



CHAPTER 2

Tapping the Internal Communications

A personality is a full Congress of orators and pressure-groups, of children, demagogues, communists, isolationists, war-mongers, mugwumps, grafters, log-rollers, lobbyists, Caesars and Christs, Machiavels and Judases, Tories and Promethean revolutionists. — Henry Murray

THE HIDDEN MESSAGE

We are all aware of the various ways that the signs and signals from our environment dictate what we do and how we feel. We stop at red lights, detour blasting areas, protest over mistreatment, exult over praise, and grouse over reproaches. We are less familiar with the internal organization of signals that correspond to external signals. Incoming messages are processed, decoded, and interpreted by our self-regulating system that issues instructions and prohibitions, self-praise and self-reproaches.

The complex system of environmental stimuli controls us only to the extent that it meshes with its internal psychological counterpart. Our inner workings can shut out or twist around the signals from the outside so that we may be completely out of phase with what is going on around us. A profound or chronic discrepancy between the internal and the external systems may culminate in psychological disorders.

Many of the characteristics of the emotional disorders are puzzling and seem to defy common-sense laws because of the poverty of relevant information. When the missing data are supplied, the investigator or therapist can readily apply his tools to make sense out of the most perplexing behaviors. Unraveling the meanings woven into an anomalous reaction is an intriguing enterprise that provides a wealth of insight into human behavior. Consider these representative examples from clinical practice:

A woman walking out-of-doors suddenly realized that she was about three blocks from home and immediately felt faint.

A professional athlete consistently felt his chest constrict and his heart pound whenever he was driving his automobile through a tunnel. He started to gasp for breath and thought he was dying.

A successful novelist cried bitterly when he was complimented for his work.

Puzzling reactions such as these have stimulated various schools of psychotherapy to reach into their conceptual baggage for explanations. Psychoanalysis, for example, has explained a woman's feeling faint when away from home in terms of unconscious meaning: Being out-of-doors stirs up a repressed desire such as a wish for

seduction or rape (Fenichel, 1945). The wish arouses anxiety because of its taboo nature.

Behaviorists, on the other hand, using a conditioning model of emotions to account for the anxiety, provide a different kind of explanation. They assume that at some time in the woman's life she was confronted with a realistically dangerous situation, while simultaneously being exposed to an innocuous situation (such as traveling away from home). Because of the closeness of the innocuous stimulus to the real danger, the woman became conditioned to react to the innocuous stimulus with as much anxiety as she would experience in the face of a real danger (Wolpe, 1969).

The psychoanalytic and behaviorist explanations of the woman's anxiety are dictated by theory and do not take advantage of all the relevant data. Another explanation forces itself upon us when we tap the internal communication system.

Each of the patients described above was aware of having had a sequence of thoughts that intervened between the event and the unpleasant emotional reaction. When a person is able to fill in the gap between an activating event and the emotional consequences, the puzzling reaction becomes understandable. With training, people are able to catch the rapid thoughts or images that occur between an event and the emotional response.

The woman observed the following chain of ideas immediately before she became anxious. As soon as she became aware that she was several blocks from her house, she would think, "I am really far away from home. If something happened to me now, I couldn't get back in time to get help. If I fell down on the street here, people would just walk by—they wouldn't know me. Nobody

would help me." The chain of events leading to anxiety included a sequence of thoughts of danger.

The athlete with the tunnel phobia also was able to identify a specific series of ideas revolving about the concept of danger. As he entered the tunnel, he would think, "This tunnel could collapse and I would suffocate." He then had a visual image of these dire happenings and immediately began to experience tension in his chest—which he interpreted as a sign that he was suffocating. The thoughts of suffocation generated further anxiety which was manifested by an increased pulse rate and shortness of breath.

The novelist, who was in the throes of a depression, reacted to a compliment about his writing with this procession of thoughts: "People won't be honest with me. They *know* that I'm mediocre. They just won't accept me as I really am. They keep giving me phony compliments." When he revealed these thoughts, his adverse reaction to praise became intelligible: Since he regarded his work as inferior, he interpreted positive statements as being insincere. His erroneous conclusion that he could not have a genuine relationship with other people made him feel more isolated and more depressed.

