

## ☆ BOOK REVIEWS ☆

### *From Science-fiction to Fiction-science*

DIANETICS: THE MODERN SCIENCE OF MENTAL HEALTH, by L. Ron Hubbard.  
Introduction by J. A. Winter, M.D. New York: Hermitage House, 1950.  
452 pp. \$4.

THE CASE of Lafayette Ronald Hubbard, author of *Dianetics: The Modern Science of Mental Health*, offers an almost unparalleled illustration of the principle held by writers on general semantics that language habits tend ultimately to become internalized. Korzybski said that one's evaluations tend to reflect the structure of the language one speaks; Wendell Johnson has described 'the way the language does your thinking for you' and has said that 'every speaker is his own most interested and affected listener.'

Hubbard is a writer of science-fiction. Before writing *Dianetics* he had written *Death's Deputy* (a novel about accident-proneness), *Final Blackout* (science-fiction), *The Kingslayer* (science-fiction), *Slaves of Sleep* (fantasy novel), *Triton* (fantasy). How many more novels he has written, I do not know, but he has also been an incredibly prolific contributor to science-fiction and other magazines. According to his own account of himself in the 1942-43 edition of *Who's Who in the East*, he had had at that time (he was born in 1911) five million words published under six names.<sup>1</sup> How many more millions of words he has published since then, it is impossible even to guess without at least knowing the names he writes under. But it appears to me inevitable that anyone writing several million words of fantasy and science-fiction should ultimately begin to internalize the assumptions underlying that verbiage. This appears to be what happened to Hubbard; his chef d'oeuvre, *Dianetics*, is the result.

Science-fiction, whether in Jules Verne or H. G. Wells or in the pulp-magazine varieties common on newsstands, is a legitimate enough art form.

<sup>1</sup> The account also states that he is an 'explorer' and names expeditions on which he has gone. He is also a 'licensed commercial glider pilot, motor boat operator, master of motor vessels, master of sail vessels (any ocean), radio operator.' The 5 million published words include writing for '90 national magazines,' for 'Hollywood studios, radio,' and 'two texts on psychology.' He gives his college training as 'George Washington U. Engr. Sch. 1930-32.' On p. 85 of *Dianetics* he also mentions having studied mysticism, 'not in . . . second-hand sources . . . but in Asia.' But for purposes of dianetics he says he found mysticism unnecessary.

When done well, the value of the genre is that, in treating the remotely possible or conceivable as if it had already occurred, it helps prepare the reader for the shape of things to come. (*Twenty Thousand Leagues Under the Sea*, for example, was written in 1869.) But good science-fiction is not too common. Much of it today is written hastily and according to formula, to meet the unceasing demands of the pulps.

I have long felt that there are dangers to the writer as well as to the reader in pulp fiction. It did not occur to me until I read *Dianetics* to try to analyze the special dangers entailed in the profession of science-fiction writing. The art consists in concealing *from the reader*, for novelistic purposes, the distinctions between established scientific facts, almost-established scientific hypotheses, scientific conjectures, and imaginative extrapolations far beyond what has even been conjectured. The danger of this technique lies in the fact that, if the writer of science-fiction writes too much of it too fast and too glibly and is not endowed from the beginning with a high degree of semantic self-insight (consciousness of abstracting), he may eventually succeed in concealing the distinction between his facts and his imaginings *from himself*. In other words, the space-ships and the men of Mars and the atomic disintegrator pistols acquire so vivid a verbal existence that they may begin to have, in the writer's evaluations, 'actual' existence. Like Willy Loman in *The Death of a Salesman*, he may eventually fall for his own pitch.

Of course, there is nothing wrong with literary imaginings as such. Even Frederick Rolfe ('Count Corvo'), one of the great paranoids of literary history, who in *Hadrian the Seventh* pictured in vivid and dramatic detail his daydream of overcoming his enemies and traducers and being elected Pope, presented his imaginings *as a novel*. In other words, Rolfe remained a novelist; he never came to believe that he was the Pope. Hubbard, however, goes farther. The slick craftsman of mass-production science-fiction, mustering his talents and energies for a supreme effort, produces — and what could be more reasonable? — a fictional science. Had dianetics been presented as fiction — as, let us say, the discovery revealed to our hero, Dick Savage, by the mysterious scientist, Dr. Vladimir Nemo, in the spring of 2013 A.D. in the Cosmic Ray Solarium of the fashionable Olympia Hotel in Lhasa, now a favorite summer resort for wealthy American poets and commissars — it might have been, like other ingenious science-fiction, good entertainment. It might even have stimulated scientific imagination, as no doubt *Twenty Thousand Leagues Under the Sea* stimulated the imaginations of naval architects and engineers.

