

Walker Percy

The Message in the Bottle



**How Queer Man Is,
How Queer Language Is, and
What One Has to Do with the Other**

BY WALKER PERCY

NOVELS

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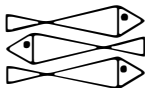
NON-FICTION

The Message in the Bottle

Walker Percy

THE MESSAGE
IN THE BOTTLE

*How Queer Man Is, How Queer Language Is,
and What One Has to Do with the Other*



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NEW YORK

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For MARY PRATT *and* ANN

AUTHOR'S NOTE

This book was twenty years in the writing. All chapters except the last appeared as articles in journals. One chapter was published in 1954, another in 1975. Since my recurring interest over the years has been the nature of human communication and, in particular, the consequences of man's unique discovery of the symbol, a certain repetitiveness in the articles is inevitable. Some of the repetition has been preserved here, for example, the "Helen Keller phenomenon," if for no other reason as evidence at least of the longevity of my curiosity and my inability to get rid of it. This particular bone, I thought, needed worrying.

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1

THE DELTA FACTOR

*How I Discovered the Delta Factor Sitting
at My Desk One Summer Day in Louisiana in the
1950's Thinking about an Event in the
Life of Helen Keller on Another Summer Day
in Alabama in 1887*

In the beginning was Alpha and the end is Omega, but somewhere between occurred Delta, which was nothing less than the arrival of man himself and his breakthrough into the daylight of language and consciousness and knowing, of happiness and sadness, of being with and being alone, of being right and being wrong, of being himself and being not himself, and of being at home and being a stranger.

WHY DOES MAN feel so sad in the twentieth century?

Why does man feel so bad in the very age when, more than in any other age, he has succeeded in satisfying his needs and making over the world for his own use?

Why has man entered on an orgy of war, murder, torture, and self-destruction unparalleled in history and in the very century when he had hoped to see the dawn of universal peace and brotherhood?

Why do people often feel bad in good environments and good in bad environments?

Why do people often feel so bad in good environments that they prefer bad environments?

Why does a man often feel better in a bad environment?

Why is a man apt to feel bad in a good environment, say suburban Short Hills, New Jersey, on an ordinary Wednesday afternoon? Why is the same man apt to feel good in a very bad environment, say an old hotel on Key Largo during a hurricane?

Why have more people been killed in the twentieth century than in all other centuries put together?

Why is war man's greatest pleasure?

Why is man the only creature that wages war against its own species?

What would man do if war were outlawed?

Why is it that the only time I ever saw my uncle happy during his entire life was the afternoon of December 7, 1941, when the Japanese bombed Pearl Harbor?

Why did he shortly thereafter become miserable when he learned that he was too old to go to Europe to shoot at Germans and stand a good chance of being shot by Germans?

Why is it that the only time he was happy before was in the Argonne Forest in 1918 when he was shooting at Germans and stood a good chance of being shot by Germans?

Why was he sad from 1918 to 1941 even though he lived in as good an environment as man can devise, indeed had the best of all possible worlds in literature, music, and art?

Why is it that a man riding a good commuter train from Larchmont to New York, whose needs and drives are satisfied, who has a good home, loving wife and family, good job, who enjoys unprecedented "cultural and recreational facilities," often feels bad without knowing why?

Why is it that if such a man suffers a heart attack and, taken off the train at New Rochelle, regains consciousness and finds himself in a strange place, he then comes to himself for the first time in years, perhaps in his life, and begins to gaze at his own hand with a sense of wonder and delight?

What is the difference between such a man, a commuter who feels bad without knowing why, and another commuter who feels

bad without knowing why but who begins to read a book about a man who feels bad without knowing why?

Why does it make a man feel better to read a book about a man like himself feeling bad?

Why was it that Jean-Paul Sartre, sitting in a French café and writing *Nausea*, which is about the absurdity of human existence and the nausea of life in the twentieth century—why was he the happiest man in France at the time?

Why was it that when Franz Kafka would read aloud to his friends stories about the sadness and alienation of life in the twentieth century everyone would laugh until tears came?

Why is it harder to study a dogfish on a dissecting board in a zoological laboratory in college where one has proper instruments and a proper light than it would be if one were marooned on an island and, having come upon a dogfish on the beach and having no better instrument than a pocketknife or bobby pin, one began to explore the dogfish?

Why is it all but impossible to read Shakespeare in school now but will not be fifty years from now when the Western world has fallen into ruins and a survivor sitting among the vines of the Forty-second Street library spies a moldering book and opens it to *The Tempest*?

Why is it difficult to see a painting in a museum but not if someone should take you by the hand and say, "I have something to show you in my house," and lead you through a passageway and upstairs into the attic and there show the painting to you?

Why are Americans intrigued by the idea of floating down the Mississippi River on a raft but not down the Hudson?

Why do more people commit suicide in San Francisco, the most beautiful city in America, than in any other city?

Why is the metaphor *Flesh is grass*, which is not only wrong (flesh is not grass) but inappropriate (flesh is not even like grass), better and truer than the sentence *Flesh is mortal*, which is quite accurate and logical?

What would you do if a stranger came up to you on a New York street and, before disappearing into the crowd, gave you a note

which read: "I know your predicament; it is such and such. Be at the southeast corner of Lindell Boulevard and Kingshighway in St. Louis at 9 a.m., April 16—I have news of the greatest importance"?

Where are the Hittites?

Why does no one find it remarkable that in most world cities today there are Jews but not one single Hittite, even though the Hittites had a great flourishing civilization while the Jews nearby were a weak and obscure people?

When one meets a Jew in New York or New Orleans or Paris or Melbourne, it is remarkable that no one considers the event remarkable. What are they doing here? But it is even more remarkable to wonder, if there are Jews here, why are there not Hittites here?

Where are the Hittites? Show me one Hittite in New York City.

Given two men living in Short Hills, New Jersey, each having satisfied his needs, working at rewarding jobs, participating in meaningful relationships with other people, etc., etc.: one feels good, the other feels bad; one feels at home, the other feels homeless. Which one is sick? Which is better off?

Why do people driving around on beautiful Sunday afternoons like to see bloody automobile wrecks?

Why did the young French couple driving through the countryside with their baby, having heard the news of a crash nearby of an airliner killing three hundred people and littering the forest with bits of flesh, speed frantically toward the scene, stop the car, and, carrying the baby, rush toward the dead, running through thickets to avoid police barricades? Did they have relatives on the plane?

Why did French and German veterans of Verdun, a catastrophic battle in which one million men were killed, keep returning to Verdun for years after the war, sit quietly in a café at Lemmes on the Sacred Way, speaking softly of those terrible times, and even camp out for a week in the shell hole or trench where they spent the worst days of their lives?

Why is the good life which men have achieved in the twentieth century so bad that only news of world catastrophes, assassinations, plane crashes, mass murders, can divert one from the sadness of ordinary mornings?

Why do young people look so sad, the very young who, seeing how sad their elders are, have sought a new life of joy and freedom with each other and in the green fields and forests, but who instead of finding joy look even sadder than their elders?

2

What does a man do when he finds himself living after an age has ended and he can no longer understand himself because the theories of man of the former age no longer work and the theories of the new age are not yet known, for not even the name of the new age is known, and so everything is upside down, people feeling bad when they should feel good, good when they should feel bad?

What a man does is start afresh as if he were newly come into a new world, which in fact it is; start with what he knows for sure, look at the birds and beasts, and like a visitor from Mars newly landed on earth notice what is different about man.

If beasts can be understood as organisms living in environments which are good or bad and to which the beast responds accordingly as it has evolved to respond, how is man to be understood if he feels bad in the best environment?

Where does one start with a theory of man if the theory of man as an organism in an environment doesn't work and all the attributes of man which were accepted in the old modern age are now called into question: his soul, mind, freedom, will, Godlikeness?

There is only one place to start: the place where man's singularity is there for all to see and cannot be called into question, even in a new age in which everything else is in dispute.

That singularity is language.

Why is it that men speak and animals don't?

What does it entail to be a speaking creature, that is, a creature who names things and utters sentences about things which other similar creatures understand and misunderstand?

Why is it that every normal man on earth speaks, that is, can utter an unlimited number of sentences in a complex language, and that not one single beast has ever uttered a word?

Why are there not some "higher" animals which have acquired a primitive language?

Why are there not some "lower" men who speak a crude, primitive language?

Why is there no such thing as a primitive language?

Why is there such a gap between nonspeaking animals and speaking man, when there is no other such gap in nature?

How can a child learn to speak a language in three years without anyone taking trouble about it, that is, utter and understand an unlimited number of sentences, while a great deal of time and trouble is required to teach a chimpanzee a few hand signals?

Why is it that scientists, who know a great deal about the world, know less about language than about the back side of the moon, even though language is the one observable behavior which most clearly sets man apart from the beasts and the one activity in which all men, scientists included, engage more than in any other?

Why is it that scientists know a good deal about what it is to be an organism in an environment but very little about what it is to be a creature who names things and utters and understands sentences about things?

Why is it that scientists have a theory about everything under the sun but do not have a theory of man?

Is it possible that a theory of man is nothing more nor less than a theory of the speaking creature?

Is it possible that the questions about man's peculiar upside-down and perverse behavior, which he doesn't understand, have something to do with his strange gift of speech, which he also doesn't understand?

Is it possible that man's peculiar predicament, his unhappiness in the twentieth century, his upside-down behavior, disliking things which according to his theory he ought to like, liking things which according to his theory he ought not to like, has come to pass because the old modern age has ended and man has not the beginning of an understanding of himself in the new age because the old theories don't work any more, because they showed man as monster, as centaur organism-plus-soul, as one not different from beasts yet somehow nevertheless possessing "freedom" and "dignity" and "individuality" and "mind" and such—and that such theories, monstrous as they are, worked for a while in the old modern age because there was still enough left of belief in Judeo-Christianity to make such talk of "sacredness of the individual" sound good even while such individuals were being slaughtered by the millions, and because science was still young and exuberant and no one noticed or cared about the contradiction in scientists' understanding other men as organisms-beasts and putting them into the world of things to understand and so putting themselves above the world and other men?

