by Julian Silverman

When Schizophrenia Helps

THERE ARE FORMS of schizophrenic experience that can be positively and creatively constructive. Karl Menninger, in 1959, put it this way: "Some patients have a mental illness and then get well and then they get weller! I mean they get better than they ever were. . . . This is an extraordinary and little-realized truth."

A handful of psychiatrists have recognized the validity of this observation—Harry Stack Sullivan, John Perry, R. D. Laing and others. But most psychiatrists find it hard to regard the bizarre disorganization of schizophrenia as anything but ominous, and they see the crazy disturbances as behaviors to be done away with as quickly as possible. When this cannot be done, they prescribe huge doses of antipsychotic drugs.

But there is mounting evidence that some of the most profound schizophrenic disorganizations are preludes to impressive reorganization and personality growth—not so much breakdown as breakthrough. Kazimierz Dabrowski has called it "positive disintegration." It appears to be a natural reaction to severe stress, a spontaneous process into which persons may enter when their usual problem-solving techniques fail to solve such basic life crises as occupational or sexual inadequacy. If this natural process is interrupted by well-intended psychotherapy or by antipsychotic medication, the effect may be to detour the patient away from the acute schizophrenic episode, away from a process as natural and benign as fever. The effect can be disastrous—it can rob him of his natural problem-solving potential.

Make or Break. Anton Boisen was one of the first to recognize the potentially beneficial aspects of psychosis. Boisen was a psychologist and chaplain who went through several brief schizophrenic periods himself. Acute schizophrenic reactions, he wrote, are "not in themselves evils but problem-solving experiences. They are attempts at reorganization in which the entire personality, to its bottom-most depths, is aroused and its forces marshaled to meet the danger of personal failure and isolation. . . . The acute disturbances tend either to make or break. They may send the patient to the back wards, there to remain as a hopeless wreck, or they may send him back to the community in better shape than he had been for years."

As Boisen indicates, while some patients are likely to recover—even benefit—from their psychotic experiences, others may be severely disturbed for the rest of their lives. There has been extensive research in recent years concerning which patients are which; usually this has involved collecting a quantity of data about many schizophrenic patients, waiting to see which ones get better, then rechecking the data to see if the improved patients were in any way systematically different from the unimproved patients.

One of the most common findings is that the patient who improved had a sudden onset of symptoms; he typically went from a moderately effective lifestyle to severe psychosis in a period of perhaps a few days or weeks. Further, there was typically a precipitating event, some life-crisis that immediately preceded the break. On the other hand the schizophrenic who has been developing his symptoms over a period of years, gradually becoming more withdrawn and out of touch with reality, is more likely to remain in a disturbed condition for many years.

Death. There are other typical characteristics of the "problem-solving schizophrenic." A reaction to personal failure or guilt often starts with high anxiety as the patient searches for any possible way to repair his self-esteem. With increasing emotional turmoil, he takes a highly subjective orientation to the problem and becomes preoccupied, socially isolated and withdrawn. He feels despair and hopelessness. As Sullivan has noted, he may finally think "that he is dead, that this is the state after death; that he awaits resurrection or the salvation of his soul. Ancient myths of redemption and rebirth seem to appear." Ideas of death-rebirth, world catastrophe and cosmic importance are common.

The patient may regress to childish

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behavior. He may go so far as to simulate the womb by wrapping himself in wet sheets. He may become extremely withdrawn—not eating or drinking, not talking, not blowing his nose, staying in bed all day, perhaps with eyes and mouth tightly closed. He might rock back and forth with strange, rhythmic movements. Occasionally he may pass from his catatonic stupor into violent, random excitement. In this state he may hurt himself or others, but only by accident. He is not mad at anyone else. In fact, persistent outright aggression toward others is a bad sign. It is as if such a patient has aborted his schizophrenic trip, has taken the easy way out by blaming his troubles on someone else. Harry Stack Sullivan has vividly described the implications:

"This is an ominous development in that the schizophrenic state is taking on a paranoid coloring. If the suffering of the patient is markedly diminished thereby, we shall observe the evolution of a paranoid schizophrenic state. These conditions are of relatively much less favorable outcome. They tend to permanent distortions of the interpersonal relations. . . .