**B**UT in the book *Dianetics*, Hubbard does not write as a novelist. He is, he says, a scientist. He has discovered — nay, created — a new science of the human mind which, in one swell foop, renders obsolete the psychological gropings of Wundt, James, Pavlov, Kraepelin, Charcot, Janet, Freud, Jung,

Adler, Lewin, Thorndike, Kohler, Moreno, Reik, Menninger, Masserman, Rogers, and all the work of the neuropsychologists to boot. Of this new 'science' of dianetics, Hubbard's book says (his italics), '*The hidden source of all psychosomatic ills and human aberration has been discovered and skills have been developed for their invariable cure.*' This sentence appears on the first page of the book, of which the opening sentence has been widely and derisively quoted by reviewers: 'The creation of dianetics is a milestone for Man comparable to his discovery of fire and superior to his inventions of the wheel and arch.'<sup>2</sup>

The expository technique of *Dianetics* is straight out of science-fiction. First, there is the elementary device of taking for granted the existence of things which do not exist, and then making assertions about them ('As we approached the planet Venus, Captain Wolf throttled down his space-ship to a leisurely 8,000 m.p.h.'): 'The reactive mind is the entire source of aberration. It can be proved and has been repeatedly proven that there is no other, for when that engram bank is discharged, all undesirable symptoms vanish and a man begins to operate on his optimum pattern' (p. 52). There are innumerable references to 'research' and 'tests' which 'have been' performed: 'A series of severely controlled dianetic experiments over a much longer period demonstrated that the law of affinity, as applicable to psycho-somatic illness, was more powerful than fear and antagonism by a very wide margin. So great is this margin that it could be compared as the strength of a steel girder to a straw' (p. 106). There are, of course, the vivid narratives (i.e., the 'case-histories') by means of which that which is *assumed* to be so is transmuted — and that is the function of the art of fiction — into that which is *felt* to be so. (Of these 'case-histories,' more later.) In addition, Hubbard has practically all the other science-fiction devices — references to unspecified 'laboratories' and 'clinics,' where zealous (and unnamed) teams of 'dianeticists' are busy refining the 'techniques' and the 'basic postulates.' Occasionally, he goes through the motions of distinguishing between 'fact' and 'theory' and abstemiously denying himself, as a scientist, the self-indulgence of proceeding on mere theories: 'It may well have been — and elsewhere some dianetic computations have been made about this — that the brain is the absorber for overcharges of power resulting from injury, the power itself being generated by the injured cells in the area of injury. That is theory and has no place here save to serve as an example. We are dealing now only with scientific fact' (pp. 53-54); 'As an organized body of scientific knowl-

<sup>2</sup> Hubbard has claimed that these are not his own words, but those of his publishers. They appear in an unsigned section headed 'Synopsis.' But both in style and content, the synopsis is indistinguishable from the rest of his book, which continues to the end to make similar claims in similar language. If it was not written by Hubbard, it was written by someone who was quite as awe-struck with Hubbard's genius as Hubbard himself. Whatever the authorship, it may be presumed that he had the opportunity, of which he did not avail himself, to remove the passage before publication.

edge dianetics can draw only the conclusions which it observes in the laboratory' (p. 105). In addition, of course, there is an occasional mathematical-looking equation or graph, extremely impressive except to those who can read them.

**B**UT THE SPECIAL and compelling feature of Hubbard's talent in science-fiction is vocabulary. If he had produced a genuine 'science of thought' he could hardly have chosen a better word than *dianetics*, an adaptation of an obsolete word *dianoetic*, found in *The Shorter Oxford English Dictionary* (where its earliest occurrence is given as 1677) and defined, as an adjective, as, 'of or pertaining to thought; intellectual,' and, as a noun, 'applied by Sir W. Hamilton to denote the operations of the discursive faculty 1836.' Nor could Hubbard have chosen a better word than the almost obsolete 'engram.' This word is defined by Masserman in his glossary of psychiatric terms as 'The supposed neural pathway or *trace* left in the nervous system by every sensorimotor experience' (*Principles of Dynamic Psychiatry*, p. 275). Hubbard redefines it for his special purposes as the 'cellular recording' on the 'reactive mind' which causes all mental disorders.<sup>3</sup>

