

## CHAPTER 1

### GENERAL SEMANTICS, PSYCHOTHERAPY, AND THE LOGIC OF SCIENCE

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This paper presents a synthesis of the viewpoint of general semantics, specifically the psychotherapeutic implications of general semantics, with the much more widely understood viewpoint of the logic of science.

Historically, the work presented in this paper constituted the initial step in the formulation of a general theory of the structure of human psycho-dynamics, based on korzybskian premises, which has since undergone further elaboration and testing. In collaboration with John F. Randolph, then Fayerweather Professor of Mathematics at the University of Rochester, I have translated this theory into the form of an axiomatic system stated in a set-theory language. In order further to put this theory to test, I am at present making intensive studies of human inter-personal transactions which have been recorded by means of sound movies or video tape.

We incur disadvantages when we put a doctrine into mathematical form: even among those who are already familiar with the general outlines of the doctrine, the audience which can read it in its mathematical form is limited to those who already know the mathematical language, or who are able to learn it. Furthermore, due to the ponderous nature of logical analysis, it may prove difficult for those who do not know the general outlines of the doctrine, but do already know the mathematical language, to learn the doctrine from the mathematical statement of it. (I leave you to imagine the difficulties which would have to be overcome in order for someone who knows neither the doctrine nor the math to master the mathematical statement of the doctrine.)

Nevertheless, tremendous advantages have been gained from the process of axiomatizing this doctrine. In the first place, the events which make up human intra-personal and inter-personal transactions are so bewilderingly complex that we need a powerful logical language in order to keep track of them. But the process of constructing a mathematical language capable of representing these bewildering events has required an examination of the tacit, non-verbal operations involved in our human intra-personal and inter-personal transactions, and has had the result of making explicit previously unnoticed or only partially understood processes. To the best of my knowledge, no language capable of handling non-verbal behavioral dialogues has previously been developed.

Moreover the process of axiomatizing a doctrine imparts advantages in logical terms. When a doctrine is stated in a discursive language, such as English, its logical structure is in principle concealed, at least in part, by the complex and still imperfectly known structure of the discursive language itself. However, when a doctrine is stated as an axiomatic system in a mathematical language of known structure, its logical structure is very clearly displayed. Now, no logical system is ever completely known: the possibility remains that tomorrow, someone may discover in it a fundamental and unavoidable self-contradiction. But thus far, intensive study has

revealed no self-contradiction in the doctrine under examination, as judged by the standards of modern set theory.

Finally, the process of axiomatizing a doctrine imparts advantages in scientific terms. Since set-theory is entirely operationally-defined, this theory is set up so as to be intrinsically testable at any level of organization in which one may be interested.

This non-mathematical paper presents some of the findings of these studies, and an experimental test of the viewpoint under discussion. But this paper has a further purpose: it serves, frankly and unabashedly, to issue a call to action. It becomes increasingly apparent that mankind is in a period of crisis, in which the continued survival of life on this planet is at stake, and that an essential component of this crisis is psychopathological in nature. It appears that virtually every human being alive today is to some degree or other **chronically at war with himself**, and that this self-divided state is necessary to those human activities by which we are so successfully and rapidly rendering our planet uninhabitable.

But today it is no longer necessary to remain at war with oneself. Although the process of making friends with oneself is painful and difficult, at this point in human history it is at least FEASIBLE. Even a small success in this endeavor brings immediate and lasting rewards, not only through termination of the pain produced by self-divided activities, but also because the process of making friends with oneself proves to be synonymous with the positive and exciting process of making more sense of one's own life, of building one's life more to one's own liking. Thus one gains immediate rewards for performing the kinds of actions which increase the chances of the long-term survival of mankind.

This call to action, then, comprises a call to make use of the existing, relatively primitive methods for making friends with oneself. These methods will prove to be available only to those who can face anxiety-provoking questions without starting to emit emotional octopus-ink, and who are strong enough to choose to live for a while with stark terror. But if the now-existing methods are put to use, then by experience and experiment, gradually these methods will be enlarged in scope, and, bit by bit, it will become increasingly likely that the rest of us will be able to succeed in our own struggles toward behavioral health.