"A paranoid systematization is, therefore, markedly beneficial to the peace of mind of the person chiefly concerned, and its achievement in the course of a schizophrenic disorder is so great an improvement in security that it is seldom relinquished. . . . It is for this reason that the paranoid development in a schizophrenic state has to be regarded as of bad omen."

Interference. Phenothiazine drugs—especially chlorpromazine—have made it possible to control the most difficult, craziest patients. But in certain individuals these drugs may interfere with recovery. In a recent study, Drs. Michael Goldstein, Lewis Judd and their colleagues at U.C.L.A. tested schizophrenic patients who had shown reasonably good psychological adjustments before they were hospitalized. The acute nonparanoid schizophrenic patients treated with chlorpromazine actually showed increases in thought disorder over a three-week period, while a similar group of patients, on placebos, showed decreases in thought disorder during the same period. This relationship did not hold in patients with the paranoid type of schizophrenic reaction.

Tranquilizers seem to reduce regressed and agitated schizophrenic behavior, and most psychiatrists take this as evidence of improvement. Unfortunately, regressed and disorganized behavior may be essential parts of schizophrenia's problem-solving process.

Several research studies have shown that chlorpromazine reduces the clarity of ordinary experience, and it disrupts a person's abilities to see alternatives and solve problems. It is no wonder then that in schizophrenic reactions that are essentially problem-solving processes, the use of chlorpromazine can make the psychosis worse.

Light. This type of schizophrenic reaction bears an interesting relationship to the phenomenon of suicide. Suicide is also a radical response to a life-crisis situation. The suicidal person, unable to die the ritual death that the acute nonparanoid schizophrenic does, actually removes himself completely from this entrapment.

There is fascinating research that relates suicide to the autokinesis test in which one sits in a darkened room and looks at a small spot of stationary light several yards away. After a few minutes in darkness, most persons report that the light is moving erratically. One explanation of this effect is that in darkness, in the absence of external references, we respond more to internal cues. Our eyes normally have a slight vibrating movement that we never notice, but in the darkness we are aware of the movement and conclude that the spot of light is doing it. Harold Voth and his colleagues found that persons who later commit or attempt suicide tend to see the light as stationary. In part this is because they are unable to respond to inner cues—their attention is primarily outside, on the external world. Conflict is not experienced as occurring within oneself but rather outside—between oneself and others. Such individuals find it very difficult to escape into fantasy where they might consider alternative solutions. This reduces the options available for mastering personal distress.

The important point here is that while certain patients with nonparanoid schizophrenia see more autokinetic movement than normal persons do, paranoid schizophrenics are similar to suicidal groups in that they report relatively little movement. As we noted, it is the paranoid schizophrenic who has aborted the natural schizophrenic experience by directing his attention outward.

Trips. Research has indicated several similarities between the schizophrenia trip and the psychedelic-drug trip, with LSD for example. First of all such tranquilizers as chlorpromazine can make a

bad trip worse, possibly in the same way that they interrupt the schizophrenic process. The development of paranoid ideas in a person under LSD is also ominous; they take him away from the ideal subjective orientation to the drug experience. We have also found that persons on either kind of journey have a more undifferentiated perceptual orientation than normal persons. For example, they respond to distracting stimuli which causes them to perform poorly on reaction-time tasks and on complex perceptual tasks.

Further, acute schizophrenics and persons under the influence of psychedelic drugs are highly sensitive to stimuli. Sights and sounds are experienced as brilliant, intense, alive, rich, compelling. This acute sensitivity of schizophrenia has gone unnoticed until recently because it is very hard to test. Schizophrenics do not respond well to complex directions; they are flooded by so many stimuli, and so easily distracted by minor sights and noises, that on many sensitivity tests ("press this button when you see the light") they appear unable to perceive stimuli as well as normal persons can.

Only in recent studies have we learned that certain schizophrenics can detect lights and sounds that are too weak for normal persons to sense. We are beginning to accumulate evidence that supports the acute schizophrenic's description of his overaroused world. He is overwhelmed by stimulation. He has difficulty in focusing attention for very long. While he is expressing an idea, a whole series of complicating ideas may come to his mind. He may be blocked in the act of speaking, or may give up the struggle and go mute.