The principle that there is a conscious thought between an external event and a particular emotional response is not generally accepted by the major schools of psychotherapy. Their exclusion of conscious ideation from their theoretical formulations is an inevitable consequence of not investigating this crucial source of information. It is not difficult, however, to train subjects or patients to focus on their introspections in various situations. The person can then observe that a thought links the external stimulus with the emotional response.

We know that a person may suddenly experience an emotion when there is no external event to account for it. In such instances, it is usually possible to ascertain that there is an integral "cognitive event" (that is, a thought, a reminiscence, image, in his free-flowing stream of consciousness) which produced the emotional response. In emotional disturbances such as depression or anxiety neurosis this prevailing cognitive flow may account for the persistent unpleasant emotions.

Many behavioral scientists object to the concept that ideation plays a crucial role in shaping emotional responses. Some argue that the emotional response is triggered directly by the external stimuli and that the person inserts his cognitive appraisal of the event only retrospectively. A person who is trained to track his thoughts, however, can observe repeatedly that his interpretation of a situation *precedes* his emotional response to it. For example, he sees a car heading toward him; then, he thinks, "It is going to hit me," and feels anxious. Furthermore, when a person changes his appraisal of a situation, his emotional reaction changes. A young woman believed that a friend passed by her without saying hello. She thought, "He's snubbing me," and felt sad. After a second glance, she realized that it wasn't her friend at all and her hurt feelings disappeared.

In fact, it is difficult to conceive of how a person can react emotionally to an event before he has appraised its nature. The significant details in his environment, unlike simple laboratory stimuli such as a ringing bell or dermal shocks used in many behavioral experiments, are generally complex. Judgment is required to decide whether a situation is safe or harmless, whether another person is friendly or unfriendly: Often a subtle clue

determines whether he is joking or being hostile. If not for cognitive processes such as discrimination and integration of stimuli, we would react willy-nilly to events. Whether we laughed, cried, or raged would have no sensible relation to the reality of what was happening. Such capricious responses might be predicted from behavior theory, which asserts that emotional responses are based on accidental past conditionings and set off by the occurrence of events that had been associated by chance with emotionally arousing situation in the past.

The importance of eliciting a person's cognitions becomes apparent when we attempt to understand incongruous emotional reactions. We find that apparently unrealistic or exaggerated anger, anxiety, or sadness is based on the individual's peculiar appraisal of the event. These peculiar appraisals become dominant in emotional disorders.

THE DISCOVERY OF AUTOMATIC THOUGHTS

My formulation of the role of cognition in emotional disorders and in psychotherapy may be explained further by an autobiographical note. I had been practicing psychoanalysis and psychoanalytic psychotherapy for many years before I was struck by the fact that a patient's cognitions had an enormous impact on his feelings and behavior. All my patients had been instructed in the basic rule of free association ("The patient is requested to say everything that enters his mind, without selection" [Fenichel, 1945, p. 23]) and most learned quite well to overcome the tendency to censor their ideas. They expressed rather freely feelings, wishes, and experiences they had concealed from other people because of fear of

disapproval. Although I recognized that my patients could not possibly report all their thoughts, I believed that their verbalizations represented a fairly good cross-section of their conscious ideation.

In time, however, I began to suspect that the patients were not reporting certain kinds of ideation. This omission was not due to any resistance or defensiveness on the part of the patient, but rather it had to do with the fact that the patient had not been trained to focus on certain kinds of thought. In retrospect, it is apparent to me that the types of ideation that had gone unnoticed are in fact crucial to understanding the nature of psychological problems. Although other psychoanalysts may have exposed this rich vein of material, they had not reported it as such in the literature.

The following experience triggered my interest and consequent investigation of this un verbalized material.

