first session. Rather than become enmeshed in the tedious listing of symptomatic behavior, the therapist conducts the investigation of how each member of the family reacts to the symptom. The model is triadic¾a member of the family is invited to describe in what manner another member reacts to the symptom and in what way yet another family member reacts to that reaction.

The following example comes from the first session in therapy of a family presenting an anorexic son, Marcello.

Ther. (to sister Ornella): When your mother tries to get Marcello to eat and he refuses the food, what does your father do?
Ornella: For a while he holds himself back, but after a while he gets mad and starts yelling.
Ther.: At whom?
Ornella: At Marcello.
Ther.: And when he yells at Marcello, what does your mother do?
Ornella: She gets mad at Daddy. She says that he's ruining everything, that he doesn't have any patience, that he's just making everything worse.
Ther. (to father): And while all this is going on, what does Ornella do?
Father (smiling at his daughter with open admiration): She just goes on eating as if nothing were happening!

The gradual enlargement of the field of observation. Another important method of gathering information during the family interview is to begin with the investigation of the subgroups. An example follows.

A young couple with two sons, Paolo and Alessandro, 6 and 4 years of age, respectively, consulted our center because of their difficulty in controlling Paolo. In the period prior to the session, his spiteful behavior had become unbearable; he had flooded the house, hammered nails into an expensive piece of furniture, etc.
During the team discussion preceding the first session, we decided to investigate the family relationships beginning with the various subgroups. If, as is often the case, the father was absent at work all day and the mother remained at home with the children, our inquiry would begin with the subgroup mother-children, using the terms we have already described:

1. in terms of differences:
Ther. (to the father): Who is more attached to his mother, Paolo or Alessandro?
2. in terms of specific interactive behavior in specific circumstances:
Ther.: Paolo, when you get Alessandro mad, what does your Mommy do? Alessandro, when you get Paolo mad, what does your Mommy do? etc.
We would then proceed to the entire family, always following the proposed form.
Ther.: When Daddy's home in the evening, is Paolo more naughty with Mommy or less naughty? If he's naughty with Mommy, what does Daddy do? etc.

Only after forming a well-articulated picture of the nuclear family, can we enlarge the investigation to include relationships with the families of origin of the parents, dwelling in detail upon the relations between grandparents and grandchildren¾(ie. "Who is Grandmother's pet?"), always keeping to the above-described methods for obtaining information.

NEUTRALITY

By neutrality of the therapist we mean a specific pragmatic effect that his other total behavior during the session exerts on the family (and not his intrapsychic disposition). We shall try to explain exactly what this pragmatic effect is by describing a hypothetical situation. Let us imagine that when one of our team members has terminated his interview with the family and has gone to discuss the information he has gathered with the rest of the team, an interviewer approaches the family and asks the various members their impressions of the therapist. If the session has proceeded according to the systemic epistemology, the various members of the family will have plenty to say about the personality of the therapist (his possession or lack of intelligence, human warmth, agreeability, style, etc.) However, if they are asked to state whom he had supported or sided with or what judgment he had made concerning one or another individual or his respective behavior or of the entire family, they should remain puzzled and uncertain.

In fact, as long as the therapist invites one member to comment upon the relationship of two other members, he appears at that time to be allied to that person. However, this alliance shifts the moment he asks another family member and yet another to do the same. The end result of the successive alliances is that the therapist is allied with everyone and no one at the same time.

Furthermore, the more the therapist assimilates the systemic epistemology, the more interested he is in provoking feedback and collecting information and the less apt to make moral judgments of any kind. The declaration of any judgment, whether it be of approval2 or of disapproval, implicitly and inevitably allies him with one of the individuals or groups within the family. At the same time, we try to observe and neutralize as early as possible any attempt towards coalition, seduction, or privileged relationships with the therapist made by any member or subgroup of the family.

In fact, it is our belief that the therapist can be effective only to the extent that he is able to obtain and maintain a different level (metalevel) from that of the family.

CONCLUSION

The conduct of the interview according to the principles and methods discussed above effectively aids the therapist in gathering information and therefore in his therapeutic work. By information we chiefly mean the increase of the therapist's knowledge of the ensemble of the relational modality at work in the family. Upon this awareness the therapist will base his eventual therapeutic interventions, comments, simple prescriptions, ritualized prescriptions, or family rituals.

The present phase of our research has brought us to face a new problem. Can family therapy produce change solely through the negentropic effect of our present method of conducting the interview without the necessity of making a final intervention?

We hope this question will be answered after a significant number of family therapies have been conducted applying the above described method of interviewing and omitting any final intervention.

REFERENCES

1. Bateson, G., Steps to an Ecology of Mind, San Francisco, Chandler, 1972.
2. De Beauregard, O. C., "Sur l'Equivalence entre Information et Entropie," Sciences, 11, 51, 1961.
3. Ruesch, J. and Bateson, G., Communication: The Social Matrix of Psychiatry, New York, W.W. Norton, 1968.
4. Schafroth, M. R., "The Concept of Temperature," in H. Messel (Ed.) Selected Lectures in Modern Physics, London, Macmillan, 1960.
5. Schrödinger, E., What Is Life?, Cambridge University Press, 1967.
6. Selvini Palazzoli, M., Bascolo, L., Cecchin, G. and Prata, G., Paradox and Counterparadox, New York, Aronson.

Reprint requests should be addressed to Mara Selvini Palazzoli, M.D., Centro per lo Studio della Famiglia di Milano, Via Leopardi 19, I-20123, Milan, Italy.