Apparently the mechanism that filters out nonessential stimuli for the rest of us—the humming of the refrigerator, the rustling of the leaves—has ceased to function in the acute schizophrenic. In this distressed individual, who is groping for any possible answer to a life-crisis dilemma, heightened awareness may allow him to see alternative perspectives for making sense out of the life-crisis situation.

Inside. In the highly aroused state the schizophrenic may become aware of thoughts, images and feelings that would ordinarily be beyond the scope of consciousness. Internal events and ideas may be experienced as vividly as if they were real.

With continued overstimulation, inhibition is built up against very strong stimuli. The individual may now be able to tolerate intense pain; he may not show a startle response to very loud sounds. This paradoxical situation of sharpened sensitivity to weak stimuli and reduced responsiveness to strong stimuli has also been reported in subjects on LSD.

Looked at in this perspective, the familiar symptoms of early schizophrenia—distractability, thought-blocking, withdrawal, loss of spontaneity in movement and speech—all may be understood as defensive reactions to overstimulation.

Some studies show that an acute schizophrenic may improve temporarily after being placed in a dark, soundproofed room. Apparently the brief interlude of semirelief from overstimulation allows him to drop some of his automatically defensive reactions to overstimulation, at least for a while.

Rites. Cross-cultural research has reinforced the impression that the schizophrenic process is a universal one. There is a striking similarity between what we call schizophrenia and the behaviors observed in socially accepted initiation rites in some other cultures.

These transition ordeals clearly imply a ritual death followed by resurrection or a new birth—an image that closely parallels the death-rebirth experience that is so common in the schizophrenic reaction of Western culture. In some societies persons may become esteemed spiritual leaders or shamans after being possessed by religious experiences in which they explore the inner world.

In a survey of many such cases I found that these persons were often reported to be hypersensitive before their experiences and had unsolved or traumatic problems that aroused strong emotional reactions. Often they had felt personally inadequate and had built defensive barriers that protected them from intimate contact with others.

Many religious figures—St. Paul, St. Theresa and George Fox, the founder of the Quakers, for example—have gone through experiences that today would be regarded as full-blown psychoses. But since their personal disharmonies resonated with the society's disharmonies at that time, the individuals were valued for their special insights.

Initiation. In many non-Western cultures the psychoticlike transition ordeal is accepted—there is no social stigma for the initiate. In our culture, however, the schizophrenic must make his fantastic voyage alone, ashamed, in the hands of hospital-ward personnel whose purpose is to interrupt his schizophrenic trip.

In tribal cultures the initiatory experience is guided by an old leader, a spiritual master or a guru. But in our culture we have certified doctors whose job all too often is to abort the schizophrenic process by powerful chemicals or any other means necessary.

At Agnews State Hospital in San Jose, California I am working with other mental-health professionals who agree that this type of schizophrenic reaction should be encouraged and supported. With systematic clinical tests, electrophysiological measures and computer techniques we are attempting to identify those individuals who are on the schizophrenic trip. We are withholding antipsychotic medication from patients who ordinarily would be heavily drugged.

Empathy. A primary concern at our center is the attitude and orientation of the staff. Nurses, attendants and doctors are trained to encourage and support the acute schizophrenic episode; they are learning to understand deep regressive states and to live with their own fears and fantasies about madness. In collaboration with Richard Price, Vice President of the Esalen Institute at Big Sur, and the Esalen staff, our staff members participate in intensive group-work sessions that focus on awareness of their own feelings and openness to the feelings of others.

We have even begun extensive psychophysical and personality testing of ourselves to see which type of therapist has the most success with schizophrenic patients. And, of course, we are doing comparison studies to see if our program is more effective than traditional treatments in helping patients and returning them to the community. Our basic hypothesis is that the organism's wisdom is greater than our limited intellectual appreciation of it. The daemonic symptoms may, like fever, be benign responses to the deeper trials of life that the patient may never solve if the therapist encourages escape or drugs him into a permanent state of psychic helplessness.

It may be that one day acute schizophrenics of certain types will not go to hospitals but will go instead to asylums or sanctuaries to grapple with their otherwise unsolvable life-crisis problems. One hopes that in this kind of environment the schizophrenic patient who emerges "weller than before" will be more the rule than the exception.

long to grasshoppers but to dogs run over in the early morning, railroad men who lived next door, and skinny bodies with polio. Grasshoppers did not die, they simply fell from view, replaced by the next one that was livelier. And though they lived with us, they were not domestic animals. Neighbors did not rush into the lot crying anything like, "Leave that goddam cat alone!" So we were able to put in long hours. No one ever complained about the sun. No one ever tried to replace an appendage, to put a leg back into its hole. . . . Hobbies of such classical proportions do not come along every day, and since the passing of the grasshopper I have been largely empty-handed.