But time ran out and the old modern world ended and the old monster theory no longer works. Man knows he is something more than an organism in an environment, because for one thing he acts like anything but an organism in an environment. Yet he no longer has the means of understanding the traditional Judeo-Christian teaching that the "something more" is a soul somehow locked in the organism like a ghost in a machine. What is he then? He has not the faintest idea. Entered as he is into a new age, he is like a child who sees everything in his new world, names everything, knows everything except himself.

When man doesn't know whether he is an organism or a soul or both, and if both how he can be both, it is good to start with what he does know.

This book is about two things, man's strange behavior and man's strange gift of language, and about how understanding the latter might help in understanding the former.

I have made the assumption that the proper study of man is man and that there does not presently exist a theory of man. Accordingly, the book is an attempt to sketch the beginnings of a theory of man for a new age, the sort of crude guess a visitor from Mars might make if he landed on earth and spent a year observing man and the beasts.

It is the meager fruit of twenty years' off-and-on thinking about the subject, of coming at it from one direction, followed by failure and depression and giving up, followed by making up novels to raise my spirits, followed by a new try from a different direction or from an old direction but at a different level, followed by failure, followed by making up another novel, and so on.

As it stands, it is nothing more than a few trails blazed through a dark wood, most dead-ended. I should consider it worthwhile even if it established no more than that there is such a wood—for not even that much is known now—and that it is very dark indeed.

Most readers will not want to read all chapters. It is hard, for example, to imagine anyone at all at the present time who would want to read the last. Only after writing it did it occur to me that it had, for the moment at least, no readership whatever. Nobody will be interested in it except psycholinguists and transformational grammarians, and the latter won't like it. The only comfort I can take is that this particular excursion into what many readers will take to be the esoterics of language is no ordinary blind alley. Unless I am very much mistaken, it lies across the impasse which must be broken through before the new man in the new age can begin to understand himself.

I make no apologies for being an amateur in such matters, since the one thing that has been clear to me from the beginning is that language is too important to be left to linguisticians. Indeed everything is too important to be left to the specialist of that thing, and the layman is already too deprived by the surrendering of such sovereignty.

If justification is needed, I plead the justification of the visitor from Mars: it is necessary in this case to be to a degree an outsider in order to see these particular woods for the trees.

One must be a Martian or a survivor poking among the ruins to see how extremely odd the people were who lived there.

3

I don't even know what to call it, the object of this mild twenty-year obsession. If I say "language," that would be both accurate and misleading—misleading because it makes you think of words and different human languages rather than the people who utter them and the actual event in which language is uttered. So the book is not about language but about the creatures who use it and what happens when they do. Since no other creature but man uses language, it is really an anthropology, a study of man doing the uniquely human thing.

The proper study of man is man, said Pope. But that's a large order, especially nowadays, when there is no such thing as a study of man but two hundred specialties which study this or that aspect of man. Ethnologists and anthropologists study man's culture and evolution. Linguists study languages. Psychologists study stimuli and responses. Ethologists study those drives and instincts man shares with other creatures. Theologians study God and man's relation to God. But only a Martian can see man as he is, because man is too close to himself and his vision too fragmented. As a nonpsychologist, a nonanthropologist, a nontheologian, a nonethologist—as in fact nothing more than a novelist—I qualify through my ignorance as a terrestrial Martian. Since I am only a novelist, a somewhat estranged and detached person whose business it is to see things and people as if he had never seen them before, it is possible for me not only to observe people as data but to observe scientists observing people as data—in short to take a Martian view.

Imagine how it must appear to the Martian making his first visit to earth. Let us suppose that he too is an intelligent being, whose intelligence has, however, evolved without the mediation of language but rather, say, through the development of ESP. So he is something like the angels who, according to Saint Thomas, can see things directly in their essences and communicate thought without

language. What is the first thing he notices about earthlings? That they are forever making mouthy little sounds, clicks, hisses, howls, hoots, explosions, squeaks, some of which *name* things in the world and are uttered in short sequences that *say* something about these things and events in the world.

This behavior seems a good deal stranger to the Martian than it does to us. This is the case because language is the very mirror by which we see and know the world and it is very difficult to see the mirror itself, to see how curiously wrought it is.

In order to see the mirror of language, it is necessary to turn it around so that it no longer reflects, distorts, transforms. Say the word *glass*. It is almost impossible to hear the sounds for themselves because they have already been transformed: they sound like glass. The word *glass* sounds brittle, shiny, transparent.

Now try this. Repeat the word aloud fifty times. What happens? Somewhere along the way the word loses its magic transformation and, like Cinderella's other slipper at midnight, becomes the ugly little vocable it really is: a small explosion of the back of the tongue against the palate, the rush of air around the sides of the tongue, a bleat ending in the hissing of breath between the teeth and tip of tongue.

A very odd business.

The Martian is surprised by what he sees and hears. In order to prepare himself for the journey to earth, he has read many scientific books and journals brought to Mars by astronauts. These works, in biology, psychology, physiology, have led him to believe that man is not much different from other earth creatures, certainly not qualitatively different. He has the same kind of anatomical equipment—nerve, bone, and blood—exhibits the same chemical reactions, the same transactions across his bodily membranes, the same capacity to respond to stimuli, adapt to environments, and so on. Imagine the Martian's astonishment after landing when he observes that earthlings *talk all the time* or otherwise traffic in symbols: gossip, tell jokes, argue, make reports, deliver lectures, listen to lectures, take notes, write books, read books, paint pictures, look

at pictures, stage plays, attend plays, tell stories, listen to stories, cover blackboards with math symbols—and even at night dream dreams that are a very tissue of symbols.

Earthlings in short seem to spend most of their time trafficking in one kind of symbol or another, while the other creatures of earth—more than two million species—*say not a word*.

When he asks his hosts (in ESP) about this strange behavior, he gets a curious answer from earth scientists. Mostly they seem anxious to convince him how much they are like other creatures rather than different. “Ever since Darwin,” say the scientists, “we have known that man is not qualitatively different from other animals. In fact the whole burden of earth science is to discover similarities, not differences, to establish continuities, not gaps.”

“Yes,” replies the Martian, “but you *talk* all the time; you’re talking now.”

The earth scientists insist that man is an animal like other animals, that in fact the government is spending millions of dollars investigating the behavior of monkeys and apes in order to learn more about man, that ethologists, trying to account for man’s madness, spend much of their time investigating aggressive and territory-protecting behavior among other animals, even a small fish such as the stickleback.

“Yes, but you’re still talking,” says the Martian. “Why don’t you investigate that?”

They refer him to linguists and psychologists, who tell him a great deal about the structure of languages, grammar, phonemes, and morphemes; about the relation of one language to another, the historical changes in a language, the acoustics of language, the physics and physiology of speech; about the rules by which one sentence can be transformed into another; about information theory; about stimulus-response theory; about learning theory, according to which a person learns a language in a way not really different from the way a rat learns to thread a maze or a pigeon learns to do a figure eight.

“But wait,” says the Martian. “What about the actual event of

language? The central phenomenon? What happens when people talk, when one person names something or says a sentence about something and another person understands him?"

At this point he is apt to encounter a certain evasiveness, even an irritability. From the theoretical linguist he may get (as, in fact, I did) this sort of answer: "Well, I'm not interested in that. What interests me is the formal structure of language—for example, the rules by which new sentences are generated."

The psychologist might reply, "Well, our knowledge of the brain is not sufficient to outline the exact neural pathways, but of course we believe that language behavior is not qualitatively different from the learned responses of other animals. Read Skinner's *Verbal Behavior*."

"Excuse me," says the Martian, "but I am not asking you to identify all the neural pathways and brain structures involved. I want to know only what sort of thing happens. Could you draw me a picture or describe a crude explanatory model—something like what your famous Dr. Harvey did when he speculated that perhaps the heart is like a unidirectional pump that sends the blood around in a circle?"

I used to have a professor in medical school who, when a student gave a particularly murky answer, would hand him a piece of chalk, escort him to the blackboard, and say, "Draw me a picture of it."

The point is that the picture the psychologist draws, showing stimuli and responses, big *S*'s and *R*'s outside the brain, little *s*'s and *r*'s inside the brain, with arrows showing the course of nerve impulses along nerves and across synapses, no matter how complicated it is, will not show what happens when a child understands that the sound *ball* is the name of a class of round objects, or when I say *The center is not holding* and you understand me.

When the Martian says as much to the psychologist, the latter shrugs. "Well, if you're interested in such matters, go see a linguist or a semanticist or a transformationalist."

The Martian is astounded by the runaround. On the one hand he is referred to entire libraries of books about learning theory and

stimulus-response theory, factual behavioral science which treats the behavior of both men and beasts. This is what he is looking for—behavior, why men act as they do—but he discovers that these books leave out those very features of language that set it apart from other behavior: for example, that unlike other animals, which learn a very limited repertoire of responses, a four-year-old child can utter and understand an unlimited number of new sentences in his language.

When he mentions this remarkable accomplishment of children, the Martian is referred to linguists who treat the formal and structural features of a body of language.

As for the central phenomenon itself, earthlings seem to know less and, what is more, care less than they do about the back side of the moon.

Could the Martian be mistaken or is it not a fact that earthlings for all their encyclopedic knowledge about the formal and factual aspects of language have managed to straddle the phenomenon itself and *miss* it?

It is as if neither Dr. Harvey nor anyone else had ever discovered that the heart is a pump and that the blood circulates but in the past three hundred years scientists had amassed huge quantities of data about the chemical reaction of heart muscle, and the composition of blood, had described the distribution of the elements of blood, had made comparisons of the blood systems of thousands of mammals, and, finally, had developed a sophisticated computerized method for calculating the velocity and pressure of the blood in any given artery.

