GENERAL SEMANTICS, PSYCHOTHERAPY, AND THE LOGIC OF SCIENCE

C. ANDREW HILGARTNER *

 Granted the premise that human behavior shows a postulational structure, it follows that in order to alter some set of actions, it is both necessary and sufficient to alter the set of assumptions from which these actions proceed. But there is little reason to alter human behavior which proves effective and comfortable. Only when there is some falsification of a behavioral hypothesis, for example a contradiction between what we expect and what we observe, are we constrained to change our assumptions.

That diverse group of human activities which is lumped together under the general term psychotherapy has been developed specifically for the task of helping uncomfortable human beings to alter those sets of their own actions which lead to undesirable outcomes, but which they still persist in performing. The methods and the theories of psychotherapists have been many and diverse.

But when we view the process of developing a therapeutic insight from the standpoint of our logical terminology, it becomes apparent that this process is equivalent to the process of performing a critical experiment in order to select between two rival theories. Utilizing whatever therapeutic methods are available to him, the therapist in effect helps his patient to take apart some specific behavioral act, so as to disclose its logical structure—including the assumptions on which it is based. Once the assumptions which make the patient do as he does are revealed to the patient, then he is free to keep

* C. Andrew Hilgartner, M.D., is an instructor at the University of Rochester Medical Center, Department of Biochemistry, Rochester, New York, and formerly assistant professor at the Center for Brain Research, University of Rochester.
them, to modify them, or to discard them, and thus to con-
tinue doing it, to modify it, or to stop doing it and do some-
thing else instead.

In these terms, then, the key operation which is common
to the psychotherapy of any therapeutic school comprises the
process of hypothesis-falsification. The situation of psycho-
therapy stands equivalent to the preceptorial situations which
have served to perpetuate the scientific tradition since its incep-
tion. The patient functions as trainee and the therapist as both
precept and example. Displaying his special skills in experi-
mental logic, he helps his patient to design and execute his
own critical experiment—namely, to analyze his own situation
for himself.

Analysis of Personal Assumptions

Let us now put these theoretical constructs to test by
using them to examine in detail a bona fide example of
a situation in which a human being achieved a therapeutic
insight. For this purpose, I shall use an example from my own
personal experience. Customarily, a therapist, in describing
therapeutic experiences, describes what he saw somebody else
do or say, and what he thinks the experience meant to this
person. By leaving themselves out of the picture as much as
possible, therapists seem to hope to be able to classify their
observations as being objective.

However, I cannot actually feel your pain or your pleasure.
What I see you do or say is understandable to me only if I
am able to relate it to things I have done or said. In other
words, my understanding of you is a part of my personal
experience. Moreover, I have access to more information about
what I do and why I do it than I have about what you do
and why you do it. Therefore, by describing my own experi-
ences, instead of somebody-else's-experiences-as-I-understand-
them, I can present information of considerably higher po-
tential validity than is otherwise possible. I realize that this
statement and this procedure comprise a deliberate challenge
to commonly held assumptions about "objectivity," and, for
this reason, may prove a bit unsettling to at least some readers.
But let us proceed with the analysis and see whether or not it ends up looking absurd.

This incident occurred about eight months after I had started doing the exercises in body-awareness as taught at the Institute of General Semantics and as described by Perls, Hefferline, and Goodman in *Gestalt Therapy*. For many years, I had been aware that I had occasional episodes of what I called "that characteristic tension of my thighs," which consisted of a somewhat strange feeling of muscular strain or tension localized diffusely in both thighs, accompanied, as I now realize, by ill-defined restlessness and other signs of discomfort. I did not know what initiated these episodes. They lasted long enough at a time for me to have made the observation that they were sometimes somewhat relieved by sexual intercourse, but by nothing else that I knew of. If intercourse did not occur, then this feeling eventually "went away by itself." My "intellectual" explanation for these episodes was that they were somehow related to unsatisfied sex drive, but I didn't know how.