A patient in the course of free association had been criticizing me angrily. After a pause, I asked him what he was feeling. He responded, "I feel very guilty." At the time, I was satisfied that I understood the sequence of psychological events. According to the conventional psychoanalytic model, there was a simple cause-and-effect relation between his hostility and guilt; that is, his hostility led directly to guilty feeling. There was no need, according to the theoretical scheme, to interpose any other links in the chain.

But then the patient volunteered the information that while he had been expressing anger-laden criticisms of me, he had also had continual thoughts of a self-critical nature. He described two streams of thought occurring at about the same time: one stream having to

do with his hostility and criticisms, which he had expressed in free association, and another that he had not expressed. He then reported the other stream of thoughts: "I said the wrong thing... I shouldn't have said that... I'm wrong to criticize him... I'm bad... He won't like me... I'm bad... I have no excuse for being so mean."

This case presented me with my first clear-cut example of a train of thought running parallel to the reported thought content. I realized that there was a series of thoughts that linked the patient's expression of anger to guilty feelings. Not only was the *intermediate* ideation identifiable, but it directly accounted for the guilty feeling: The patient felt guilty because he had been criticizing himself for his expressions of anger to me.

When I checked subsequently with other patients who had been following the rule of free association for many months or years, I discovered they also had streams of thoughts they had not been reporting. Unlike the first patient, however, many of them were not fully aware of these unreported thoughts until they started to focus on them. Typically, these thoughts differed from the reported ideation in that they appeared to emerge automatically and were extremely rapid. In order to probe into their unexpressed thoughts, I had to guide the patients to be especially attentive to certain ideas and to report them to me. This change of focus was quite revealing, as illustrated in the following case.

A woman who felt continuous unexplained anxiety in the therapy sessions was describing certain sensitive sexual conflicts. Despite mild embarrassment, she verbalized these conflicts freely and without censoring. It was not clear to me why she was experiencing anxiety in

each session, so I decided to direct her attention to her thoughts about what she had been saying. Upon my inquiry, she realized that she had been ignoring this stream of ideation. She then reported the following sequence: "I am not expressing myself clearly... He is bored with me... He probably can't follow what I'm saying... This probably sounds foolish to him... He will probably try to get rid of me."

As the patient focused on these thoughts and reported them to me, her chronic anxiety during the therapy sessions began to make sense. Her uneasiness had nothing to do with the sexual conflicts she had been describing. But her self-evaluative thoughts and anticipations of my reactions pointed to the essence of her problem. Even though she was actually quite articulate and interesting, she had continual thoughts revolving around the theme of her being inarticulate and boring. After she was able to pinpoint and to correct her unrealistic thoughts, she no longer felt anxious during the therapy sessions.

I noted initially that my patients' automatic thoughts appeared to be of a transference nature: that is, they were concerned with the patient's evaluation of what he was saying or planning to say to me during the session and how he expected me to react to him.¹ Subsequently, the patients recognized they had the same types of thoughts in their interactions with other people. It became increasingly apparent that patients, without realizing it, were constantly communicating with them-

¹Of course, psychoanalytic writers have always emphasized the importance of the patient's reactions to the analyst. However, they generally enunciated the basic rule without attempting to train the patient to concentrate on his thoughts in the way described in this chapter.

selves outside of therapy as well as in our sessions. By tuning in on the "intercom," as it were, we were able to obtain a more precise definition of the patient's key problems. The woman who thought she was boring me, for instance, recognized similar thoughts in practically all her interpersonal relations.

In order to tap this rich source of information, it was necessary to train patients to observe the stream of unreported thoughts. Since my initial finding had been that these unreported thoughts preceded an emotional state, I instructed the patients, "Whenever you experience an unpleasant feeling or sensation, try to recall what thoughts you had been having prior to this feeling." This instruction helped them to sharpen their awareness of their thoughts, and eventually they were able to identify the thoughts *prior* to experiencing the emotions. Since these thoughts appeared to emerge automatically and extremely rapidly, I labelled them "automatic thoughts." As we shall see in subsequent chapters, the pinpointing of the automatic thoughts provided the raw material for understanding the emotional states and disturbances.