Some scientists, I hasten to add, are more honest. The famous theoretician Noam Chomsky is frank to admit our nearly total ignorance on the subject. He does draw a picture. He indicates the central phenomenon of language by a black box, contents unknown, labeled LAD, the "language acquisition device," which receives the random input of language a child hears and somehow converts it into the child's capacity to utter any number of sentences in the language. So certain indeed is Chomsky that what happens inside that box cannot be explained by the S's and R's of psychologists that

at one time he saw fit to resurrect the old idea of Descartes that only a mind, a mental substance, can account for the extraordinary phenomenon of language. The black box was full of mind stuff, according to Chomsky. Later he said it probably contained computerlike elements.

What is in the black box then, a ghost or a piece of machinery?

How extraordinary, thinks the Martian, that these earthlings who know so much about the back side of the moon know so little about the one observable thing which even Darwin agreed sets them apart from the beasts!

4

If such a gap in our knowledge of language exists, it should undoubtedly be a matter of concern to those interested in that sort of matter—linguists, psychologists, anthropologists, and the like. But if that were all there were to it, the following essays would not have been written, because I have neither the desire nor the competence to venture into theoretical linguistics. It is true that in the end I propose a crude working model, something like Harvey's notion that perhaps the heart is like a pump, or Malpighi's hunch that the kidney may be a sort of filter, but only on the grounds that such is the prerogative of the amateur in an area shunned by professionals. Something is better than nothing.

No, what has rather concerned me and fueled my mild obsession over the years has been first the inkling, then the growing conviction, that more is at stake than a theory of language.

It turned out that the quest for a theory of language—that human, uniquely human, all too human behavior—ran head on into the larger question of man himself. If Chomsky, the foremost linguistic theorist of our time, talks one minute about explaining the linguistic capacity as a structure of computerlike components and the next about the mind stuff of Descartes, we can't escape the conclusion that the newest and most celebrated theory, the transformational linguistics of Chomsky, has landed us in the midst of the oldest and most vexed question of all, the nature of man.

It was no coincidence then when the Martian discovered that earthlings, who have a theory about everything else, do not have a theory about language and do not have a theory about man.

What interested me was the Martian method of taking man as he found him and looking at him as if he were the strangest of fauna, which he is. That is to say, instead of coming at man from the traditional approaches, this or that theological assumption or scientific assumption about the nature of man—and, believe me, when it comes to settling man's status before the fact, so to speak, scientific theory in the twentieth century can be quite as dogmatic as theological theory in the thirteenth, and perhaps with less sanction—why not come at man like the Martian? Instead of marking him down at the outset as besouled creature or responding organism, why not look at him as he appears, not even as *Homo sapiens*, because attributing sapience already begs the question, but as *Homo loquens*, man the talker, or *Homo symbolificus*, man the symbol-monger? Instead of starting out with such large vexed subjects as soul, mind, ideas, consciousness, why not begin with language, which no one denies, and see how far it takes us toward the rest? Instead of having behaviorists trying to explain language by stimulus-response theory, why not try to account for behaviorists by a larger theory of language (for after all the behavior of behaviorists is notable in that it is not encompassed by behavioral theory: behaviorists not only study responses; they write articles and deliver lectures setting forth what they take to be the truth about responses, and would be offended if anyone suggested that their writings and lectures were nothing more than responses and therefore no more true or false than a dog's salivation)?

Accordingly, the assumption will be made that current theory of language is incoherent, that the formal-descriptive disciplines of linguistics deal with the products, the corpora, of the language phenomenon, that the factual science of psychology deals with the stimuli and responses of organisms, and that between them lies the terra incognita of the phenomenon itself.

A second assumption is that current theories of man, or rather, I should say, notions, are equally incoherent and that one incoher-

ence has something to do with the other, so much so indeed that one suspects that the latter can only be gotten at through the former. If you know why this creature talks, thinks the Martian, you might also know why he behaves so oddly.

Start with God and man's immortal soul and you've lost every reader except those who believe in God and man's immortal soul.

Start with B. F. Skinner and man decreed as organism who learns everything he does by operant conditioning and you've lost every reader who knows there is more to it than that and that Skinner has explained nothing. Skinner explains everything about man except what makes him human, for example, language and his refusal to behave like an organism in an environment.

I take it as going without saying that current theories of man are incoherent. There does not presently exist, that is to say, a consensus view of man such as existed, for instance, in thirteenth-century Europe or seventeenth-century New England, or even in some rural communities in Georgia today. Prescinding from whether such a view is true or false, we are able to say that it was a viable belief in the sense that it animated the culture and gave life its meaning. It was something men lived by, even when they fell short of it and saw themselves as sinners. It was the belief that man was created in the image of God with an immortal soul, that he occupied a place in nature somewhere between the beasts and the angels, that he suffered an aboriginal catastrophe, the Fall, in consequence of which he lost his way and, unlike the beasts, became capable of sin and thereafter became a pilgrim or seeker of his own salvation, and that the clue and sign of his salvation was to be found not in science or philosophy but in news of an actual historical event involving a people, a person, and an institution.

I am not suggesting that there are not believing Christians today for whom this view of man or some variant of it is still viable. What I do suggest is that if one attempts to state a kind of consensus view of man in the present age, the conventional wisdom of the great majority of the denizens of a democratic technological society in the late twentieth century, this Judeo-Christian credo is no longer a significant component.

What has survived and is significant in the culture are certain less precise legacies of this credo: the "sacredness of the individual," "God is love," the "Prince of Peace," "the truth shall make you free," etc. Almost everyone is in favor of love, truth, peace, freedom, and the sacredness of the individual, since, for one thing, these prescriptions are open to almost any reading.

What does exist is a kind of mishmash view of man, a slap-up model put together of disparate bits and pieces. The other major component of the conventional wisdom, along with the ethical legacy of Christianity, is what the layman takes to be the consensus of science—whose credentials after all are far more impressive than those of Judeo-Christianity—that, myths aside and however admirable ethics may be, man is an organism among other organisms.

One sign that the world has ended, the world we knew, the world by which we understood ourselves, an age which began some three hundred years ago with the scientific revolution, is the dawn of the discovery that its world view no longer works and we find ourselves without the means of understanding ourselves.

There is a lag between the end of an age and the discovery of the end. The denizens of such a time are like the cartoon cat that runs off a cliff and for a while is suspended, still running, in mid-air but sooner or later looks down and sees there is nothing under him.

My growing conviction over the years has been that man's theory about himself doesn't work any more, not because one or another component is not true, but because its parts are incoherent and go off in different directions like Dr. Doolittle's pushmi-pullyu.

Those who don't take this matter seriously forfeit the means of understanding themselves. Many people in fact are quite content to live out their lives as the organisms and consumer units their scientists understand them to be; to satisfy their needs, even "higher" needs, according to the prescription of those who profess to understand such things.

Those who do take it seriously find themselves involved in certain characteristic dilemmas and predicaments all too familiar to the denizens of the late twentieth century. One tires of the good life and the best of all possible worlds one has designed for oneself.

One feels anxious without knowing why. One is at home yet feels homeless. One loves bad news and secretly longs for still another of the catastrophes for which the century has become notorious.

It is an inevitable consequence of an incoherent theory that its adherents in one sense profess it—what else can they profess?—yet in another sense feel themselves curiously suspended, footing lost and having no purchase for taking action. Attempts to move issue in paradoxical countermovements. As time goes on, one's professed view has less and less to do with what one feels, how one acts and understands oneself.

If asked to define the conventional wisdom of the twentieth century, that is to say, a kind of low common denominator of belief held more or less unconsciously by most denizens of the century, I would think it not unreasonable to state it in two propositions which represent its two major components, the one deriving from the profound impact of the scientific revolution, the other representing a kind of attenuated legacy of Christianity.

(1) Man can be understood as an organism in an environment, a sociological unit, an encultured creature, a psychological dynamism endowed genetically like other organisms with needs and drives, who through evolution has developed strategies for learning and surviving by means of certain adaptive transactions with the environment.

(2) Man is also understood to be somehow endowed with certain other unique properties which he does not share with other organisms—with certain inalienable rights, reason, freedom, and an intrinsic dignity—and as a consequence the highest value to which a democratic society can be committed is the respect of the sacredness and worth of the individual.

I make the assumption that most educated denizens of the Western world would subscribe in some sense or other to both propositions.

I make the second assumption that the conventional wisdom expressed by these two propositions, taken together, is radically incoherent and cannot be seriously professed without even more serious consequences.

How does a man go about living his life if he takes both proposi-

tions seriously? He sees himself as an organism highly evolved enough to have developed certain "values." But what he doesn't realize is that as soon as he looks upon his own individuality and freedom as "values," a certain devaluation sets in.

5

There is an astronomer who works at night on Mount Palomar, observing, recording, hypothesizing, writing equations, predicting, searching the skies, confirming, writing papers for other astronomers. During the day he comes down into town to satisfy his needs as organism and culture member, eats, sleeps, enjoys his wife and family and home, plays golf, and participates in other cultural and recreational activities.

He is one of the more fortunate denizens of the age because he functions well as both angel (scientist-knower) and beast (culture organism). But the question is, what manner of creature is he? Draw me a picture of Dr. Jekyll and a benign Mr. Hyde inhabiting the same skin.

Yet he is one of the lucky ones. It is his century and he is one of its princes. His is the best of both worlds: He theorizes and satisfies his needs. He is like one of the old gods who lived above the earth but took their pleasure from the maids of the earth.

But what about the villagers? What happens to a man when he has to live his life in the twentieth century deprived of the sovereignty and lordship of science and art? What is it like to be a layman and a consumer? Does this consumer, the richest in history, suffer a kind of deprivation?

What are the symptoms of the deprivation?

6

When the scientific component of the popular wisdom is dressed up in the attic finery of a Judeo-Christianity in which fewer and fewer people believe, and men try to understand themselves as organisms somehow endowed with mind and self and freedom and worth, one consequence is that these words are taken less and less

seriously as the century wears on, and no one is even surprised at mid-century when more than fifty million people have been killed in Europe alone. In fact there is more talk than ever of the dignity of the individual.