"In the dawning of the Age of Aquarius," says **Julian Silverman** (page 62), "the task for the behavioral scientist is to construct a definition of man which more fully appreciates his irrational nature. Dichotomies such as mind-body or well-sick have outlived their usefulness."

Silverman, who is 37, received a Ph.D. in psychology in 1962 from the University of Michigan. As research specialist with the California Department of Mental Hygiene, he has helped develop a new research project at Agnews State Hospital in San Jose, California. He is working on neurophysiological laboratory techniques for identifying schizophrenic reactions that are likely to be integrating and beneficial. Patients are supported in their regressive psychotic states, and half of them receive no anti-psychotic medication.

Silverman, who is Research Director of the Esalen Institute, has published many research and theoretical papers that deal with altered states of consciousness and with the physiological aspects of subjective experience. Silverman wrote his article while integrating his past and present research into his forthcoming book, *The Value of Psychotic Experience,* to be published by Science and Behavior Books, Inc.

Input *(Continued from page 4.)*

divided only on how much each of the two contributes in particular cases. The insight "both the genetic background and the environment in which those genes grow must be considered *jointly*" (italics by the authors) seems to be an argument of yesterday. The authors seem to be responding to Seneca's (1-64 A.D.) opinion that all useful behavior in animals is innate, rather than to contemporary behaviorists. 3) There is an inconsistency. On page 66 we read "rat-reared animals were capable of fighting." Page 67 then tells us "when mice are reared by rat-mothers the species-specific aggressive behavior pattern is eliminated" (incidentally, there is not one but a number of behavior patterns). The last paragraph finally says "we may definitely conclude that species-specific behavior patterns . . . can be modified dramatically by appropriate social experience in early life."

I still would like to know what the authors considered to be present, what to be modified, and what to be eliminated. Does rat-rearing merely raise the threshold for fighting? Do rat-reared mice fight rats (change of addressee of aggression due to early experience)? Clear answers to these questions are the crux of the matter.

Dr. D. Müller-Schwarze
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☐ Richelle's "Biological Clocks" [May] is most interesting, but an appreciation of some of the anthropological work by Paul Bohannon, Edmund R. Leach, and R. I. Pocock might have been useful.

I suppose it would have been either too facile or too trendy to have substituted the "clocked rat" illustration on Page 34 for an equally crucified figure of an urban human (take your choice, male or female) . . . but more unfortunately, to the point.

Grant McCall
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Oxford, England

Where's P-T?

☐ When in heaven's name will the magazine be sent to my new address? What is the matter with you people, or should I ask? I know darn well what the matter is! . . . Of course since you are now getting your higher rates, those who subscribed at the beginning can go jump in the lake I suppose. It is the same insanity everywhere, the greed for money overcomes any and all morality, and your brothers in the field have created this immorality. Morality does not only apply to sex, dumb dumbs, it also applies to your dealings with people in general, in all areas of life, or did this escape you?

Lily M. Leduc
New York City, N. Y.

ESP

☐ Recently I had a dream in which I was searching for my young son. To my relief, I found him splashing around with some other children at the beach.

At the breakfast table, my husband, who had been awake longer than I had, said, "I had an odd dream—I dreamed that J. S. said that Jimmy had drowned."

It was as if I had "rescued" our son.

In waking life, neither of us is psychic. And not all our dreams correspond so closely.

I hope Ullman and Krippner ["ESP in the Night," June] run follow-up studies of husbands and wives; the data should be interesting.

Susan Forthman

Whales

☐ I realized your magazine was taking up my, our, cause and you gave me such a psychological lift that I'll be invigorated for a long time to keep up the "blue whale" campaign [June].

Tony Mallin
Chicago, Ill.

☐ The recordings of whale songs are wonderful and terrible, fantastic and frightening—and they evoked a feeling I cannot describe effectively. I felt a great empathy for these magnificent creatures. I know now power and space and depth and something very close to doom in a new way.