These observations of automatic thoughts presented a dilemma. According to my psychoanalytic training, my patients had been following the basic rule and had expressed the kind of material generally produced by patients in psychoanalysis. This fact was confirmed by my supervisors in the psychoanalytic institute who had reviewed with me the verbatim reports of my patients' free associations. Yet the standard method of emphasizing free association, overcoming censoring, and interpreting resistances, had not (with the exception of the cases described above) yielded the automatic thoughts.

After I considered the problem further, I concluded

that my patients had not really been focusing sharply on the stream of consciousness. They had been presenting material that had to do with current problems, dreams, and memories; or they were presenting narratives of their experiences; or they were jumping from one idea to another in a chain of associations. But they had not concentrated on observing and reporting their thoughts. Ultimately, it became apparent that much of what they reported was based on their conjectures of what they "must be thinking" rather than on sharp focusing on what they were thinking.

Why does conventional free association fail to uncover these automatic thoughts? One possible explanation is that people are accustomed to speaking to themselves in one way and to speaking to others in quite another way. Even though these internal signals exert a powerful influence over him, the patient has a life history of paying no attention to them. He is constantly signaling or communicating with himself as he ceaselessly interprets (or misinterprets) events, monitors his own behavior, makes predictions, and draws generalizations about himself. He is not deterred from reporting these thoughts because of shame or anxiety. Rather, he is either not fully conscious of his automatic thoughts or it does not occur to him that these kinds of thoughts warrant special scrutiny. Only when primed to focus on these thoughts would the patient be likely to report them.

When the patient is more disturbed—as in severe depression—these thoughts are more prominent. In fact, I became more cognizant of their presence when I tried to elicit the thought content from severely depressed patients. I also observed that the automatic thoughts

were more compelling in the ideation of obsessional patients.

THE NATURE OF AUTOMATIC THOUGHTS

After my interest in automatic thoughts was aroused, I systematically instructed patients to observe them during free association and to report them to me. I also induced them to record thoughts of this nature that occurred outside of the therapy sessions. In reviewing patients' descriptions of these thoughts, I was struck with the similarities reported by different patients.

From a practical standpoint, the explicit identification of the automatic thoughts relieved me—as well as the patient—of guessing at what he "must be thinking" and made it possible to define with great precision what he was actually thinking. This principle may be illustrated by another case example.

A woman, who was free-associating, was talking about a movie she had seen. In describing the plot of the movie, she reported feeling anxious. When I asked her why she was anxious, she said, "I guess it is because any scenes dealing with aggression probably stir me up." This guess was prompted by her notion derived from psychoanalytic theory that aggression produces anxiety. When I then inquired whether she had been having another chain of thoughts just prior to noticing the anxiety, she responded, "*Now I've got it!* I had the thought that you were critical of me for wasting time by going to the movies. This is what made me nervous."

I noted repeatedly that until a patient had been instructed to focus on the automatic thoughts, they would

frequently pass by barely noticed. However, by shifting his attention to these thoughts, the patient could recognize them. As already indicated, the more disturbed a patient was, the more salient were the automatic thoughts. As the patient improved, the automatic thoughts were less obvious; if his condition worsened, the thoughts became more apparent again.

These automatic thoughts reported by numerous patients had a number of characteristics in common. They generally were not vague and unformulated, but were specific and *discrete*. They occurred in a kind of shorthand; that is, only the essential words in a sentence seemed to occur—as in a telegraphic style. Moreover, these thoughts did not arise as a result of deliberation, reasoning, or reflection about an event or topic. There was no logical sequence of steps such as in goal-oriented thinking or problem-solving. The thoughts “just happened,” as if by reflex. They seemed to be relatively *autonomous* in that the patient made no effort to initiate them and, especially in the more disturbed cases, they were difficult to “turn off.” In view of their involuntary quality they could just as well have been labeled “autonomous thoughts” as automatic thoughts.