Do not imagine that what has occurred is a victory of science over religion. In the end science suffers too. As the pure research of the first half century, the revolutionary physics of Planck and Einstein, devolved into the technology of the second half, more and more youths turned their backs on both, the new science and the old God, and sought instead the fragile utopias of the right place and the right person and the right emotion at the right time.

What happens when these utopias don't work?

7

There is a secret about the scientific method which every scientist knows and takes as a matter of course, but which the layman does not know. The layman's ignorance would not matter if it were not the case that the spirit of the age had been informed by the triumphant spirit of science. As it is, the layman's ignorance can be fatal, not for the scientist but for the layman.

The secret is this: Science cannot utter a single word about an individual molecule, thing, or creature in so far as it is an individual but only in so far as it is like other individuals. The layman thinks that only science can utter the true word about anything, individuals included. But the layman is an individual. So science cannot say a single word to him or about him except as he resembles others. It comes to pass then that the denizen of a scientific-technological society finds himself in the strangest of predicaments: he lives in a cocoon of dead silence, in which no one can speak to him nor can he reply.

8

At the end of an age, the denizens of the age still profess to believe that they can understand themselves by the theory of the age, yet

they behave as if they did not believe it. The surest sign that an age is coming to an end is the paradoxical movement of the most sensitive souls of the age, the artists and writers first, then the youth, in a direction exactly opposite to the direction laid down by the theory of the age.

It was not an accident that in the nineteenth and the early twentieth century, the high-water mark of the old modern age, when the world had been transformed by Western man and the scientific revolution to his own use and people lived peacefully in the ethical twilight of Christianity, man should begin to feel most homeless in the same world where he had expected to feel most at home.

How can the Harvard behaviorist, living in the best of all scientific worlds, begin to understand the behavior of the Harvard undergraduate who comes from the best of all lay worlds, the affluent, informed, democratic, and ethical East (let the professor specify this world, make it as good as he chooses), who nevertheless turns his back on both worlds and prefers to live like Dostoevsky's underground man?

How can the Unitarian minister, good man that he is, who believes in all the good things of the old modern age, the ethics, the democratic values, the tolerance, the individual freedom, and all the rest—how can he begin to understand his son, who wants nothing so much as *out*, out from under this good man and good home and the good things professed there? It is of no moment what the son chooses instead—Hare Krishna, Process, revolution, or Zen; to him anything, *anything*, is better than this fagged-out ethical deadweight of five thousand years of Judeo-Christianity.

9

A theory of man must account for the alienation of man. A theory of organisms in environments cannot account for it, for in fact organisms in environments are not alienated.

Judeo-Christianity did of course give an account of alienation, not as a peculiar evil of the twentieth century, but as the enduring symptom of man's estrangement from God. Any cogent anthropol-

ogy must address itself to both, to the possibility of the perennial estrangement of man as part of the human condition and to the undeniable fact of the cultural estrangement of Western man in the twentieth century.

By the very cogent anthropology of Judeo-Christianity, whether or not one agreed with it, human existence was by no means to be understood as the transaction of a higher organism satisfying this or that need from its environment, by being "creative" or enjoying "meaningful relationships," but as the journey of a wayfarer along life's way. The experience of alienation was thus not a symptom of maladaptation (psychology) nor evidence of the absurdity of life (existentialism) nor an inevitable consequence of capitalism (Marx) nor the necessary dehumanization of technology (Ellul). Though the exacerbating influence of these forces was not denied, it was not to be forgotten that human alienation was first and last the homelessness of a man who is not in fact at home.

The Judeo-Christian anthropology was cogent enough and flexible enough, too, to accommodate the several topical alienations of the twentieth century. The difficulty was that in order to accept this anthropology of alienation one had also to accept the notion of an aboriginal catastrophe or Fall, a stumbling block which to both the scientist and the humanist seems even more bizarre than a theology of God, the Jews, Christ, and the Church.

So the scientists and humanists got rid of the Fall and re-entered Eden, where scientists know like the angels, and laymen prosper in good environments, and ethical democracies progress through education. But in so doing they somehow deprived themselves of the means of understanding and averting the dread catastrophies which were to overtake Eden and of dealing with those perverse and ungrateful beneficiaries of science and ethics who preferred to eat lotus like the Laodiceans or roam the dark and violent world like Ishmael and Cain.

Then Eden turned into the twentieth century.

The modern age began to come to an end when men discovered that they could no longer understand themselves by the theory professed by the age.

After the end of the modern age, its anthropology was still professed for a while and the denizens of the age still believed that they believed it, but they felt otherwise and they could not understand their feelings. They were like men who live by reason during the day and at night dream bad dreams.

The scientists and humanists were saying one thing, but the artists and poets were saying something else.

The scientists were saying that by science man was learning more and more about himself as an organism and more and more about the world as an environment and that accordingly the environment could be changed and man made to feel more and more at home.

The humanists were saying that through education and the application of the ethical principles of Christianity, man's lot was certain to improve.

But poets and artists and novelists were saying something else: that at a time when, according to the theory of the age, men should feel most at home they felt most homeless.

Someone was wrong.

In the very age when communication theory and technique reached its peak, poets and artists were saying that men were in fact isolated and no longer communicated with each other.

In the very age when the largest number of people lived together in the cities, poets and artists were saying there was no longer a community.

In the very age when men lived longest and were most secure in their lives, poets and artists were saying that men were most afraid.

In the very age when crowds were largest and people flocked closest together, poets and artists were saying that men were lonely.

Why were poets and artists saying these things?

Was it because they were out of tune with the spirit of the mod-

ern age and so were complaining because the denizens of the age paid no attention to them?

Or was it that they were uttering the true feelings of the age, feelings however which could not be understood by the spirit of the age?

Nobody wants to hear about his unspeakable feelings. It is only when the feelings become speakable, that is, understandable by a new anthropology, that people can bear hearing about them.

It was easy not to take poets and artists seriously because they often behaved badly, seemed to enjoy their suffering and, though they made fun of the spirit of the age, science, and technology, were as willing as the next man to enjoy its benefits. Has anyone ever heard of a poet who refused penicillin when he got a streptococcus?

But most of all, the poets and artists who attacked the spirit of the age had nothing to offer in its stead. If the modern theory of man didn't work, and they said it didn't, what theory did?

11

The end of the age came when it dawned on man that he could not understand himself by the spirit of the age, which was informed by the spirit of abstraction, and that accordingly the spirit of the age could not address one single word to him as an individual self but could address him only as he resembled other selves.

Man did not lose his self in the modern age but rather became incommunicado, being able neither to speak for himself nor to be spoken to.

A man is after all himself and no other, and not merely an example of a class of similar selves. If such a man is deprived of the means of being a self in a world made over by science for his use and enjoyment, he is like a ghost at a feast. He becomes invisible. That is why people in the modern age took photographs by the million: to prove despite their deepest suspicions to the contrary that they were not invisible.

At the end of an age the theorists of the age will go to any length to stretch their theory to fit the events of the age in the name of science, even if it means that theory is stretched out of shape and is no longer scientific.

What theorists of the old modern age had to confront were the altogether unexpected disasters of the twentieth century: that after three hundred years of the scientific revolution and in the emergence of rational ethics in European Christendom, Western man in the twentieth century elected instead of an era of peace and freedom an orgy of wars, tortures, genocide, suicide, murder, and rapine unparalleled in history.

The old modern age ended in 1914. In 1916 one million Frenchmen and Germans were killed in a single battle.

Future ages will look back on the attempts to account for man's perverse behavior in the twentieth century by the theory of the old modern age as one of the curiosities of the history of science.

First, given the consensus wisdom of the time, it was to be expected of man, understood as an organism in an environment with a roster of "needs," that as the scientific revolution succeeded in transforming the environment for man's use and increasing man's knowledge and as culture evolved according to rational democratic and ethical principles, man should himself progress toward peace and happiness.

Next, when that did not happen, when men in fact seemed to prefer bad environments to good, a hurricane on Key Largo to an ordinary Wednesday afternoon in Short Hills, and even war to peace—war, the worst of all possible environments—the theorists of the age had only one recourse: to search for explanations either within the "organism" or within the "environment." Accordingly, it did not strike anyone as peculiar when scientists sought an explanation for man's perversity and upsidedownness in this or that atavism from man's evolutionary past. Man blamed the beasts for his madness.

Next, it seemed natural to look for the source of man's "aggres-

sive" behavior in the aggression and "territoriality" of more primitive species, for example, the male stickleback, or in this or that putative ancestor of man, even though no stickleback or any other creature but man has been observed to wage war against itself (suicide) or against its own kind (war).

To the Martian, it seemed curious. If it was the case, as it appeared to be to him, that man exhibited two observable traits wherein he differed most clearly from the beasts, (1) that he had crossed the language barrier and spent most of his time symbol-mongering and (2) that man, alone among creatures, had a perverse penchant for upside-down feelings and behavior, feeling bad when he had expected to feel good, preferring war to peace, and in general being miserable at the time and in the place which he had every reason to expect to be the best of all possible worlds, it seemed to the Martian that earth scientists might do well to search for the explanation of trait 2 in trait 1, or at least to explore the connection between the two.

Instead he discovered that earth scientists were studying sticklebacks and male dominance in baboons and even hypothesizing a putative killer-ape, which perhaps had roamed the African prairies killing for pleasure and whose perverse behavior had somehow persisted in man.

The United States government, he discovered, spent millions funding the study of chimpanzees and other primates, crowding them into cage ghettos or isolating them in cage hermitages in the full expectation of shedding light on man's hatefulness and man's loneliness. Hundreds of papers were written on such subjects as "Sibling Rivalry in a Gibbon Colony" or "Electrically Induced Anxiety in the Macaque."