Let us now start to build up and to examine the theory which holds forth this promise.

## THE LOGIC OF SCIENCE

According to Popper<sup>1</sup> (see endnotes, p. 12), the essential point of scientific behavior is that, instead of taking a position and then defending it against all comers, a scientist at work systematically subjects his own ideas (theories, hypotheses, or in general, guesses) to test. He maintains that it is feasible to discover whether or not, on the basis of the tests performed, a given guess is wrong (*falsified*); but that it is in principle impossible to establish that a guess is correct. If a hypothesis is falsified, the man who made it must reject or revise it, devise a new one, and put the new hypothesis to test; having done so, he must then accept, revise, or reject his new hypothesis in accordance with the results of the test, and then proceed to devise a new hypothesis; and so on. This process of self-correction is endless and progressive, and it stands as the key characteristic of scientific progress.

In the course of human history, man has devised other methods of problem-solving. These include

- Prayer,
- Waiting for inspiration,
- Intuitive guessing,
- Application of "logic" or "common sense."

None of these methods involves systematic efforts to challenge one's own views through deliberate attempts at self-correction. The story is told of a 16-year-old college student who was attending a Lutheran college in an area which was suffering from a drought. He suggested that a control experiment be performed: the responsible clergy and parishioners of County A were to pray for rain, while the responsible clergy and parishioners of County B were not to pray for rain; rain gauges were to be set up and the actual rainfall recorded; the observations were to be repeated enough times to arrive at statistically significant estimates of the efficacy of praying for rain. Of course, the experiment was never conducted. The student was very nearly expelled for his impious suggestion, and one version of the story maintains that the president of the college took the young man aside and explained that he just didn't have the right idea about what praying for rain accomplishes. From our point of view, praying for rain constitutes a method for solving the problem of a drought, but a method which forbids the testing of the METHOD by means of careful measurement. Many of our social institutions likewise make no attempt at self-correction. Therefore, while these methods may very well lead to correct guesses, they do not constitute reliable methods for establishing truth.

A scientific truth, then, at a given date, comprises a hypothesis or guess which has been extensively tested, but has not (yet) been falsified. A given truth may be falsified tomorrow, by someone with a new viewpoint who tries some test nobody else has tried; but until such a time as they are falsified, scientific truths can tentatively be accepted as true.

Over the past centuries, epistemologists have more and more convincingly demonstrated that every mathematical system or scientific theory shows what is called a *postulational* structure: it starts from a set of *undefined terms*, which can be defined in terms of one another, but cannot be further specified in words. This set of undefined terms is used implicitly or explicitly to state a set of **postulates** or **assumptions**. Furthermore, there is some set of *rules*, a grammar or *modus operandi*, which is used so as to arrive at *theorems* or *conclusions*. (A *proof* of a theorem constitutes a convincing demonstration that the theorem does in fact both *imply and assume* the stated original set of postulates; that is, that the theorem is in a relation of *logical consistency* with the postulates.)

In order to show the self-correcting structure of science in this logical terminology, it is sufficient to regard a scientific hypothesis as a theorem derived from a theory (or postulational system). If the hypothesis is falsified, then the scientist who has tested it is constrained to revise or reject the set of assumptions on which this theory is based, to select some alternative set of assumptions, and to work out this new theory to the point where he can derive from it a new theorem or hypothesis, which can in turn be put to test.

## THE LOGIC OF HUMAN BEHAVIOR

Following the lead of Korzybski, I regard science as one form of human behavior; and conversely, I take it as a premise that human behavior shows a postulational structure. In these terms, the role of theorem or conclusion is fulfilled by what we *do*. For example, from the fact that I am expending effort to write this paper, I infer that I am assuming that what I want to say will prove relevant to someone besides myself; from the fact that you are reading it, I infer that you are assuming that it is at least POSSIBLE that I will say something which will interest you. If you and I proceed to act on these assumptions, if I finish writing the paper and you finish reading it, then we will have in effect put our assumptions to test. Then and only then can we ascertain whether or not, on the basis of these tests, our assumptions are falsified.