In addition, the patient tended to regard these automatic thoughts as *plausible* or reasonable, although they may have seemed far-fetched to somebody else. The patients accepted their validity without question and without testing out their reality or logic. Of course, many of these thoughts were realistic. But the patient often tended to believe the unrealistic thoughts even though he had decided during previous discussions that they were invalid. When he took time out to reflect on their validity or discussed their validity with me, he would conclude

they were invalid. Yet, the next time that he had the same automatic thought, he would tend to accept it at face value.

The wording of the thoughts varied according to the circumstances but generally had the same theme. But these were not the typical repetitive thoughts reported by patients with obsessional neurosis. For example, depending upon who was with him, a depressed patient would have the thoughts that his mother was critical of his general behavior or the way he dressed, that his employer disapproved of his performance on the job, that his wife despised his lovemaking, that his therapist devalued his intelligence. These negative thoughts occurred despite the fact that they were contrary to objective evidence. No matter how many times these thoughts were invalidated by external experience, the patient continued to have them—until he recovered from his depression.

I also noted that the content of automatic thoughts, particularly those that were repetitive and seemed to be most powerful, was *idiosyncratic*. They tended to be peculiar not only to the individual patient but to other patients with the same diagnosis. The thoughts were closer to the patient's problems and, therefore, were more useful in psychotherapy than most of what the patient narrated in “free association.” As already indicated, these thoughts preceded the arousal of emotion. In the previously cited case, the patient's anxiety was triggered by her automatic thoughts, not by her reflections on the actual content of the movie. Finally, these thoughts generally involved more distortion of reality than did other types of thinking.

It became apparent from my subsequent work with patients that internal signals in a linguistic or visual form

play a significant role in behavior. The way a person monitors and instructs himself, praises and criticizes himself, interprets events, and makes predictions not only illuminates normal behavior, but sheds light on the inner workings of the emotional disorders.

SELF-MONITORING AND SELF-INSTRUCTIONS

For a good part of their waking life, people monitor their thoughts, wishes, feelings and actions. Sometimes there is an internal debate as the individual weighs alternatives and courses of action and makes decisions. Plato referred to this phenomenon as an "internal dialogue."

Self-monitoring of behavior may be involved in maladaptive reactions. Overmonitoring can lead to self-consciousness and over-regulation to excessive inhibition. Cautionary signals tend to interfere with spontaneous self-expression. This phenomenon is particularly clear in stage fright, which is generally characterized by an excess of warning signals and inhibiting self-instructions. In obsessional neurosis, the internal debates may paralyze action.

Individuals may also have a *deficit* of self-monitoring of thought and impulse. This deficiency is seen in milder forms in excessive smoking or overeating. The individual blots out awareness of the consequences of his actions. Some food addicts or alcoholics may suspend self-monitoring to the point that they are unaware—or only dimly aware—of starting to eat or drink.

The sequence of scanning the situation, debating, and making decisions leads logically to self-instructions—verbal messages directing behavior. In the most com-

monplace instances a person gives himself instructions in order to achieve specific, concrete aims. A student reminds himself that it is time to start studying; an entertainer tells himself to pause for applause. Instructing and evaluating oneself also serve broader goals, such as being a good parent, acquiring wealth or power, becoming popular. When a person has a large investment in a particular goal, the relevant instructions take the form of prodding, commanding, and reproaching oneself. Even in the normal state, these proddings and self-instructions can be burdensome.

In a number of clinical conditions, self-instructions may become overmobilized—to the point that a person is constantly driving himself. This quality of being driven by internal prods may be seen among "overachievers" and in the early or mild states of depression. Karen Horney (1950) has described the overly active system of self-commands as "the tyranny of the shoulds." Contradictory "shoulds" may be found in people who are indecisive and in obsessional neurotics.

Another kind of self-instruction revolves around the theme of avoidance or inhibition of action. Such persons react to noxious situations with thoughts of avoidance. When confronted with what appears to be a boring or onerous task, they have the thought, "Don't do it." (Overcoming this resistance may require more willpower than actually doing the task.) Similarly, if people anticipate that a given action might expose them to danger, they may signal themselves to inhibit this action.