Very good, said the Martian, the more knowledge the better. But why doesn't the government spend a single dollar or you scientists write a single paper on such subjects as:

"Suicide in San Francisco, or the End of the Frontier: Correlations between Point of Origin, Level of Education, Time of Arrival, and Number of Rotations between New York and San Francisco of 150 Suicides Who Jumped off the Golden Gate Bridge,"

or "Sadness in Suburbia: Psychiatric Profiles of Twenty-five Housewives before and after Reading Betty Friedan,"

or "Scientific Transcendence and Sexual Imminence, or the Relationship of Lust to the Spirit of Abstraction: The Sexual Behavior of Twelve Scientists at Los Alamos in 1942-45, the Zenith of Transcendence of Twentieth-Century Physics Interrupted by Periodic Re-entry into the Organismic and Cultural Imminence of Santa Fe, Los Angeles, and New York; Sexual Intercourse as Prototype of Re-entry,"

or "The Aesthetic Reversal of Depression on Commuter Trains: Before-and-After Muscle-Tension Studies on Ten Depressed Commuters Reading a Book about Depressed Commuters on a Train,"

or "How Bad Is Bad News? A Survey of the Selective Predeliction of 250 New York City Subway Riders for News Stories Headlined 'War,' 'Plane Crash,' 'Assassination,' 'Rape,' 'Murder,' 'Kidnapping,' "

or "Catastrophe as Catalyst in the Ontology of Joy, or Hurricane Parties on the Gulf Coast during Hurricane Camille: An In-depth Study of Eleven Victims Who Elected to Stay Compared with Eleven Random Control Subjects Who Elected to Leave"?

When the Martian made inquiries about such possible connections between man's peculiar symbol-mongering and his even more peculiar behavior, he was given a copy of *The Naked Ape*.

13

The truth is that man's capacity for symbol-mongering in general and language in particular is so intimately part and parcel of his being human, of his perceiving and knowing, of his very consciousness itself, that it is all but impossible for him to focus on the magic prism through which he sees everything else.

In order to see it, one must be either a Martian, or, if an earthling, sufficiently detached, marooned, bemused, wounded, crazy, one-eyed, and lucky enough to become a Martian for a second and catch a glimpse of it.

The day I was thinking about Helen Keller and became a Martian for five seconds, making a breakthrough like Helen's, the difference being that her breakthrough was something she did and my breakthrough was a sudden understanding of what she did.

One ordinary summer day I was sitting at my desk in Louisiana and thinking about a day in the life of Helen Keller in Tusculumbia, Alabama, in 1887. I had been trying to figure out what happens when a child hears a word, a sound uttered by someone else, and understands that it is the name of something he sees. Toward this end I had filled a page with diagrams showing little arrows leaving the speaker's mouth, entering the ear of the hearer, coursing along neurons and synapses; other arrows showing light waves coming from the tree or ball the child was looking at; the two trains of arrows meeting one way or another in the brain.

For a long time the conviction had been growing upon me that three short paragraphs in Helen Keller's *The Story of My Life* veiled a mystery, a profound secret, and that, if one could fathom it, one could also understand a great deal of what it meant to be *Homo loquens*, *Homo symbolificus*, man the speaking animal, man the symbol-monger.

The literature on the subject was by and large unsatisfactory. It still is. If the Martian wanted to go to the library and look it up or enroll in the university and take a course in it, he'd be out of luck. I too discovered that if you tried to look up *language*, you could find out everything under the sun about it except—the phenomenon itself. What I found was two kinds of thinking on the subject with a narrow but impenetrable terra incognita in between.

There were the behaviorists, who seemed anxious above all to explain language as a stimulus-response event, drawing arrows in and out and around dogs' brains and human brains. A man receiving a symbol could not, it seemed, be altogether different from a pigeon "understanding" a green light which "meant" food-pellet-over-there. The classic case, of course, was Pavlov's dog learning to respond to a buzzer by salivating. Other kinds of animal re-

sponses may be a little different—Skinner's pigeons, for example—but the model was the same. The same arrows worked for both.

The explanatory model of the behaviorists was all a model should be; it was simple, elegant, and fruitful. It stood, moreover, in a direct line of continuity with chemistry and physics. The happenings in a speaker's mouth, in the air, in the ear of the listener, along the nerves, could all be understood, at least in principle, as chemical and physical transactions occurring between molecules or electrons. You could draw a picture of it, showing things and spaces and arrows flying between them.

It was a valuable model. Beautiful and simple as it was, one did not abandon it lightly—especially not for fuzzy philosophical notions like "thoughts" and "minds" and "ideas."

The behaviorists knew what they were talking about. The picture they drew of an organism responding to a learned signal had all the virtues of a good explanatory model. It explained, satisfied, and stimulated.

One wanted very much to apply the model, or a variant of it, to human behavior. And indeed one could—if one picked the right kind of behavior. The anthropologist Malinowski, who also liked the model, picked a good example. A party of Trobriand Islanders are out fishing. One man sights a school and calls out, "Mackerel here!" The other fishermen converge on the spot and ready their spears.

The model works in this case. Fisherman B responds to the cry of fisherman A, as he has learned by past experience and past rewards to respond: he paddles over and readies his spear. Perhaps if the cry had been "Shark here!" the response would have been to paddle in the opposite direction.

Yes, Trobriand fishing fitted the model. But I couldn't help wondering at the time what Malinowski and the behaviorists would make of the behavior of the fishermen after they returned to the island, when they had a feast and later sat around the fire and told stories. Try to draw a picture with arrows of a storyteller spinning a long tale about long-past or imaginary events and forty islanders listening to him and taking it all in.

Something was wrong. Something in fact usually went wrong with the behaviorist S-R model whenever it was applied to a characteristically symbolic transaction, telling a story and listening to a story, looking at a painting and understanding it, a father pointing at a ball and naming it for his child, a poet hitting on a superb metaphor and the reader "getting" it with that old authentic thrill Barfield speaks of. In order to be fitted to such events, the S-R model had to be distorted, yanked, stretched, added onto, and in general rendered unrecognizable. The behaviorists in fact seemed more anxious to fit the model to the phenomenon than to take a good look at the phenomenon.

When a model ceases to illumine and order or even to fit the case, and when the time comes that you're spending more time tinkering with the model to make it work than taking a good hard look at the happening, it's time to look for another model.

Clearly something is wrong with the behaviorist model when it is applied to symbolic phenomena. To be blunt about it, it doesn't work. No matter how much it is tinkered with, no matter how many little *s*'s and *r*'s, "intervening variables," are added, it still doesn't work. Not only does it fail to account for a particular symbolic transaction, it has been conspicuous by its uselessness in the face of those very features of language that set it apart from animal behavior: (1) the productivity of language, the fact that a child, after two or three years' exposure to a language and without anyone taking much trouble about it, can utter and understand an unlimited number of new sentences in the language; (2) an explanation of names; (3) an account of sentences.

The other great tradition by which man has sought to understand his own peculiar traffic in words and symbols runs from Plato through Kant to Ernst Cassirer. Here the starting point is not the "real" objective world out there with its sticks and stones, plants and bugs, amoebae shrinking, dogs salivating, Trobriand Islanders fishing—all these items and many more out there, and out there too perhaps the oddest lot of all, a group of scientists looking at these happenings and trying to explain them to each other. No, the emphasis is rather on the mind, the idea, the word, the self-

generated symbol, the interior picture, the transcendental form which we make and by which we not only understand the world but construe it, even constitute it. To make a long story much too short, and so to make as quick as possible an end to the longest and most boring argument in philosophy, it is not really the world which is known but the idea or symbol which becomes the all-construing form, while that which it symbolizes, the great wide world, gradually vanishes into Kant's unknowable noumenon.

At any rate Cassirer did indeed give the symbol the full weight and primacy I thought it deserved, but in so doing he seemed to have fallen victim to the old interior itch of German philosophers and let the world slip away.

How to account in this tradition for the unending sweat and toil and mistakes and wrong guesses and quarrels and finally triumphs of scientists who go to so much trouble to get at the truth, or at least the hows and whys, of what is going on out there?

American behaviorists kept solid hold on the world of things and creatures, yet couldn't fit the symbol into it.

German idealists kept the word as internal form, logos, and let the world get away. From Kant to Cassirer, man became ever more securely locked up inside his own head. Even outside happenings seemed to be ordered by the interior forms of the mind. All questions could be given inside answers—except the kind of awkward questions children ask: Yes, but how does it happen that you can talk and I can understand you? Or, how does it happen that you can write a book and I can read it? Or, if the world is really unknowable, why do scientists act as if there were something out there to be known and as if they could even get at the truth of the way things are?

Accordingly, I was sitting at my desk in Louisiana on a summer day in the 1950's wondering whether this split in human knowing was not in the very nature of things and whether, also, that peculiar and most human of all phenomenon, language, did not fall between the two, and was not somehow unapproachable from either, a forbidden island, a terra incognita.

My instincts, I confess, were on the side of the scientists in gen-

eral and in particular on the side of the hardheaded empiricism of American behavioral scientists. The entire spectacular history of modern science seemed to bear out their unspoken assumption that there was indeed something to be known out there and it was worth the effort to try to find out what it was.

Yet the natural scientists, with all their understanding of interactions, energy exchanges, stimuli, and responses, could not seem to utter a single word about what men did and what they themselves were doing: observing and recording, telling and listening, uttering sentences and hearing sentences, writing papers and reading papers, delivering lectures, listening to the six o'clock news, writing a letter to one's daughter in college.

Was it possible, I wondered, to preserve the objective stance of the psychologist, which always seemed so right and valuable to me, which assumes there are real things and events happening, and to make some sense out of what happens when people talk and other people listen and understand or misunderstand? Maybe it wasn't possible, to judge from the spectacular default of the behaviorists when confronted by language as behavior. Not since Noam Chomsky wrote his famous review of Skinner's *Verbal Behavior* has it been possible to take seriously the application to language of the old stimulus-response theory, however refined and modified it might be.

Sitting there in Louisiana, I was thinking about these things. Then I began thinking about what happened between Helen Keller and Miss Sullivan in Tuscumbia, Alabama, on another summer morning in 1887. You recall the story. The heart of it is in three short paragraphs. Earlier, Helen had learned to respond like any other good animal: When she wanted a piece of cake, she spelled the word in Miss Sullivan's hand and Miss Sullivan fetched her the cake (like the chimp Washoe, who gives hand signals: tickle, banana, etc.). Then Miss Sullivan took her for a walk.