I quote from a record made at the time:

_Thursday, 22 June 1961 (5 A.M.): A success with a GESTALT THERAPY experiment. Jimmy (age twenty-one months) was awake and wouldn’t go back to sleep, so I lay on his floor as he played with toys, and "let it develop" (body awareness). First I was aware of tense and rigid back-muscles with which I was maintaining an arch. Then I was aware of restricting my breathing to an extreme degree—I almost couldn’t exhale at all. Then I was aware of extreme nausea, and squeezing my throat. Then I got some intense itches, and finally succeeded in not scratching some of them, and then gradually there emerged that characteristic tension of my thighs. This nearly had me climbing the walls. Then I tried "remembering," and once again got the picture of our back-yard chickens, and somebody telling me (age four?) to be careful, or they’d peck my peter off. I also got additional details: the green barn that we used to throw eggs against; the gravelled area between barn and garage; stepping
barefooted in chicken droppings; and I as a small child, feeling so funny, especially in the thighs, and withdrawing my pelvis because someone, Pete or Ben or someone, was telling me, "Watch out for that rooster, or he'll peck your peter off." The big rooster, half as tall as I, with bright red wattles and comb, and gold feathers in his neck.

Then all of a sudden, I drew my legs up as I lay on the floor, and I knew what "that characteristic tension of my thighs" signified: running away and its suppression. So then I proceeded to "run away," rubbing my feet back and forth on the floor, very hard and fast, until I was tired ("run out"). Probably I was still suppressing screaming (it does somehow seem appropriate to run away screaming from such a monster as that rooster), but I still feel joyful and exhilarated to discover-and-release "that characteristic tension."

The assumptions here are not hard to dissect. My experience as a child clearly involved the spontaneous impulse to run away in terror; but I didn't do that, presumably because "big boys don't cry, big boys are not afraid." Behind this crippling prejudice is the assumption that human behavior is to be judged in terms of "good" or "bad." A "big boy" who does perform the appropriate acts of crying or showing fear is treated with disapproval by adults and is jeered at by his peers, and he would have to be very strong indeed not to be defeated, and to become resigned, and eventually to come to believe that big boys don't cry or show fear. The experience of a spontaneous impulse to do something involves the gathering of the appropriate muscles to execute the maneuver. In this instance, since I judged this impulse as bad (dangerous), I suppressed it by "turning on" the antagonistic muscles as well (retroflexion), and by suppressing breathing (anxiety).

No one can annihilate, make nonexistent, his own spontaneous impulses; but a forbidden impulse can be kept out of awareness by suppressing it, as I did, and then by "forgetting" how the suppressing was done, which constitutes repression. Thereafter, when the forbidden impulse to flee recurs, it is
automatically put out of commission by means of retroflexion and anxiety, so that both the impulse and its suppression are felt, not as such, but rather as this frightening, dimly painful, and autonomous feeling of tension. The basic assumption for this whole constellation comprises the magical assumption, the assumption of identity, which underlies all phenomena of psychological denial: A thing is what I say it is. If I call a bad thing by a good name, that makes the thing good. (Thus dissociated persons are proud of their “self-control,” or better, self-conquest; but they don’t know how to let go of it.)

I t was pointed out earlier that the assumptions which underlie actions performed under conditions of resignation turn out to eliminate one or more crucial variables which must be taken into account in order to deal adequately with the set of situations about which one is resigned. The assumption of identity, by claiming that nonverbal things and verbal statements are the same in all respects, ignores the possibility that our verbal constructs can be falsified, and thus it eliminates the possibility of self-challenging or self-correcting activities. Likewise, the assumption of identity ignores the differences between verbal statements which are different in level of abstraction; namely, labels, descriptions, inferences, inferences about inferences, etc. The person who is behaving adaptively (sanely), the person who is dealing adequately with his here-now situation, does not allow his inferences to muddy up his descriptions. In my example of therapeutic insight, the judgment of good or bad must be assigned a higher level of abstraction than the nonverbal impulse to flee, or even the descriptive statement, “I feel the impulse to flee.” And yet, in suppressing the impulse and awareness of the impulse, I was allowing myself, on the basis of this judgment (“bad”), not just to color, but entirely to censor, to obliterate from awareness, the impulse and the description. It would be hard to imagine a better example of the elimination of crucial variables, and the consequent logical untenability of these assumptions underlying actions which were clearly performed under conditions of resignation.
The method of therapy indicated by general semantics and proposed by Gestalt therapy is already implied in the preceding paragraph: Train yourself to observe what you do in fact do, how you do in fact feel, without allowing inferences or judgments to interfere. In Gestalt therapy, this is called a "technique of awareness." Underlying this technique are the korzybskian premises of nonidentity, non-allness, and self-reflexiveness.