Thoughts of escape and avoidance are particularly prominent in the ideation of anxious and depressed patients. The anxious patient perceives danger and, lacking confidence in his capacity to cope with it,

experiences wishes and thoughts about escape to safety. The depressed patient regards the usual routines of life as onerous and seeks ways of detaching himself from these burdens or from life itself. He retreats from the perceived unpleasantness into a state of immobility or passivity.

On the other hand, the self-instructions of the angry person take the form of inciting action against the offensive object: "Get even with him"; "Tell him off"; "Don't let him get away with it." The angry, paranoid patient may be propelled into similar action on the basis of illusory offenses.

Self-punishments and self-rewards are related to self-instructions. If the person perceives a deficiency in his behavior or performance, he may barrage himself with regrets and reproaches. He may even make general evaluations of himself as bad, ineffective, or unworthy. The result of such self-reproaches is that he is likely to feel guilty or sad. These reactions, of course, shade into pathological states such as depression in which self-reproaches and self-criticisms are paramount.

The converse of self-punishment or regret is self-reward. When someone is proud of an achievement or receives praise for it, he may think to himself, "You're a great guy. You deserve the best of everything. Happy days are here again!" By the same token, when things go wrong, he is apt to be self-punitive. He thinks, "You look like a fool. You're really not as bright as you thought you were. Everybody considers you a jerk. You really don't have much to offer yourself or anybody else."

ANTICIPATIONS

The role of anticipations in influencing feelings and action is far more dominant than is generally recognized.

The meaning of a person's experiences is very much determined by his expectations of their immediate and ultimate consequences (Kelly, 1955). Whether he is studying, conversing, or working, a person's mood and motivations are elevated by pleasant and dulled by unpleasant expectations.

Anticipations may assume a visual form. A physically ill person may be buoyed by vivid daydreams of regaining his health and pursuing a vigorous life. An anxious person may have visions of disaster as he enters an unknown situation. Depressed patients often have fantasies of failing every task they undertake (Beck, 1970c).

In social situations the individual may attempt to keep score of how other people react to him, and on the basis of his appraisal, he will try to predict what they will think of him. He wonders, "Will they like what I am saying?" "Will they decide I'm a fool?" "Will they praise me?" "Will they mock me?" His natural propensity is to regard any immediate reaction to him as though it will become an enduring attitude. His evaluation of his social image is based largely on what he perceives as the type of impact he makes on others. His notion of his social image may invade his own self-concept. "If I'm not physically attractive, or if I'm a poor conversationalist, people won't like me and I will be worthless."

RULES AND INTERNAL SIGNALS

Consideration of automatic thoughts leads naturally to the question: What general principles shape the content of these internal signals? We know from our own observations that people may behave quite differently in identical circumstances. We find that they interpret the

situation differently and evidently issue different "self-instructions." Furthermore, we find that a given person tends to show regularities in his reactions to many situations that are similar in certain crucial respects. His responses may become so predictable that we often attach character attributes to the person: "He is shy and timid." "He is insensitive and aggressive."

These observations of the consistency of responses suggest that each person has a set of general rules that guide how he reacts to specific situations. These rules not only guide his overt actions, but also form the basis for his specific interpretations, his expectancies, and his self-instructions. Furthermore, rules provide the standards by which he judges the efficacy and appropriateness of his actions and evaluates his worth and attractiveness. He uses rules in order to achieve his goals, to protect himself from physical or psychological injury, and to maintain stable relations with others.

The most obvious kinds of rules are standards and regulations. The person uses a kind of mental rule book to guide his actions and evaluate himself and others. He applies the rules in judging whether his own behavior or that of other people is "right" or "wrong." He also uses rules as measuring rods to evaluate the degree of success of a particular performance. By drawing on these standards and principles, he instructs himself (or others) how to behave in a given situation. Afterward, he can evaluate the feedback from his actions, make the necessary corrections, and either praise or criticize himself for his performance.