Lillie Robinson
Virginia Beach, Va.

Over-Eager Volunteers

☐ It was with a good deal of interest I read your June article "When He Lends a Helping Hand Bite It," by Ralph L. Rosnow. About the paragraph referring to experiments on the social psychology of the volunteers, wondered if they had thought of testing them in a field completely unrelated to the immediate research in question; consequently not so threatening? An eye examination as a case in point: I was really startled at my own "over-achieving" subconscious reaction, in a very thorough testing of very normal eyes. It was a relaxed situation, but my constant reaction to a normal question was, "What is the right answer? What does he really want me to say—is this a dumb response?" A constant reminder was necessary, *only* eyes were being tested, no rightness or wrongness involved; no ego strength needed, just a test of eyes.

(Mrs. David) Katharine Foreman
Flint, Mich.

bibliography

Helen I. Safa

The Achieving Society. David McClelland. Van Nostrand, 1961, $8.75; Free Press, 1967, $2.95.

The Culture of Poverty. Oscar Lewis in *Scientific American,* Vol. 215, No. 4, pp. 19-25, October 1966.

The Experience of Change in Puerto Rico. Arnold S. Feldman and John M. Kendrick in *Howard Law Journal,* Vol. 15, No. 1, pp. 28-46, Fall 1968.

The Female-Based Household in Public Housing: A Case Study in Puerto Rico. Helen I. Safa in *Human Organization,* Vol. 24, No. 2, Summer 1965.

From Shanty Town to Public Housing: A Comparison of Family Structure in Two Urban Neighborhoods in San Juan, Puerto Rico. Helen I. Safa in *Caribbean Studies,* Vol. 4, No. 1, April 1964.

Puerto Rican Adaptations to the Urban Milieu. Helen I. Safa in *The City and Race,* Vol. V of the *Urban Affairs Annual Review,* Peter Orleans and Russell Ellis, eds. Sage Publications, in press, 1971.

The Social Isolation of the Urban Poor: Life in a Puerto Rican Shanty Town. Helen I. Safa in *Among the People: Encounters with the Urban Poor,* Irwin Deutscher and Elizabeth Thompson, eds. Basic, 1968, $10.00.

La Vida: A Puerto Rican Family in the Culture of Poverty. Oscar Lewis. Random, 1965, $10.00; paper, $2.95.

Daniel P. Moynihan

The Behavioral and Social Sciences: Outlook and Needs. A report by the National Academy of Sciences and the Social Science Research Council. Prentice-Hall, 1969, $7.95.

Beyond the Melting Pot. Daniel P. Moynihan and Nathan Glazer. M.I.T. Press, Second Edition, 1970, $10.00, paper, $1.95.

Knowledge into Action: Improving the Nation's Use of the Social Sciences. A report of the Special Commission on the Social Sciences of the National Science Board. National Science Foundation, 1969, available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402, $.75.

Maximum Feasible Misunderstanding: Community Action in the War on Poverty. Daniel P. Moynihan. Free Press, 1969, $5.95; 1970, paper, $2.45.

The Professionalization of Reform. Daniel P. Moynihan in *The Public Interest,* Issue 1, pp. 6-16, Fall 1965.

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The Concept of Equality of Educational Opportunity. James S. Coleman in *Harvard Educational Review,* Vol. 38, No. 1, pp. 7-22, Winter 1968.

Equal Schools or Equal Students. James S. Coleman in *The Public Interest,* Issue 4, pp. 70-75, Summer 1966.

Equality of Educational Opportunity. James S. Coleman et al. U. S. Government Printing Office. Available from Superintendent of Documents, Document No. FS5.238:-38001, 1966, paper, $4.25.

Racial Isolation in Public Schools. A report of the U. S. Commission on Civil Rights. U. S. Government Printing Office. Available from Superintendent of Documents, Document No. CR1.2:Sch6/12/v. 1,2 (Vol. 1 is the report, Vol. 2 the appendix), 1967, $1.00 each.

Sources of Resistance to the Coleman Report. Daniel P. Moynihan in *Harvard Educational Review,* Vol. 38, No. 1, pp. 23-36, Winter 1968.

George W. Albee

Careers in Mental Health. George W. Albee in *Encyclopedia of Mental Health,* Vol. I, Albert Deutsch and Helen Fishman, eds. Watts, 1963.