We walked down the path to the well-house, attracted by the fragrance of the honeysuckle with which it was covered. Someone was drawing water and my teacher placed my hand under the spout. As the cool stream gushed over one hand, she spelled into the other the word

water, first slowly then rapidly. I stood still, my whole attention fixed upon the motion of her fingers. Suddenly I felt a misty consciousness as of something forgotten—a thrill of returning thought; and somehow the mystery of language was revealed to me. I knew then that “w-a-t-e-r” meant the wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free! There were barriers still, it is true, but barriers that could in time be swept away.

I left the well-house eager to learn. Everything had a name, and each name gave birth to a new thought. As we returned to the house every object which I touched seemed to quiver with life. That was because I saw everything with the strange, new sight that had come to me. On entering the door I remembered the doll I had broken. [She had earlier destroyed the doll in a fit of temper.] I felt my way to the hearth and picked up the pieces. I tried vainly to put them together. Then my eyes filled with tears; for I realized what I had done, and for the first time I felt repentance and sorrow.

I learned a great many new words that day. I do not remember what they all were; but I do know that *mother*, *father*, *sister*, *teacher* were among them—words that were to make the world blossom for me, “like Aaron’s rod with flowers.” It would have been difficult to find a happier child than I was as I lay in my crib at the close of that eventful day and lived over the joys it had brought me, and for the first time longed for a new day to come.

If there was a bifurcation in our knowledge of ourselves and our peculiar and most characteristically human activity, with a terra incognita in between concealing the mystery, surely I was straddling it and looking straight down at it. Here in the well-house in Tusculumbia in a small space and a short time, something extremely important and mysterious had happened. Eight-year-old Helen made her breakthrough from the good responding animal which behaviorists study so successfully to the strange name-giving and sentence-uttering creature who begins by naming shoes and ships and sealing wax, and later tells jokes, curses, reads the paper, writes *La sua volontade e nostra pace*, or becomes a Hegel and composes an entire system of philosophy.

For a long time I had believed and I still believe that if one had an inkling of what happened in the well-house in Alabama in the space of a few minutes, one would know more about the *phenome-*

non of language and about man himself than is contained in all the works of behaviorists, linguists, and German philosophers.

What did happen?

Once again, as I had done many times before and as my hard-headed professor had taught me, I began drawing diagrams, behaviorist models, showing the usual arrows. After all the arrows *were* there: Miss Sullivan traced certain sensory patterns in Helen's hand, which were then coded by the touch receptors in the skin and transmitted by afferent nerves to the sensory cortex, the gray matter of the brain. And, at least in the incident with the cake, once Helen received a "word" which she had learned to associate with a certain pleasant consequence, other arrows could be drawn showing that Helen's attention and behavior were directed to the fetching and eating of the cake. Then did something of the sort happen in the well-house? Begin then with this diagram:

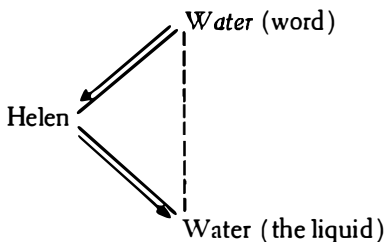


Figure 1

Now I had something very close to Ogden and Richards's triangle. The arrows showed "real causal" relations between the word *water* spelled in Helen's hand and Helen's brain, and between the brain event which issues in Helen's attention being directed toward the "referent," the water flowing over her other hand.

What about the relation between the word *water* and the water itself? There is no "real causal" relation but only the relation of naming which Miss Sullivan teaches Helen to "impute" between the two. So, if we want to follow Ogden and Richards, we can draw

a dotted line between the word *water* and the water and call it an “unreal imputed relation.”

But wait. Something was very wrong. For one thing, I felt like handing a piece of chalk to Professors Ogden and Richards, inviting them to the blackboard, and making a polite request: Would you mind drawing me a picture of an “unreal imputed relation”? What does the dotted line mean?

For another thing, it wasn't the case that Helen had received the word *water*, which had then directed her attention or behavior toward the water. That wasn't what happened. What happened was that she received *both*, both the sensory message from the hand Miss Sullivan was spelling in and that from the other hand, which the water was flowing over. The direction of one arrow should be reversed, as in Figure 2.

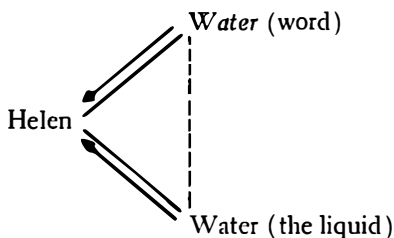


Figure 2

Then what happened inside Helen's head? Clearly, even if I were a neuroanatomist I would hardly be in a position to say, because for one thing not even a neuroanatomist can look. But I was asking myself, rather, what sort of thing happened? The old model had broken down. I needed a new one, however crude. After all, modern medicine began with Harvey making the crudest sort of guess about the heart and the blood: Maybe the latter works like a unidirectional pump and the blood goes round and round.

Accordingly, I kept thinking about Helen's breakthrough and drew dozens of diagrams, triangles, arrows, dotted lines, nerve nets linking portions of the sensory cortex.

Unquestionably Helen's breakthrough was critical and went to the very heart of the terra incognita. Before, Helen had behaved like a good responding organism. Afterward, she acted like a rejoicing symbol-mongering human. Before, she was little more than an animal. Afterward, she became wholly human. Within the few minutes of the breakthrough and the several hours of exploiting it Helen had concentrated the months of the naming phase that most children go through somewhere around their second birthday.

It was like holding a test tube of pure uranium which had been smelted from thousands of tons of ore-bearing rock. I was looking straight at it, but what to make of it?

Not only that, not only did Helen's experience distill the essence of the two-year-old's language learning, but also—and this was enough to quicken your pulse and keep you drawing diagrams by the hour—if the biologist's motto were true and ontogeny does recapitulate phylogeny, then Helen's breakthrough must bear some relation to the breakthrough of the species itself, at that faraway time when our ancestor, having harnessed fire, for the first time found himself seated by the flickering embers, looking into the eyes of his comrades and thinking (not really thinking, of course) about the vivid events of the day's hunt and "knowing" that the others must be "thinking" about the same thing: One of them tries to recapture it, to savor it, and so repeats the crude hunting cry meaning *Bison here!*; another, hearing it, knows somehow that the one doesn't mean *get up and hunt now* or do this or do anything, but means something else, means *Remember him, remember the bison*, and as the other waits and sees it, sees the bison, savors the seeing it, something happens, a spark jumps . . .

What happened?

The arrows tell part of the story but not the breakthrough. What seems to have lain at the heart of the breakthrough, what in fact *was* the breakthrough, was the fact that somehow the old arrow route, the six-billion-year-old chain of causal relations, the energy exchanges which had held good from the earliest collision of hydrogen atoms to the responses of amoeba and dogs and chimps, that ancient circuit of causes, my troop of arrows, had been short-circuited.

Then it was that I made my own Helen Keller breakthrough, a "discovery" which I was later to learn that Charles Peirce had hit on a hundred years earlier and from a different direction and to which no one had paid much attention, not even Peirce's greatest admirers. Peirce's "triad" or "thirdness" was rather part and parcel of a heavy metaphysic and so could hardly be seen as something that happened among persons, words, and things.

What dawned on me was that what happened between Helen and Miss Sullivan and water and the word was "real" enough all right, no matter what Ogden and Richards said, as real as any S-R sequence, as real as H_2SO_4 reacting to $NaOH$, but that *what happened could not be drawn with arrows*.

In short, it could not be set forth as a series of energy exchanges or causal relations.

It was something new under the sun, evolutionarily speaking.

It was a natural phenomenon but a nonlinear and nonenergetic one.*

15

A NONLINEAR NONENERGIC
NATURAL PHENOMENON
*(that is to say, a natural
phenomenon in which energy exchanges
account for some but not all
of what happens)*

If the event which occurred in the well-house in Tuscumbia in 1887 was not primarily a linear energy exchange, what was it?

I stopped drawing arrows and saw that I had a triangle (Figure 3).

* I am aware of course that other phenomena can be described in a sense as nonlinear, e.g., action of a force field, gestalt perception, transactions in a neural net, etc. Yet these events lend themselves to formulation by equation and to explanatory models which discern this or that causal or statistical relationship within a structure.

The utterance or understanding of a sentence does not so lend itself.

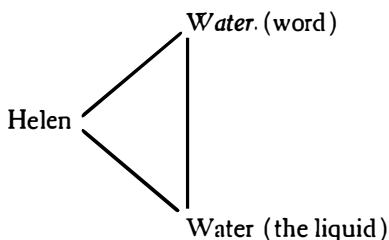


Figure 3

Undoubtedly there were three elements somehow involved in the event—Helen, the water, and the word *water*. But how? What was the base of the triangle? What is the nature of the mysterious event in which one perceives that *this* (stuff) “is” *water*? What is the natural phenomenon signified by the simplest yet most opaque of all symbols, the little copula “is”?

My breakthrough was the sudden inkling that the triangle was absolutely irreducible. Here indeed was nothing less, I suspected, than the ultimate and elemental unit not only of language but of the very condition of the awakening of human intelligence and consciousness.

What to call it? “Triad”? “Triangle”? “Thirdness”? Perhaps “Delta phenomenon,” the Greek letter Δ signifying irreducibility.

Alpha was the beginning, omega will be the end, but somewhere in between, some five billion years after alpha, and x years before omega, there first occurred delta, Δ .

The Delta phenomenon lies at the heart of every event that has ever occurred in which a sentence is uttered or understood, a name is given or received, a painting painted and viewed.

What Helen had discovered, broken through to, was the Delta phenomenon.