In the main, however, Hubbard's vocabulary is his own invention; the invention is inspired by *some* acquaintance with the literature of cybernetics, that is, the theories underlying, among other things, the great modern electronic computers ('giant brains'). Modern computing machines can 'remember' and 'store' information (for example, on punched or magnetized tapes) and utilize past 'experience' in solving problems fed into them. They operate without error, given the information fed into them, working at fantastic speeds. But occasionally the electrical apparatus can be 'overloaded' or otherwise abused so that the machines become 'psychotic.' The startling discoveries of Norbert Wiener, Clyde Channon, Warren McCulloch, John von Neumann, and others in the mathematics and engineering of such 'thinking machines' have, with good reason, caused much speculation on the possible analogies between electronic computers and the human brain. The fact that startling analogies can be shown is beyond question; the fact that the pursuit of these analogies can contribute to our understanding of the human mind is also beyond question; but, at present, what remains little known or unknown is (1) what psychologically important results will emerge from the pursuit of this analogy, and (2) how far

<sup>3</sup> See Ogden and Richards: 'Thus when we strike a match, the movements we make and the sound of the scrape are present stimuli. But the excitation which results is different from what it would be had we never struck matches before. Past strikings have left, in our organization, engrams, residual traces, which help to determine what the mental processes will be. . . . An engram is the residual trace of an adaptation made by the organism to a stimulus' (*The Meaning of Meaning*, pp. 52-53). Ogden and Richards give as the source of the term, which has never had wide currency in psychological literature, Semon's *Die Mneme*, a work with which I am not familiar.

this analogy may legitimately be carried. The existence of such a scientific No Man's Land is exactly the condition under which the science-fiction writer (to say nothing of the scientist) is stimulated to his best work: dazzling new scientific miracles seem to be around the corner, while enough news of current developments has appeared in popular science literature to arouse public interest and curiosity.

THE SURFACE plausibility and the verbal ingenuity of dianetics are clear in the light of the foregoing. According to dianetics, which is an 'engineering' science (p. xxvi), the important part of the human mind is the 'analytical mind — or analyzer,' which is 'not just a *good* computer, it is a *perfect* computer,' which 'never makes a mistake' (p. 44) and 'computes perfectly on the data perceived and stored' (p. 16). Its memory is perfect, and all past experience is stored and filed in 'memory banks' (pp. 43-49, 53-55, et passim) and is perfectly utilized (p. 17). But like any other delicate electrical mechanism it has to be protected: 'Would you leave its delicate circuits prey to every overload or would you install a fuse system? . . . Any computer would be so safeguarded' (p. 53). 'Painful emotion and physical pain' are by definition the overloads on the circuit; these result by definition in the 'shutting off' of the 'analyzer,' which condition is, by definition, 'unconsciousness' (pp. 54-55). Unhappily, when the 'analyzer' is shut off, the 'reactive mind' takes over, recording all the painful emotions and physical pain in the form of 'engrams,' which are by definition the recordings, highly charged with pain, which, when 'keyed in' by 'restimulators,' cause 'demon circuits' (Book II, Chapter iv, et passim). These 'demon circuits' foul up the operation of the analyzer, causing 'aberration.'<sup>4</sup> Such aberrations are the cause of 'all neuroses, psychoses, insanities' (p. 53), and also (by definition) of *all* psychosomatic illnesses:

Naturally such diseases, when one has resolved the problem of human aberration, become uniformly susceptible to cure. Arthritis, dermatitis, allergies, asthma, some coronary difficulties, eye trouble, bursitis, ulcers, sinusitis, etc. form a very small section of the psycho-somatic catalogue. . . . Just what, if any, part the virus plays in the common cold is not known, but it is known that when engrams about colds are lifted, no further colds appear. . . . A number of germ diseases are predisposed and perpetuated by engrams. Tuberculosis is one. . . . Many conditions which have been called 'inherited disabilities' are actually engramic. Engrams pre-

<sup>4</sup>The fact that computing machines can suffer 'nervous breakdowns' is well known: 'During World War II, [Dr. Shannon] says, one of the Manhattan dial exchanges (very similar to computers) was overloaded with work. It began to behave queerly, acting with an irrationality that disturbed the company. Flocks of engineers, sent to treat the patient, could find nothing organically wrong' (*Time*, January 23, 1950). See Norbert Wiener, *Cybernetics, or Control and Communication in the Animal and the Machine* (New York: John Wiley, 1948), especially Chapter V, 'Computing Machines and the Nervous System,' and Chapter VII, 'Cybernetics and Psychopathology.'

dispose people to accidents. Engrams can predispose and perpetuate bacterial infections. . . . At the present time dianetic research is scheduled to include cancer and diabetes. There are a number of reasons to suppose that these may be engramic in cause, particularly malignant cancer (pp. 92-93).