Conceptual Models and Manpower Requirements in Psychology. George W. Albee in *American Psychologist,* Vol. 23, No. 5, pp. 317-320, 1968. Also in *Community Psychology and Community Mental Health; Introductory Readings,* P. E. Cook, ed. Holden-Day, 1970, tentative price $8.50.

Notes Toward a Position Paper Opposing Psychodiagnosis. George W. Albee in *New Approaches to Personality Classification,* A. R. Mahrer, ed. Columbia University Press, 1970, $12.50.

The Relation of Conceptual Models of Disturbed Behavior to Institutional and Manpower Requirements. George W. Albee in *Manpower for Mental Health,* F. N. Arnhoff, E. A. Rubinstein and J. C. Speisman, eds. Aldine, 1969, $6.95.

Ralph L. Beals

The Behavioral Sciences and the Federal Government. National Academy of Sciences/National Research Council. Publication 1680, 1968, $3.00.

Cross Cultural Research and Government Policy. Ralph L. Beals in *Bulletin of the Atomic Scientists,* Vol. 23, pp. 18-24, October 1967.

International Research Problems in Anthropology. Ralph L. Beals in *Current Anthropology,* Vol. 8, pp. 470-475, December 1967.

Politics of Social Research. Ralph L. Beals. Aldine, 1969, $6.95.

The Rise and Fall of Project Camelot. Irving Louis Horowitz, ed. M.I.T. Press, 1967, $12.50, paper, $3.95.

The Sociologist as Partisan: Sociology and the Welfare State. Alvin W. Gouldner in *American Sociologist,* Vol. 3, No. 2, pp. 103-116, May 1968.

David Premack

The Acquisition of Language in Infant and Child. Martin D. S. Braine in *The Learning of Language,* Carroll E. Reed, ed. Appleton-Century, in press 1970, tentative price $9.00.

Aspects of the Theory of Syntax. Noam Chomsky. M.I.T. Press, 1965, $7.50; 1969, paper, $2.95.

Behavior of Nonhuman Primates, Vol. III. Alan Schrier and Fred Stollnitz, eds. Academic Press, in press 1971.

Biological Foundations of Language. Eric Lenneberg. Wiley, 1967, $10.00.

A Functional Analysis of Language. David Premack in *Journal of the Experimental Analysis of Behavior,* Vol. 13, No. 4, 1970.

The Genesis of Language. Frank Smith and George A. Miller, eds. M.I.T. Press, 1966, $10.00.

An Inquiry into Meaning and Truth. Bertrand Russell. Humanities, 1966, $5.50; Penguin, 1963, paper, $1.25.

Psycholinguistics. Roger Brown. Free Press, 1970, $8.95.

Julian Silverman

Conceptions of Modern Psychiatry. Harry S. Sullivan. Norton, 1953, $7.50, paper, $2.95.

Exploration of the Inner World; A Study of Mental Disorder and Religious Experience. Anton Boisen. Harper, 1936.

A Paradigm for the Study of Altered States of Consciousness. Julian Silverman in *British Journal of Psychiatry,* Vol. 114, pp. 1201-1218, 1968.

Politics of Experience. Ronald D. Laing. Pantheon, 1967, $3.95; Ballantine, paper, $.95.

Positive Distintegration. Kazimierz Dabrowski. Jason Aronson, ed. Little, Brown, 1964, $5.00, paper, $1.95.

Psychophysiological and Behavioral Effects of Phenothiazine Administration in Acute Schizophrenics as a Function of Premorbid Status. Michael J. Goldstein, Lewis L. Judd, Eliot H. Rodnick and Anthony LaPolla in *Journal of Psychiatric Research,* Vol. 6, pp. 271-287, May 1969.

Reconstitutive Process in the Psychopathology of the Self. John W. Perry in *Annals of the New York Academy of Science,* Vol. 96, pp. 853-876, 1962.

Shamans and Acute Schizophrenia. Julian Silverman in *American Anthropologist,* Vol. 69, pp. 21-31, February 1967.

Suicidal Solution as a Function of Ego-Closeness — Ego-Distance. Harold M. Voth, Albert C. Voth and Robert Cancro in *Archives of General Psychiatry,* Vol. 21, pp. 536-545, 1969.