I sat there looking at this queer triangle, drawing it over and over again (Figure 4). Even though I did not have the words to name it or think about it, I suspected that Delta Δ might somehow prove to be the key, not perhaps for unlocking the mysteries of language and the human condition, but at least for opening a new way of thinking about them.

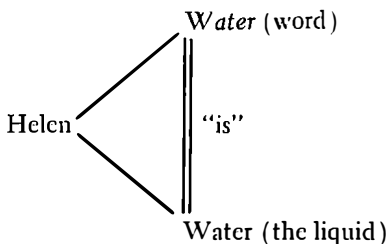


Figure 4

Using the concept of the Delta phenomenon, mightn't one set out to understand man as the languaged animal? Mightn't one even begin to understand the manifold woes, predicaments, and estrangements of man—and the delights and savorings and home-comings—as nothing more nor less than the variables of the Delta phenomenon, just as responses, reinforcements, rewards, and such are the variables of stimulus-response phenomena?

Mightn't one even speak of such a thing as the Helen Keller phenomenon, which everyone experiences at the oddest and most unlikely times? Prince Andrei lying wounded on the field of Borodino and discovering clouds for the first time. Or the Larchmont commuter whose heart attack allows him to see his own hand for the first time.

Or the reverse Helen Keller phenomenon: the couple who build the perfect house with the perfect view in the perfect neighborhood and who after living in the house five years can't stand the house or the view or each other.

Accordingly, I was wondering in Louisiana in the 1950's: Is it possible that Delta Δ might provide the key to understanding not only what happened to Helen in the well-house but also how Americans who have everything are bored and French existentialists who write about boredom and despair are happy?

What did I have to lose? The conventional wisdom was a mish-mash: man set forth as "organism in an environment" but man also and somehow, though God alone knew how, set forth as repository of democratic and Judeo-Christian "values."

Delta Δ might be the new key, but it itself was a mystery. It de-

scribed a kind of event, a natural phenomenon, yet something new under the sun. And recent. Life has existed on the earth for perhaps three billion years, yet Delta Δ could not be more than a million years old, no older certainly than *Homo erectus* and perhaps a good deal more recent, as late as the time of *Homo neanderthalensis*, when man underwent an astonishing evolutionary explosion which in the scale of earth time was as sudden as biblical creation. Was not in fact the sudden 54 per cent increase in brain size not the cause but the consequence of the true urphenomenon, the jumped circuit by which Delta Δ first appeared? The spark jumped, language was born, the brain flowered with words, and man became man.

At any rate the Alabama well-house was the place to set out from.

If one could ever fathom what happened when Helen knew that water "was" *water*, one might begin to understand a great many other things, perhaps even why people get bored in Short Hills and move to the Gulf Coast to enjoy hurricanes.

The Strangeness of Delta

The longer one thought about the irreducible triangle and its elements and relations, the queerer they got.

Compare Delta Δ phenomenon with the pseudo triangle of Ogden and Richards: buzzer \rightarrow dog \rightarrow food. The latter is a pseudo triangle because one needn't think of it as a triangle at all but can conceive the event quite easily as a series of energy exchanges beginning with buzzer and ending in the dog's salivation and approaching food.

But consider the Delta phenomenon in its simplest form. A boy has just come into the naming stage of language acquisition and one day points to a balloon and looks questioningly at his father. The father says, "That's a balloon," or perhaps just, "Balloon."

Here the Delta phenomenon is as simple as Helen's breakthrough in the well-house, the main difference being that the boy is stretching out over months what Helen took by storm in a few hours.

But consider.

Unlike the buzzer-dog-salivation sequence, one runs immediately into difficulty when one tries to locate and specify the Delta elements—balloon (thing), *balloon* (word), boy (organism).

In a word, my next discovery was bad news. It was the discovery of three mystifying negatives. In the Delta phenomenon it seems: The balloon is not the balloon out there. The word *balloon* is not the sound in the air. The boy is not the organism boy.

For example: Where, what is the word *balloon*? Show me the word *balloon* as I can show you the sound of the buzzer. Unlike the dog “understanding” the sound of the buzzer to “mean” food, the boy does not understand the particular sound *balloon*—which his father makes and which enters his ear—to mean the balloon. For it is precisely the nature of the boy’s breakthrough that he understands his father’s utterance as a particular instance of the word *balloon*. Where is the word itself? Is it the little marks in the dictionary which you point to when I ask you to show me the word *balloon*?

Charles Peirce said the word *balloon* is not a concrete thing at all but a general one, a law.

What about the balloon itself? Cannot one at least say that what the boy is pointing to and “means” is that particular round red rubbery inflated object?

No.

It is precisely the nature of the boy’s breakthrough that the object he points to is understood by him as a member of a class of inflated objects. A few minutes later he might well point to a blue sausage-shaped inflated object and say, “Balloon.”

What about the boy himself? Can he not be understood, as the dog is understood, as the organism within whose neurons and molecules certain interactions occur which lead to his uttering and understanding the name?

No.

For it is not the case of the boy being the site where certain interactions and energy exchanges take place, arrows flying along neurons and jumping synapses. Something else happens. However many arrows fly along the boy’s neurons (and they do), he does

something else. He couples *balloon* with balloon. But who, what couples? Who, what is the coupler? Do you mean some part of his brain does the coupling? I could not say whether it is his brain which couples, his "mind," his "self," his "I." All one can say for certain is that if two things which are otherwise unconnected are coupled, there must be a coupler.

Then what can one say for sure about the three elements of the Delta phenomenon?

Only this: The boy in Delta is not the organism boy. The balloon in Delta is not the balloon in the world. The *balloon* in Delta is not the sound *balloon*.

An unpromising beginning.

Indeed there was not much to be said for my own Helen-Keller breakthrough (was this the nature of the beast too, that it couldn't be said?) and very little to be sure of. Only this: the Delta phenomenon yielded a new world and maybe a new way of getting at it. It was not the world of organisms and environments but just as real and twice as human.

Would it be possible, I was wondering then in Louisiana, to use the new key to open a new door and see in a new way? See man not the less mysterious but of a piece, maybe even whole, a whole creature put together again after the three-hundred-year-old Cartesian split that sundered man from himself in the old modern age, when man was seen as a "mind" somehow inhabiting a "body," neither knowing what one had to do with the other, a lonesome ghost in an abused machine?

Perhaps it was not a case of exorcising the ghost, as the scientists wanted to do, but of discovering a creature who was neither ghost nor machine.

These hopes have not of course been realized.

What follows here is only a very tentative exploration of the terra incognita, an edging into it from its opposite sides.

From one side, the far side, set out with man's breakthrough—with Helen Keller or with species man perhaps in the cave in the Neander valley a hundred thousand years ago or with any man two years old.

What does it mean for a good organism to break through into the daylight of language?

Set out from the other side, this side, the near side, with the full-blown woes, estrangements, and peculiar upside-down delights and miseries of the late twentieth century.

Two unique happenings: man learning to speak and man behaving as he does now.

Does one have anything to do with the other?

Is the organism who breaks into Delta daylight and learns to speak also and for this very reason the same creature who feels bad in Short Hills when he should feel good and feels good in hurricanes when he should feel bad?

Is there any other way to understand why people feel so bad in the twentieth century and writers feel so good writing about people feeling bad than in terms of the peculiar parameters, the joys and sorrows of symbol-mongering?

There is a difference between the way things are and saying the way things are.

Here, in what follows, only a few trails will be blazed into this dark forest, my only tool the Delta Δ blade of the symbolic breakthrough, Helen's magic Excalibur which she found in Alabama water.

In the beginning was alpha, the end is omega, but somewhere in between came Delta, man himself. Man became man by breaking into the daylight of language—whether by good fortune or bad fortune, whether by pure chance, the spark jumping the gap because the gap was narrow enough, or by the touch of God, it is not for me to say here.

But it happened, and to this day man knows less about what happened than he knows about the back side of the moon.

BIBLIOGRAPHY

- Anderson, James F. *The Bond of Being*. St. Louis: Herder, 1954.
- Bernard, L. L. "Social Psychology." In *Encyclopedia of the Social Sciences*. New York: Macmillan, 1934.
- Bidney, David. *Theoretical Anthropology*. New York: Schocken, 1967.
- Binswanger, Ludwig. "The Existential Analysis School of Thought." In *Existence*, edited by Rollo May, Ernest Angel, and Henri F. Ellenberger. New York: Basic Books, 1958.
- Bloomfield, Leonard. "Linguistic Aspects of Science." In *International Encyclopedia of Unified Science*. Chicago: University of Chicago Press, 1935.
- Boas, Franz. *Race, Language and Culture*. New York: Free Press, 1966.
- Bowlby, John. "Critical Phases in the Development of Social Responses in Man." *New Biology*, vol. 14, Baltimore: Penguin Books, 1953.
- Braine, Martin. "The Ontogeny of English Phrase Structure." *Language*, vol. 39, 1963.
- Braithwaite, Richard B. *Scientific Explanation*. Cambridge: Cambridge University Press, 1953.
- Bridgman, P. W. *The Nature of Physical Knowledge*. New York: Marquette, 1936.
- Brown, Roger, and Bellugi, Urdula. "Three Processes in the Child's Acquisition of Syntax." In *New Directions in the Study of Language*, edited by Eric H. Lenneberg. Cambridge, Mass.: MIT Press, 1964.
- Brunswik, Egon. "The Conceptual Framework of Psychology." *International Encyclopedia of Unified Science*.
- Buber, Martin. "Distance and Relation." William Alanson White Memorial Lectures, 4th series. *Psychiatry*, vol. 20, 1957.
- Carnap, Rudolf. "Formal and Factual Science." In *Readings in the Philosophy of Science*. New York: Appleton-Century-Crofts, 1953.
- . *Introduction to Semantics*. Cambridge, Mass.: Harvard University Press, 1948.