How, then, is therapy accomplished? The aim must be, it logically follows, to 'discharge' the 'demon circuits.' This is accomplished by 'running them through' and 'erasing' them. (Recordings on tape and wire-recorders are, as the reader knows, 'erased' by 'run through'.) It is necessary for the therapist or 'auditor,' and *anyone* can become an *expert* auditor (pp. 166, 167, 174 et passim), to send the patient back along the 'time-track' so that he may 'run through' the 'engramic' painful episodes of his past life stored in his 'reactive mind.' When these episodes are 'run through' several times, they are 'discharged' and go away to trouble the patient no more. Immediately, strength, eyesight, appetite are improved, allergies and backaches disappear, and the patient, no longer a patient but now a 'clear,' enjoys, for the first time in his life, perfect health and perfect mental functioning; his IQ shoots up 25 to 50 points, since his 'perfect computer,' i.e., his 'analytical mind' is no longer 'aberrated' (Book III, Chapter ii et passim).

A further indication of Hubbard's ingenuity and superficial acquaintance with contemporary thought is given in his appropriation of some terms from general semantics. The 'reactive mind,' as defined by Hubbard, thinks 'in a way which would make Korzybski swear, for it thinks in terms of full identification, which is to say *identities*, one thing *identical* to another' (p. 62); 'THE ANALYTICAL MIND COMPUTES IN DIFFERENCES. THE REACTIVE MIND COMPUTES IN IDENTITIES' (p. 336; author's emphasis). 'The reactive mind operates wholly on two-valued logic. Things are life or they are death, they are right or they are wrong, just as the engram wording states' (p. 241).

NONE OF THE FOREGOING requires refutation, of course. But all this computing-machine mumbo-jumbo is only a small part of the incredible nonsense to be found in dianetics. The stuff about producing 'clears' by discharging 'demon circuits' and reducing 'engrams,' etc., has at least the virtue of plausibility to those whose knowledge both of electronic computers and psychology is limited to what they read in the Sunday supplements.<sup>5</sup> But dianetics offers many more doctrines, not even dimly plausible, to be swallowed. Hence, my increasing sense of mystification as I read (for example, in *Look Magazine*,

<sup>5</sup> On rereading this sentence I find that it has a tone of intellectual arrogance which I am quick to disapprove in others. Let me hastily add therefore that there are a thousand topics about which I am equally limited in knowledge to what I read in the Sunday papers, for example, aeronautics, biochemistry, cowpunching, dendrology, entomology, fan-dancing, geriatrics, hermeneutics . . . .

December 5, 1950) of the amazing spread of dianetics, the huge sales of Hubbard's book, and the establishment of 'dianetic centers' in the principal large cities of the United States. Even more mystifying to me have been those people of good education and of some scientific background who have cautiously urged that dianetics be given a 'fair hearing' until 'more facts are in.' They have pointed out that there is evidence that dianetics 'works,' regardless of the implausibility of some of its theories, and that therefore, instead of dismissing it summarily, we should wait to separate the wheat from the chaff.

Before going into a discussion of the rest of the chaff in dianetics, let me state my position at once: there is no wheat.<sup>6</sup> Even if dianetic 'processing' produces, as Hubbard predicts, cures or apparent cures of neuroses, ulcers, falling hair, or diabetes, such results do not 'prove' a single item of dianetics doctrine. I do not say this in the spirit of the ecclesiastics who refused to look through Galileo's telescope, although I have no doubt such an accusation will be made. I say this on the basis of a simple distinction, familiar in general semantics literature, between *kinds of predictions*. If I predict that two cannonballs of different sizes dropped from a tower will hit the ground at the same time, my prediction *cannot be overheard by the cannonballs*, and hence cannot affect the outcome of the experiment. If, however, I hand you a mysterious bottle and predict that it will cure you of the loss of sexual vigor of which you have been complaining, *and you believe me*, you will drink the bottle and go to bed that night with changed expectations. *Your improved performance of that night will prove nothing about the efficacy of the contents of the bottle; it will merely prove something very sad about your capacity for belief—in other words, about your system of semantic reactions.* There is a world of difference between predictions which cannot affect the outcome, and predictions which are themselves a factor in producing the outcome.<sup>7</sup> Hence, the testimony of any number of individuals who, having been told they will be helped, later claim to have been helped by dianetic processing cannot constitute proof of

<sup>6</sup> This is a somewhat more absolutistic statement than is ordinarily approved in general semantics writing. Let me modify it by saying that there are some true statements in the book. But separating the truth from error in dianetics is like trying to get the vanilla extract back into the bottle after it has already been mixed into the cake batter. Hence I shall have to let my statement stand.