Having become skilled in the type of permissive observing described as a "technique of awareness," one can then afford to engage in what is called "directed awareness," in which one attends to matters more directly concerned with psychological health. When a feeling such as the one under discussion is detected, it is then observed more and more closely. If the impulse component becomes conscious, then the choice is clear: Either it can be suppressed again, in which case nothing will be changed, or it can somehow be expressed. But one has a wide choice of ways to express this previously forbidden impulse, ranging in the example all the way from leaping to my feet and running out into the night (leaving my baby unattended) to running in place, as I did (without alarming the child).

Discussion

Let us return to the beginning of this experience, and set up the situation as a critical experiment designed to decide between two rival psychological theories. The phenomenon to be accounted for comprises a feeling, which I had referred to as "that characteristic tension of my thighs."

The first theory starts with the assumption of identity (what I say it is IS IT. The form of the relationship of a person with himself-and-others is judgmental ("good" or "bad"); the form of speech in which explanations are offered is demonological ("I have that tension again"); in other words, the term tension can be replaced by the word demon, with no change in how much it says about the operations involved, and thus in the strictest sense is paranoid ("this demon is doing it to me"). The form of social awareness is the sense of
isolation (according to this theory, not only do we have to conclude that human behavior can make use of accumulated knowledge, but it becomes virtually impossible to define operations which could result in knowledge. The prediction which can be made in the basis of this theory is that the future will be just like the past: this tension (demon) "just comes by itself," and unless partially exorcised by sex, "just goes away by itself," and will continue to behave thus. The manner of dealing with the feeling is by a magic ritual (sexual intercourse) or else by helpless submission to the whims of the demon, neither of which involves taking personal responsibility for one's dealings with oneself-and-others.

The second theory starts with the assumption of non-identity (What I say it is is not it). The form of the relationship of a person with himself-and-others is permissive and descriptive rather than judgmental. ("There's no such thing as a bad impulse; try and notice what you do in fact do or feel.") The form of speech in which explanations are offered is operational. ("This feeling results from something I do.") The form of social awareness is the sense of relatedness. (After all, I did not invent the possibility of self-correction, or the therapeutic techniques by which to accomplish self-correction.) The predictions which can be made on the basis of this theory are that if I succeed in dissecting this feeling, I will discover (1) that it is composed of some forbidden impulse which I am busy suppressing; (2) that rediscovery of the impulse may or may not be accompanied by a memory picture concerning the last time in my life when this feeling was connected with a live issue; and (3) that if I somehow manage to execute the impulse in a safe way, this whole syn-
drome of repression will disappear. Then I will be left free to go on to other matters, perhaps including analysis of why I class certain impulses as so dangerous that I should forbid them. The manner of dealing with the feeling, then, is to tolerate my own discomfort in order to permit myself the opportunity to change the situation. In the context of a psychological field theory, the process of tolerating one's own discomfort stands as one example of what it means to take responsibility for one's dealings with oneself-and-others.