We use rules not only as a guide for conduct but also to provide a framework for understanding life situations. The rule book contains a coding system used to determine

the meanings of stimuli and events. In concrete ways, the rules are used to make arithmetic calculations, to follow a map, to label objects. These rules consist of equations, formulas, and premises that enable the person to order, classify, and synthesize his observations of reality so that he can come to meaningful conclusions.

We also use the code to make sense out of complex situations. When a person tells us something, we not only try to decipher the message, but we extract a highly personal (private) meaning from the communication: We judge whether the other person is offensive to us or whether we are offensive, whether we should strike back or withdraw.

The following example illustrates how the private interpretations of a situation vary according to different rules applied by two individuals. The example also illustrates how different emotions and different forms of behavior are evoked according to which rules are applied.

An instructor, in a casual way, told two students (Miss A and Miss B), who were carrying on a side conversation in his seminar, "If you have anything to say, share it with the rest of us or else be quiet." Miss A responded angrily that she had simply been trying to clarify a point. During the open discussion that followed, she challenged the instructor repeatedly regarding the content of his presentation and expressed sharp criticisms of his point of view. Miss B, who was usually an active participant in the seminar discussions, appeared sad and withdrawn following the instructor's comment, and remained silent for the rest of the class period.

The contrasting responses of these two girls can be understood in terms of different rules they applied in interpreting the situation and then in guiding their overt

responses. Miss A interpreted the teacher's remark as "He is trying to control me. He is treating me like a child." Her emotional response was anger. The general rule leading to this interpretation was: "Correction by authority figures = domination and belittling." Her self-instruction was: "Tell him off." The rule behind her retaliation was: "I must get even with people who treat me badly."

Miss B's interpretation: "He has caught me doing something wrong. He will dislike me from now on." Emotion: shame and sadness. Rule: "Correction by authority = exposure and weakness, fault, inferiority. Being corrected = disapproval." Self-instruction: "I should keep my mouth shut." Rule: "If I am quiet, I am less offensive." Also, "Being quiet will show I am sorry for my offensive behavior."

This example illustrates how people operate according to their own specific set of rules. Each girl applied a different rule in assessing the teacher's comment and thus derived a different interpretation. They then applied different rules to yield specific instructions regarding future interactions with the instructor and arrived at opposite conclusions. Their overt behavior simply represented the end product of the internal self-signals.

In summary, these rules may serve as standards to evaluate, steer, or inhibit behaviors; they are applied to others to judge the propriety, justification, and reasonableness of their behavior. By applying these rules, standards, or principles, the individual evaluates the significance of other peoples' actions and interprets how they regard his actions.

How do these rules originate? We know that people speak grammatically before they are taught the formal rules of grammar. They are not told explicitly in early childhood that they should follow a particular sequence of subject-verb-object (for example, "I want my bottle"). They derive the general rules from concrete experiences. They also behave in a socialized fashion before general rules of conduct are articulated to them. Inasmuch as rules are part of the social heritage, they are probably absorbed to a large extent through observations of other people as well as from personal experiences. It is fairly easy to see how a general rule ("Be polite" or "Stick up for your rights") is applied to a specific situation to produce specific behavior. Similarly, we can see how a rule determines the interpretation of the situation.

The operation of the rules can be compared to the kind of syllogisms discussed by logicians. For example, Miss A and Miss B have as a major premise, the rule: "All corrections by a person in authority are criticisms." The minor premise is "The teacher is correcting me." "Therefore," they conclude, "the teacher is criticizing me." The person does not actually state the initial premise to himself. The premise is already part of his cognitive organization just as are the rules for constructing sentences or the rules for distinguishing between animals and plants. Depending on the circumstances, the person may or may not have a concrete thought about the special case. In any event, he is aware of the conclusion. The conclusion may assume a central position or may be fleeting like the automatic thoughts previously described.

The rules and the syllogisms based on the rules are of particular interest to the clinician because they help to

explain unpredictable, illogical behavior and abnormal emotional responses. In Chapter 4, we shall see that when the rules are discordant with reality or are applied excessively or arbitrarily, they are likely to produce psychological or interpersonal problems.