Unless uncovered by painful research, the operation of assumptions in human behavior remains utterly unknown and unsuspected. Even in situations in which our behavior is marked by lively interest, vigorous feelings, and effective performance, we tend to find logical analyses of our own actions unconvincing.<sup>2</sup> In other words, we tend to resort to frightened incomprehension to protect ourselves from this form of self-knowledge. To the little example above, readers not already familiar with the logical structure of behavior may reply (a bit belligerently), "Okay, so I was making an assumption—so what?" But it is not my intent to criticize your act of reading this paper on the grounds that your assumptions may be questioned (or on any other grounds); rather, I am asserting that, no matter what you may do, your actions are based on assumptions. If you were to assume something different—e.g., that it is not possible that I might say something of interest to you—then your actions would be different: you probably would not bother to read this paper.

Granted the premise that human behavior shows a postulational structure, it follows that, presented with any *bona fide* example of human actions, it is feasible to examine in detail the deeds actually done and, by a process of inference, to disclose the assumptions on which these deeds are based. But if logical analysis of the actions we perform under relatively favorable conditions proves vaguely anxiety-provoking, we might expect that logical analysis of the actions we perform under more unfavorable circumstances might turn out so disturbing as to become difficult to accomplish. In order to test this expectation, let us now consider some aspects of unfavorable environmental conditions and the structure of the actions performed under these conditions.

Under chronically unfavorable circumstances, where we cannot get what we need and where it seems that there is no hope of amelioration, it is true that we feel miserable rather than contented. But when we say that there seems to be no hope of amelioration, this is equivalent to the assertion that, in the social milieu which forms the matrix of the situations under study, there is a tacit, socially-shared attitude characterized by *resignation to the universal misery*.<sup>3</sup> (If there were generally-recognized cause for hope, then when I began to get discouraged, I could be reminded of the hope, and therefore would be unlikely to become resigned.) Resignation, then, comprises the class of responses to that class of human situations involving *chronic psychological malnutrition*.<sup>4</sup>

In a context of resignation, one of the dominant tacit purposes of one's actions becomes to maintain the unsatisfactory *status quo*, as if any change in the conditions could only be for the worse. This becomes more understandable when we remember that the process of becoming resigned consists of learning the terrible lesson that fighting for improvements in one's circumstances leads inevitably to defeat: so why fight Tammany Hall? Why court another inevitable and crushing defeat? But this observable fact, that one of the unacknowledged purposes of a resigned person is to maintain the unsatisfactory *status quo*, indicates that in order to become resigned, the person had to turn against his own need, to come to regard that need as vicious or silly and to commit the forces of his personality to the task of preventing effective actions which would result in the satisfaction of the need. And these considerations, in turn, implicate the social milieu: standards by which one's own valid needs can be disesteemed can be "learned" only by example, from someone whose methods of satisfying his own needs have proved inadequate in HIS environment.<sup>5</sup>

In order automatically to serve the purpose of preserving the unsatisfactory *status quo*, the assumptions which underlie actions performed under conditions of resignation must show two most interesting characteristics: first of all, as we shall see in more detail later on, these assumptions turn out to eliminate one or more crucial variables concerning the resigned person and one or more crucial variables concerning his immediate environment, variables which he would have to take into account in order to deal adequately with the set of situations in which he is acting resigned.

The validity of the disesteemed need is ignored, along with available objects that could be used to satisfy that need. In other words, these assumptions involve one or more *solecisms*, and thus by logical criteria are demonstrably *untenable*. If they were not logically untenable, these assumptions would not result in *self-paralysis*. Nor would they serve DEPENDABLY to paralyze unless they also showed a characteristically *self-defending* aspect, similar to that illustrated in the example concerning praying for rain. As a consequence, it turns out to be most difficult for a person holding self-paralyzing, self-defending assumptions to question them in any way whatsoever, even if he wants to.