It is important to emphasize the main point of conflict between these two theories, for this point in the logical analysis of behavior is easily misunderstood. Each theory proceeds from its own assumptions, which, if granted, give a consistent account of the phenomenon to be explained (the feeling). From my point of view, it is superficial indeed to accuse a person who is displaying neurotic behavior of being inconsistent. Instead, criticisms of behavior, if they are to produce alterations in the behavior, must be addressed so as to challenge the assumptions on which the behavior is based. When a person is behaving in accordance with the theory based on nonidentity, he finds himself able to examine and discuss his assumptions and, if the situation requires it, to alter them as needed. Having his assumptions questioned does not throw him into a crisis he cannot handle. But when a person is behaving in accordance with the theory based on identity, he is unaware that he is asserting that his explanations are not only consistent and adequate, but also unique: Any questioning of his position or his assumptions throws him into a severe crisis, and he will display marked anxiety, which can be understood as the behavioral equivalent of shrieking, "Any other possibility is unthinkable, horrid!" (I have previously referred to this as the self-defending aspect of actions performed under conditions of resignation.)

In logical terms, then, the main point of conflict between the two theories can be expressed in terms of the criterion of parsimony: A logical structure which claims to be unique, and which includes elaborate techniques to disallow relations
it does not include and to prevent examination of its premises, obviously shows more complexity of premises than does a logical system which does not pretend to be unique. When self-paralyzing, self-defending behavior is challenged, it is precisely this assumption of uniqueness which is first brought into question. Explicit recognition of the dynamics of the anxiety elicited by challenge gives a tremendous advantage to the therapeutic methods under examination here: As was apparent in the example, anxiety and retroflexion play crucial roles in maintaining a state of resignation; but by analyzing the dynamics of the syndrome and becoming aware of the behavioral processes involved, we suddenly make use of anxiety and retroflexion as tools with which to destroy the state of resignation.

However, in the absence of logical analysis a state of resignation may remain unchanged for decades (in the example cited, this symptom had persisted, or reoccurred, for some twenty-five years). In the face of impulses to satisfy the dominant need, the resignation is maintained by means of muscular rigidity, and the assumptions which led to the choice to make the musculature rigid are clung to rigidly: inquiry into the assumptions is responded to with still further rigidity and desperate fright. The only other component necessary to explain the extreme stability of neurotic structures comprises an understanding of the ways in which this self-defeating, self-reinforcing situation is positively satisfying to the dissociated person. I have mentioned already how, in the process of becoming resigned, a person must turn against his own needs and spend his energies in such a way as to prevent effective actions which would result in the satisfaction of the needs; and also, that the standards in terms of which one’s needs appear worthy of disesteem can be “learned” only by example. The resigned person then copies or identifies himself with the person from whom he learned the crippling standards; and whenever the “forbidden” impulse or the “dangerous” need recurs, the resigned person paralyzes effective action, defeats the need, defeats himself—all the while asserting that he is copying the person who has served as frustrator and example by behaviorally crying out in self-
deluded triumph, "I'm the victor!" Of course, since the need which gets blocked is valid and therefore not subject to annihilation, it recurs repeatedly.

The results of my testing of these two rival psychological theories have already been presented: The second theory was in no particular falsified on the basis of this test, while the first theory survived in no particular. In the years which have elapsed since then, the only times that I recall having produced this feeling in myself have been marked by awareness of what I was doing and why I was doing it. For example, one day when I was crossing a partially wooded field, a bumblebee flew up from underfoot and started circling my head in a manner which I interpreted as threatening. I was aware of being afraid, but chose not to run for fear of precipitating an attack; and I experienced thigh-tension till the bumblebee disappeared.

Perhaps the most important remaining barrier between readers of this paper and myself lies in the fact that the occurrences which were described in the recorded entry, and others from a total (to date) of nine years of continuing and increasingly successful self-study using the therapeutic methods implied by general semantics and made explicit in Gestalt therapy, are part of my nonverbal experience; whereas for the readers of this paper, these occurrences have only second-hand, verbal existence. Some readers may have had clear-cut examples of "therapeutic" experiences in their own lives; and for them, this paper may well seem to have a kind of prima facie validity. But for readers who have not had grossly similar experiences, this viewpoint and these experiences may seem quite unreal. The main point to be restated here is that this viewpoint claims to be a general theory of the structure of human psychodynamics, which can be put to test repeatedly in formal laboratory situations involving carefully controlled experiments, and also in the more informal experiments which all of us make in the process of living our lives. In other words, the best way to argue with this theory is to put it to test in your own life.