<sup>7</sup> Another way in which a prediction may affect the outcome is illustrated by the manager of a big-league baseball team nearing a pennant who remarked scornfully of a tail-end club with whom his team still had a few games left to play, 'Are they still in the league?' The remark was reported to the tail-end team, whose semantic reactions can be guessed; they decisively defeated the league leaders in the last few days of the season, depriving them of the pennant. On the subject of predictions affecting outcomes, see Anatol Rapoport, 'The Criterion of Predictability,' *ETC.* 2.129-151 (Spring 1945), and Robert K. Merton, 'The Self-Fulfilling Prophecy,' *Antioch Review*, 8.193-210 (Summer 1948).

the dianetics theory. Every therapeutic theory (psychiatric or medical) that has ever been believed in has worked to some degree, and sometimes to a spectacular degree (witness the rows of crutches at miracle-working shrines), for the people who have believed in it.

FROM HERE ON, let me concern myself with the rest of the chaff, which is so incredible that I shall not blame the reader if he refuses to believe that Hubbard, whom so many people have taken so seriously, ever said such things. The most important engrams, the 'basic-basic,' says Hubbard, are the result of prenatal experience. Evidently we all had a pretty rough time of it in the womb, and we are not to believe the Freudian publicity about what a nice place it was:

. . . But life in the womb does not seem to be the Paradise it has been poetically, if not scientifically, represented. Actuality discloses that three men and a horse in a telephone booth would have but little less room than an unborn baby. The womb is wet, uncomfortable and unprotected.

Mama sneezes, baby gets knocked 'unconscious.' Mama runs lightly and blithely into a table and baby gets its head stoved in. Mama has constipation and baby, in the anxious effort, gets squashed. Papa becomes passionate and baby has the sensation of being put into a running washing machine. Mama gets hysterical, baby gets an engram. Papa hits Mama, baby gets an engram. Junior bounces on Mama's lap, baby gets an engram. And so it goes (p. 130).

But that, according to Hubbard, is only the beginning of one's intrauterine misadventures. Mama, not content with knocking out the unborn baby by bumping into tables, repeated coitus, and falling over pigs (p. 242), usually doesn't want the child anyway, and is always trying to induce abortion (p. 132 et passim) by means of knitting needles (p. 156), by chemicals, by jumping off boxes, by having father sit on her (p. 300), and by 'assorted household instruments thrust into the cervix' (p. 242). Baby therefore gets punctured through and through, acquiring engrams every time, but he survives because of the puncture-proof inner-tube principle: 'Nature has been smart about attempted abortion for a long, long time' (pp. 242-3). And why does Mama continue to commit 'AA' (attempted abortion)? Because she is an 'aberee,' whose aberrations result from the fact that 'Grandma' was always trying to abort *her* (p. 243). Indeed, Hubbard finds 'AA' in the 'basic-basic' engrams of nearly all his patients. There are few people alive, then, who do not carry within them engrams of murder attempts committed against them by their mothers. Morning sickness is usually the result of mothers trying to abort themselves (p. 156). Sometimes fathers help mothers try to bring about abortion ('mutual AA'); the resulting engrams are, for technical reasons which need not be gone into here, especially complicated (p. 245). But these, like all other engrams, can be discharged 'with ease,' so powerful is dianetic therapy: 'The auditor can do everything back-



wards, upside down and utterly wrong and the patient will still be better, provided only that he does not try to use drugs before he has worked a few cases, that he does not use hypnotism as hypnotism and he does not try to cross dianetics with some older therapy' (p. 167).

IT MIGHT BE well to describe here in fuller detail Hubbard's account of the engram. The engram, even when acquired prenatally — and it can be acquired from the zygote stage on (pp. 130, 158) — has *verbal* content:

Whether or not the unborn child is 'unanalytical' has no bearing on his susceptibility to engrams. The prenatal engram is just another engram. Only when the child is actually struck or hurt by a high-blood pressure or orgasms or other sources of injury does he become 'unconscious.' When he becomes 'unconscious' he receives all the percepts and words in the area of the mother as engrams. . . . Morning sickness, coughing, all monologuing (mother talking to herself), street noises, household noises, etc., are all communicated to the 'unconscious' child when he is injured. . . . And the child is very easily injured (pp. 155-156).

. . . Any remark is aberrative in an engram. Even such a statement as 'You can remember this when in dianetic therapy,' made toward an unborn child, installs an engram so that every word in this statement means a physical pain just where he received it at the time. . . . If the doctor is very tough and says, 'You had better take good care of yourself, Mrs. Jones. If you don't you'll be mighty sick!' the child, 'unconscious' from the examination no matter how mild it is, will get a mild hypochondria when the engram keys-in and be very concerned over his health.