To operate under conditions of resignation produces important long-term consequences -- both personal and social. For my present purposes, it suffices to mention that on a personal level, these sequelae include the chronic discomfort of psychological symptoms such as compulsiveness, "free-floating" anxiety or depression, the sense that "Life is passing me by"; also psychosomatic symptoms such as headaches, bowel disturbances, hypertension; and even organic pathology which may eventually require surgical intervention. On societal levels, the weary resignation of one man (which comes about, as I have said, as the result of socially sanctioned psychological malnutrition) constitutes a burden on all other men and ends up by putting a relatively fixed ceiling on the degree of happiness which can be achieved by anyone.<sup>6</sup> (If you, feeling at peace with yourself, make a loving gesture toward me, and I respond as if you were threatening me with a switchblade knife, you are likely to find this whole situation disturbing.)

When resignation is as widespread as I maintain that it currently is, this ceiling becomes so low that it is difficult to detect much of a difference between what passes for JOY and a state of ABJECT MISERY.

These comments concerning the postulational structure of human behavior, the assumptions which underlie a state of resignation, and the personal and social sequelae of resignation, stand as consequences of a *general theory of the nature of human relatedness*.

In other words, I am hypostatizing a *physical-biological-social field* as the matrix of all life. Other important aspects of this field-theory view of human behavior will become apparent as we consider the processes by means of which a state of resignation can be destroyed.

## THE OPERATION FUNDAMENTAL TO PSYCHOTHERAPY

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 them, to modify them, or to discard them, and thus to continue doing it, to modify it, or to stop doing it and do something 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 psychotherapy stands equivalent to the preceptorial situations by which the scientific tradition has been perpetuated ever since its inception. In psychotherapy, the patient functions as trainee. Displaying his special skills in experimental logic as both precept and example, the therapist helps his patient to design and execute his own critical experiment, namely, to analyze his own situation for himself.

## ANALYSIS OF PERSONAL ASSUMPTIONS: AN EXPERIMENT

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. Most therapists in describing therapeutic experiences customarily describe what they saw somebody else do or say, and what the therapist thinks the experience meant to this person. By leaving themselves out of the picture as much as possible, they 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 if and 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 experiences, instead of somebody-else's-experiences-as-I-understand-them, I can present information of considerably higher potential validity than is otherwise possible. I realize that this statement and this procedure comprise a deliberate challenge to commonly-held assumptions about "objectivity," and 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 8 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 AM): A big success with a Gestalt Therapy experiment: Jimmy (aged 21 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 4?) 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 graveled 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 then I know 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, till 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 assumptions that human behavior is to be judged in terms of "good" and "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 come to BELIEVE that "Big boys don't cry or show fear." The experience of a spontaneous impulse to do something involves a gathering of the appropriate muscles for executing 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 non-existent—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 he did the suppressing, 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 not felt 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.)

It was pointed out 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 non-verbal 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—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 non-verbal 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 censor, 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 therapeutic method which stems from general semantics, made explicit in Gestalt therapy, is already implied in the above 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 non-identity, non-allness, and self-reflexiveness.

By the time one has developed some skill in the type of permissive observing described as a "Technique of Awareness," one has already taken the crucial first step in making friends with oneself. The specifically "neurotic" purpose, to maintain a psycho-dynamically stable self-paralysis, has by that time already become destabilized, and can then be progressively and irrevocably destroyed. At that point, 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 aware, then the choice is clear: it can either 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 untended), 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 the rival psychological theories. The phenomenon to be accounted for comprises a feeling, which I had referred to as "that characteristic tension in my thighs."

- a) 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 of the term, this form of speech 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 no accumulated human knowledge, but it becomes virtually impossible to define operations which could result in *knowledge*). The *prediction* which can be made on 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.