- . *Logical Syntax of Language*. New York: Humanities Press, 1964.
- Carroll, John B. *The Study of Language*. Cambridge, Mass.: Harvard University Press, 1955.
- , ed. *Language, Thought, and Reality*. New York: John Wiley, 1956.
- Cassirer, Ernst. *Essay on Man*. New Haven: Yale University Press, 1944.
- . *The Philosophy of Symbolic Forms*. New Haven: Yale University Press, 1955.
- . *Substance and Function*. New York: Dover, 1953.
- Chafe, Wallace L. "Language as Symbolization." *Language*, vol. 43, 1967.
- Chase, Stuart. *The Tyranny of Words*. New York: Harcourt Brace.
- Cherry, Colin. *On Human Communication*. New York: John Wiley, 1957.
- Chomsky, Noam. *Aspects in the Theory of Syntax*. Cambridge, Mass.: MIT Press, 1965.
- . *Cartesian Linguistics*. New York: Harper and Row, 1966.
- . "Current Issues in Linguistic Theory." *The Structure of Language*, edited by Ferry A. Fodor and Jerrold J. Katz. Englewood Cliffs, N.J.: Prentice-Hall, 1964.
- . "Explanatory Models in Linguistics." *Logic, Methodology and Philosophy of Science*, edited by E. Nagel, P. Suppes, and A. Tarski. Stanford, Calif.: Stanford University Press, 1962.
- . *Language and Mind*. New York: Harcourt Brace, 1968.
- . "Review of B. F. Skinner's *Verbal Behavior*." *Language*, vol. 35, 1959.
- Collins, James. *The Existentialists*. Chicago: Henry Regnery, 1952.
- Cornforth, Maurice. "Logical Empiricism." In *Philosophy for the Future*. New York: Macmillan, 1949.
- Crockett, Campbell. "The Short and Puzzling Life of Logical Positivism." *The Modern Schoolman*, vol. 31, January 1954.
- Dawson, Christopher. "Sociology as a Science." *Cross Currents*, vol. 4, 1954.
- Dewey, John. *Quest for Certainty*. New York: Putnam, 1960.
- . *Reconstruction in Philosophy*. New York: Beacon Press, 1920.
- Einstein, Albert. *Essays in Science*. New York: Philosophical Library, 1934.
- Ervin, Susan M. "Imitation and Structural Change in Children's Language." *New Directions in the Study of Language*.
- Farber, Leslie H. "Martin Buber and Psychiatry." *Psychiatry*, vol. 19, 1956.
- Feigl, Herbert, and Brodbeck, May, eds. *Readings in the Philosophy of Science*. New York: Appleton-Century-Crofts, 1953.

- Friend, J. W., and Feibleman, J. *What Science Really Means*. London: Allen and Unwin, 1937.
- Geschwind, Norman. "Disconnection Syndromes in Animals and Man." *Brain*, vol. 88, 1965.
- Grinker, Roy R., ed. *Toward a Unified Theory of Human Behavior*. New York: Basic Books, 1959.
- Harris, Zellig S. "Discourse Analysis." *Language*, vol. 28, 1952.
- . *Structural Linguistics*. Chicago: University of Chicago Press, 1951.
- Herskovits, Melville. *Man and His Works*. New York: Knopf, 1948.
- Hocking, William E. "Marcel and the Ground Issues of Metaphysics." *Philosophy and Phenomenological Research*, June 1954.
- Hoijer, Harry, ed. *Language in Culture*. Chicago: University of Chicago, 1954.
- Jaffe, Joseph. "Language of the Dyad." *Psychiatry*, vol. 21, 1958.
- Jung, Carl G. *Psychology and Religion*. New Haven: Yale University Press, 1938.
- Kant, Immanuel. *Critique of Pure Reason*. New York: Dutton, 1934.
- Katz, Jerrold J. *The Philosophy of Language*. New York: Harper, 1966.
- Keller, Helen. *The Story of My Life*. New York: Doubleday, 1954.
- Kierkegaard, Søren. *Philosophical Fragments*. Princeton, N.J.: Princeton University Press, 1952.
- . *The Present Age*. Princeton, N.J.: Princeton University Press, 1949.
- Klubertanz, G. P. "The Psychologists and the Nature of Man." *The Nature of Man*. American Catholic Philosophical Association, 1951.
- Korzybski, Alfred. *Science and Sanity*. New York: Country Life Press, 1950.
- Kroeber, A. L. *Anthropology*. New York: Harcourt Brace, 1948.
- Langer, Susanne. *Feeling and Form*. New York: Scribner's, 1953.
- . *Introduction to Symbolic Logic*, 3rd ed. New York: Dover, 1953.
- . *Philosophy in a New Key*, 3rd ed. Cambridge, Mass.: Harvard University Press, 1957.
- Lévi-Strauss, Claude. *Structural Anthropology*. Garden City, N.Y.: Doubleday, 1967.
- Lévy-Bruhl, L. *How Natives Think*. New York: Knopf, 1926.
- Linski, L., ed. *Semantics and the Philosophy of Language*. Urbana: University of Illinois Press, 1952.
- Linton, Ralph. *The Tree of Culture*. New York: Knopf, 1955.
- Mainx, F. "Ways of Work in Biology." *International Encyclopedia of Unified Science*.
- Malinowski, Bronislaw. *The Dynamics of Culture Change*. New Haven: Yale University Press, 1945.
- Mandelbaum, David G., ed. "Selected Writings of Edward Sapir." In

- Language, Culture and Personality*. Berkeley: University of California Press, 1951.
- Marcel, Gabriel. *Being and Having*. Boston: Beacon Press, 1951.
- . *The Mystery of Being*. Chicago: Henry Regnery, 1951.
- Maritain, Jacques. *Art and Scholasticism*. New York: Scribner's, 1947.
- . *Creative Intuition in Art and Poetry*. New York: Pantheon, 1953.
- . *Ransoming the Time*. New York: Scribner's, 1948.
- May, Rollo; Angel, Ernest; and Ellenberger, Henri F., eds. *Existence*. New York: Basic Books, 1958.
- McQuown, Norman A. "The Cultural Content of Language Materials." In *Language in Culture*.
- Mead, George. *Mind, Self and Society*. Chicago: University of Chicago Press, 1952.
- Mehta, Ved. *John Is Easy to Please*. New York: Farrar, Straus and Giroux, 1971.
- Morris, Charles. "Foundations of the Theory of Signs." *International Encyclopedia of Unified Science*.
- . *Signs, Language and Behavior*. Englewood Cliffs, N.J.: Prentice-Hall, 1950.
- Mullahy, Patrick. "Philosophical Anthropology versus Empirical Science." *Psychiatry*, vol. 18, 1955.
- Murray, Henry A. "A Mythology for Grownups." *Saturday Review*, January 1960.
- Nagel, Ernest. "The Causal Character of Modern Physical Theory." *Readings in the Philosophy of Science*.
- . *Sovereign Reason*. Urbana, Ill.: University of Illinois Press, 1954.
- Ogden, C. K., and Richards, I. A. *The Meaning of Meaning*. New York: Harcourt Brace, 1953.
- Pap, A. "Does Science Have Metaphysical Presuppositions?" In *Readings in the Philosophy of Science*.
- Peirce, Charles S. *Collected Papers*. Cambridge, Mass.: Harvard University Press.
- . *Philosophical Writings*. New York: Dover, 1955.
- Reichenbach, Hans. *The Rise of Scientific Philosophy*. Los Angeles: University of California Press, 1951.
- Richards, Ivor A. *The Philosophy of Rhetoric*. Oxford: Oxford University Press, 1965.
- Rioch, David McK. "Psychiatry as a Biological Science." *Psychiatry*, vol. 18, 1955.
- Ruesch, Jurgen. "Psychiatry and the Challenge of Communication." *Psychiatry*, vol. 17, 1954.

- Russell, Bertrand. *An Inquiry into Meaning and Truth*. New York: Humanities Press, 1940.
- . *Our Knowledge of the External World*. New York: Humanities Press, 1961.
- Sapir, Edward. "Language." *Encyclopedia of the Social Sciences*.
- Sartre, Jean-Paul. *Being and Nothingness*. New York: Citadel Press, 1965.
- Schachtel, Ernest G. "The Development of Focal Attention and the Emergence of Reality." *Psychiatry*, vol. 17, 1954.
- . "On Memory and Childhood Amnesia." *Psychiatry*, vol. 10, 1947.
- Schutz, Alfred. "Concept and Theory Formation in the Social Sciences." *Journal of Philosophy*, vol. 51, 1954.
- Sellars, Roy Wood. "Materialism and Human Knowing." In *Philosophy for the Future*.
- Shannon, Claude E., and Weaver, Warren. *The Mathematical Theory of Communication*. Urbana, Ill.: University of Illinois Press, 1949.
- Smith, Frank, and Miller, George A. *The Genesis of Language*. Cambridge, Mass.: Harvard University Press, 1966.
- Steiner, George. *Extraterritorial*. New York: Atheneum, 1971.
- Strawson, P. F. "On Referring." In *Philosophy and Ordinary Language*, edited by Charles E. Caton. Urbana, Ill.: University of Illinois Press, 1963.
- Sullivan, Harry Stack. *The Interpersonal Theory of Psychiatry*. New York: Norton, 1968.
- Tarski, Alfred. "The Semantic Conception of Truth." *Philosophy and Phenomenological Research*, vol. 4, 1944.
- Veatch, Henry Babcock. *Intentional Logic*. New Haven: Yale University Press, 1952.
- Whitehead, Alfred North. *Science in the Modern World*. New York: Macmillan, 1950.
- Whorf, Benjamin Lee. "Language and Logic." In *Language, Thought, and Reality*.
- Wilhelmsen, Frederick D. "The Philosopher and the Myth." *The Modern Schoolman*, vol. 32, November 1954.
- Will, Otto A., and Cohen, Robert A. "Linguistic Transcription and Specification of Psychiatric Interview Materials." *Psychiatry*, vol. 20, 1957.
- Wilson, R. A. *The Miraculous Birth of Language*. New York: Philosophical Library, 1948.
- Zilsel, E. "Physics and the Problem of Historico-Sociological Laws." In *Readings in the Philosophy of Science*.