If the husband uses language during coitus, every word of it is going to be engramic (p. 157).

Now, the engram as such, it is argued, 'is not a sentient recording containing meanings. It is merely a series of impressions such as a needle might make on wax' (p. 131). Hubbard is carefully unspecific as to how this recording is made:

The child before birth does not depend upon the standard senses for its perceptions. Engrams are not memories but cellular level recordings. Therefore, the child needs no eardrums to record an engram. Cases are on hand where whatever hearing mechanism the unborn child had must have been temporarily destroyed by an abortion attempt. And the engram was still recorded. The cells rebuilt the apparatus which was to be the source of sound in the standard banks and stored their own data in the reactive bank (p. 158).

These 'cellular level recordings' do not do much damage by themselves. But later in life, the recurrence of a part of the cluster of recorded impressions including words can 'restimulate' and 'key-in' the engram:

Put a man under ether, hurt him in the chest. He has received an engram because his analytical power was turned off first by ether and

then by a chest pain. While he was there on the operating table, the reactive mind recorded the click of instruments, everything said, all sounds and smells. Let us suppose that a nurse was holding one of his feet because he was kicking. This is a complete engram.

The engram will be keyed-in by something in the future, a similar incident. After this, in greater or lesser degree, whenever he hears clicks like instrument clicks he gets nervous . . . he may find that his foot feels slightly as if it were being held . . . the chest pain would be found present in some degree. . . . This is 'push-button' in its precision (p. 74).

This push-button mechanism theory, obviously derived in part from the Korzybskian idea of 'signal reaction,' is central to both the plausibility and the appeal of dianetics. In our environment there are innumerable 'push-buttons' — words, smells, sounds, sights — which, although of no special significance to our 'analytical minds,' are meaningful to the 'reactive mind.' If we have recurrent failures of self-control, feelings of uneasiness, backaches or migraines, homosexual tendencies, or whatever, it is because some of the stimuli around us act as push-buttons 'restimulating' unhappy and painful 'engrams,' which are *by definition* something we are *not responsible for*, since they were acquired during states of 'unconsciousness.' The job is to identify the words and other stimuli which act as 'restimulators,' and then to recover, by reverie, the 'engrams.' The engrams are then 'run through' and 'discharged' of their affective content. When this is done, we are freed of all our burdens; we emerge as supermen.

HUBBARD'S BOOK, especially his 'case-histories,' is so rich in absurdity, so preposterously and awkwardly obscene (especially in the accounts of engrams acquired during parental coition), that one is tempted to quote on and on. I shall content myself by giving two more instances before completing my account of his theories. One fascinating notion is that, since human memory is by definition perfect, one is able, in dianetic reverie, to go back to conception *or before!* How dianetic science struggled through to this conclusion is explained thus:

After a few cases had been examined . . . dianetics was forced to accept . . . the fact that the cells of the foetus record. A few more cases and a little more experience discovered that the embryo cells record. And suddenly it was discovered that recording begins in the cells [sic] of the zygote — which is to say, with conception. . . . [T]he body recalls conception. . . . Most patients sooner or later startle themselves by finding themselves swimming up a channel or waiting to be connected with. The recording is there (p. 130).

Other passages indicate the degree to which Hubbard has prepared for all contingencies an auditor may run up against. What, for example, of the child of immigrant parents or the adopted child whose prenatal engrams are re-

corded in a language other than that which he uses as an adult? Special instructions for this kind of case involving the use of dictionaries are provided on pp. 315-316. More complex are the 'Junior cases,' i.e., sons who are named after their fathers. The complexity results from the fact that mothers — most mothers, apparently — are unfaithful to their husbands. In the course of intimacies with their lovers, they may (and do) make unfavorable remarks about their husbands. The lovers too may make remarks. If mother happens to be pregnant at the time, Ralph, Jr. is getting loaded up with engramic recordings about 'Ralph' — i.e., Ralph, Sr. Since the reactive mind is given to identification reactions (Ralph is Ralph) everything said about Ralph, Sr. is interpreted by Ralph, Jr. as applying to himself. Obviously, the consequences are appalling. Hubbard advises prospective dianetics, 'Do not take on a Junior as your first case if you can avoid it. . . . It is customary to shudder, in dianetics, at the thought of taking on a Junior case' (p. 305). Such cases also offer special difficulties of 'sonic [auditory] recall', since the lover is likely to have said, during or immediately after coitus, 'Ralph must never hear of this' (pp. 209-210).<sup>8</sup>

A BASIC question remains. Why, in the light of the foregoing, has dianetics had *any* following? Why was its preposterousness not evident at once to everyone to whom it was presented, including the publishers? The attempt to answer this question is the sole justification I can offer for directing the reader's attention for so long to a topic so intellectually and scientifically negligible.