- b) 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, nor 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 and
  - (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, then this whole syndrome of repression will disappear, leaving me 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 make the situation more to my own liking. 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 assumptions, which, if granted, lead to 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 non-identity, 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 unawarely 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 already 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 by 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, because of its self-stabilizing structure, a state of resignation (in the absence of logical analysis) may remain unchanged for decades: (in the example cited, this symptom had repeatedly recurred 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 lead to the choice to make the musculature rigid are clung to rigidly: inquiry into the assumptions is responded to with intensified 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. In other words, the resigned person copies or "identifies himself with" the person from whom he "learned" the crippling standards; and whenever the "forbidden" impulse or the "dangerous" need recurs, in paralyzing effective action, defeating the need, defeating himself, the resigned person is behaviorally crying out in self-deluded triumph, "I'm the victor!"—which is equivalent to the assertion that he is copying the person who has served as frustrater and example, rather than using his energies to satisfy the need. Moreover, this giddy satisfaction of self-conquest is always readily available: since the "dangerous" need which gets blocked is valid and therefore not subject to annihilation, it repeatedly recurs; and the victim, the "enemy" (oneself) remains always gratifyingly available to be defeated yet again, thus providing further nourishment[ for the disoriented arrogance and the delusions of triumph. Therefore resignation stands as a form of self-exploitation, exactly equivalent to a state of dependence on an addicting drug.

The results of my testing of these two rival psychological theories in my own life 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 seven years of continuing and increasingly successful self-study, using the therapeutic methods implied by general semantics and made explicit by Gestalt therapy, are part of my non-verbal 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." Regardless of the first impression of this paper and this viewpoint, the main point to be restated here is that this viewpoint claims to be a general theory of the structure of human psycho-dynamics, 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.

### SUMMARY

This paper, which is the first step in a general theory of the structure of human psycho-dynamics, presents a synthesis of the psychotherapeutic implications of general semantics with the more widely understood viewpoint of the logic of science. After reviewing the notion of hypothesis-falsification as the basis for the self-correcting structure of science, it points out that from a korzybskian point of view, human behavior shows a postulational structure: any human act can be analyzed as if it were a logical system, proceeding from some set of undefined terms, and utilizing some grammar or *modus operandi*; then the role of conclusion or theorem is filled by the action in question. Granted that human actions do show a postulational structure, it follows that in order to alter some set of actions, it is both necessary and sufficient to alter the assumptions from which the actions proceed. In these logical terms, then, the process of developing a therapeutic insight is of the form of a critical experiment, which is performed by somehow taking 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 us do as we do are revealed, then we are free to keep them, to modify them, or to discard them, and thus to continue doing it, to modify it, or to stop doing it and do something else instead. This viewpoint is then tested by applying it in detail to an episode from my own experience in which I took apart and then dissolved one of my own neurotic symptoms; and this viewpoint survived this test.

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### ENDNOTES

- 1 Karl Popper, *The Logic of Scientific Discovery* (Hutchinson, 1959)
- 2 Michael Polanyi, *Personal Knowledge: Toward a Post-Critical Philosophy* (Harper Torchbooks, 1964) p. 59
- 3 Frederick Perls, Ralph Hefferline, and Paul Goodman, *Gestalt Therapy: Excitement and Growth in the Human Personality* (Julian Press, 1951), pp. 360-2.
- 4 Abraham Maslow, *Toward a Psychology of Being* (van Nostrand, 1962), p. 21.
- 5 Perls, et al., op. cit. pp. 223-4.
- 6 Ibid, p. 251.

Copy available as document 005 at < <http://www.hilgart.org/research.html>>, with the following synopsis:

Proposes that human behavior resembles a self-correcting system in which an organism generates, tests, and judges behavioral hypotheses, and can reject those that appear disconfirmed. Humans can also function like a self-defending system and cling to those hypotheses they favor regardless of evidence. Presents an example in which the author dissolved a neurotic symptom in his own life. Truncated version (example only) published in ETC: A Review of General Semantics 25:315-324 (1968).