A first and obvious answer to his question is that thousands of people today are looking for help in emotional problem-solving, and dianetics purports to offer a technique for self-help. Hubbard directs the reader not to go to expensive analysts and psychiatrists, whose methods are out-of-date anyway; instead, husbands and wives, friends and neighbors, dormitory room-mates, can band together and help themselves. This appeal to economic self-interest, however, is not sufficient in itself to explain its sudden spread. There is something more.

This something more has already been suggested. It is the unusually successful use of mechanical analogies. We are habituated to the use of metaphorical vocabularies, mostly non-electrical in origin but now predominantly employed with electrical connotations, to describe everyday occurrences: 'Tom relayed the information,' 'Dick sparked the sales drive,' 'Harry blew a fuse.' Even the most casual newspaper reader has heard of 'brain waves' and 'electroencephalograms.' Hubbard's technical jargon is marvellously suggestive at once of both electrical and psychological phenomena, which, although no doubt ultimately related, are certainly not related in the way he describes.

<sup>8</sup> Hubbard's hatred and contempt of women is quite intense. His 'case-histories' betray a remarkable obsession with 'AA' and female adultery.

The fact that language can be used to adumbrate two (or more) areas of meaning at once is not in itself dangerous; indeed, it is this fact which gives language its richness and its power of creative suggestion. In Norbert Wiener's *Cybernetics*, the simultaneously electrical and psychological connotations of terms is peculiarly stimulating to the imagination. (It will be remembered that this book, too, enjoyed sales far beyond initial expectations.) But in *Cybernetics* the double-edged vocabulary is used with full consciousness of abstracting; in other words, Wiener never forgets — nor lets the reader forget — that the analogy is an analogy and that the genera to which Mark III and Mark Antony belong are distinct and separate.

Professor Weller Embler, in his article 'Metaphor and Social Belief' (*ETC.* 8.83-93, Winter 1951), has ably described, with a footnote reference to diabetics as an example, the kind of semantic reaction induced by 'perfect' metaphors. The metaphorical character of a statement may not be apprehended at all, so that we are likely, under favorable conditions, to feel that 'The city is a jungle,' 'Nature is a teacher,' 'The subways are the city's arteries.' Each age, says Embler, has its characteristic metaphors; those of other ages ('The soul is a garden, the will the gardener') are clearly seen to be metaphors. But, 'When metaphor is new, and when the reader does not enjoy the perspective vouchsafed by time, the metaphor is taken literally, and its function is not that of a rhetorical device, but of statement of fact, *prescribing* certain kinds of behavior.' Embler mentions, in addition to men-and-machines metaphors, those comparing human fate to probability phenomena as another kind which strikes us today as being vividly 'true':

Fortune, in its workings, has something in common with a slot-machine. There are those who can bait it forever and never get more than an odd assortment of lemons for their pains; but once in a while there will come a man for whom all the grooves will line up, and when that happens there's no end to the showering down. (Dorothy Baker, *Young Man with a Horn.*)

It is to be noted that Hubbard is not so flat-footed as to introduce in so many words the assertion 'The mind is a computing machine.' Indeed, such an assertion would have only had the effect of causing the reader to wonder about the degree to which this might be true. He introduces the analogy explicitly as an analogy, but he hastens to state that the analogy has shortcomings only because the mind is a *better* machine (p. 43). The effectiveness of this statement, in its context, lies in the fact that it is, in *some* respects, true. Nevertheless, the unique abilities of the human brain, such as the ability to invent computing machines, are of a different *order* than those of the machines. No computing machine has so far invented so much as a pocket abacus. If this difference of *order* is ignored — and most people ignore it — the notion that the mind is a better and much more elaborate machine can sound compellingly

'true.'<sup>9</sup> From this point on, to quote Wendell Johnson again, 'the language does your thinking for you.' *Hubbard does not have to convince the reader who lets the metaphor slip under his guard; the reader convinces himself.*

**N**O SPECIAL perfidy need be attributed to Mr. Hubbard, and no special degree of gullibility need be attributed to his followers, in attempting to account for the spread of dianetics. Hubbard, his followers, and *Norbert Wiener* (to say nothing of the mathematical biologists!) are alike products of the linguistic and semantic environment; they are alike in pursuit of the fruitful implications of the characteristic metaphors of our times. The difference between the humbuggery of dianetics and the rich scientific and humanistic<sup>10</sup> promise of cybernetics is a measure of the difference between linguistic naiveté and full semantic awareness. I know of no contrast in recent literature which shows more vividly or dramatically the importance of what Korzybski called 'consciousness of abstracting'—the disastrous results when it is absent, and the rich consequences when it is there.

It is possible to abstract, from Emblar's account of the prevailing metaphors of our time and from the success of dianetics, a dismal picture of the climate of popular opinion. Life is a slot-machine. No virtues of intellect or character which we may perfect through study or self-discipline can increase our chances of reward. But, fortunately, we are perfect computing machines, temporarily in poor repair, to be sure, because of stuck keys, demon circuits. Unstick the keys and discharge the circuits, and boy, will we begin to click! Because we shall be able to think perfectly, life will lose its probabilistic character. We shall have perfect prediction and control. Then, there will be 'no end to the showering down.'

**I** AM AWARE that my earlier dismissal, in terms of kinds of predictions, of the claim that dianetics 'works' has not been completely satisfactory, since it does not take into account the differences between dianetic and other therapies. I should therefore like finally to take account of one other factor in the 'working.'

Emotional disturbances are of course failures in interpersonal relations. It is by now commonplace to observe that any radical change in the situation in which communications between people take place can radically alter the relations between them and the content of the communications. Dr. Trigant Burrow, changing seats with his patient in a psychiatric interview, was so affected by the changes he felt in his own professional self-assurance that he

<sup>9</sup> Regarding 'order,' see A. Korzybski, *Science and Sanity* (3rd ed., Lakeville, Conn. 1948), 429ff.; also A. Rapoport, *Science and the Goals of Man* (New York: Harper, 1950), 236-243.

<sup>10</sup> See Wiener's *The Human Use of Human Beings* (Boston: Houghton Mifflin, 1950).

eventually found himself compelled to reorganize his entire view of psychiatry.<sup>11</sup> Students of group dynamics have made intensive investigations into these often startling results of what they have termed 'social restructuring.'

It is apparent that if a man and wife read the dianetics book and are persuaded to 'try it,' the effects can be those of social restructuring — indeed, of what is called in group dynamics 'role-playing.' The husband no longer listens to his wife in his everyday role of husband. He no longer shapes in his mind, as he waits for an opportunity to break in, the cutting and unassailable retort. He is now an 'auditor.' His attitude to his wife's remarks is, then, no longer defensive, but 'therapeutic' — i.e., attentive, 'non-judgmental,' and 'permissive.' The same will be true for the wife when it is her turn to 'audit.' As a result of such role-playing and in spite of all the dianetic nonsense, communications *may* be established on a number of topics about which there had been misunderstandings and harmful projections.<sup>12</sup> With the alleviation of the misunderstandings and the dismissal of suspicions now seen to have been unwarranted, there may arise warmth and pleasure — the sense of having emerged from under a cloud. Headaches and fatigue may also be relieved, and possibly more serious ailments — this is a point that need hardly be argued in the light of present knowledge of psychosomatic mechanisms. The appalling thing revealed by dianetics about our culture is that it takes a 452-page book full of balderdash to get some people to sit down and seriously listen to each other!

**B**UT EVEN the limited good that dianetics may do by introducing a single, narrowly-defined role-playing technique into interpersonal relations is probably more than offset by the damage it can do with its accompanying pretentious and nonsensical doctrines. I am not thinking here of the standard medical argument, that it may keep people away from better and more legitimate therapies, although this is no doubt true. (So many things keep people away from legitimate therapies anyway that I am not sure that one more patent-medicine can matter much.) I am thinking rather of the fact that those who are helped by dianetics will necessarily be kept at a low level of intellectual and emotional maturity by the nonsense they have absorbed in order to be helped. The lure of the pseudoscientific vocabulary and promises of dianetics cannot but condemn thousands who are beginning to emerge from scientific illiteracy to a continuation of their susceptibility to word-magic and semantic hash.

S. I. HAYAKAWA

<sup>11</sup> He tells the story in the Preface to *The Social Basis of Consciousness* (New York: Harcourt, Brace, 1927).

<sup>12</sup> Perhaps I should add here that I have never attended a dianetic session, although I have had people tell me of their experiences in auditing each other. Since I have never observed any kind of psychotherapy session, except for watching on one occasion the administration of metrazol, I have not felt myself a competent enough observer to evaluate the proceedings.