refinable by any energy density available. . . . Plasma technologies will produce an increase 1000 times greater than electricity did. Energy density is the technological property that both beam weapons and civilian plasma technologies take advantage of.

"The second thing plasma technologies offer to us is command over the whole electromagnetic spectrum. Today we are almost totally confined to the infrared part of the spectrum—that is, heat energy—for military and industrial technologies. Explosives depend on the rapid expansion of heat and the production of shock waves that that heat energy produces. The most energetic forms of light, hard x-rays, through to long wavelength infrared portions of the spectrum; that qualitative increase in flexibiliity of capabilities, is the subject of the advantages that plasma technologies bring. . . .

"The essential difference between conventional concepts of ballistic-missile defense, and a beam weapon, is that once the targets have been detected and tracked, they are destroyed not with other rockets or explosives, but with a beam of light, or atomic particles, travelling at or near the speed of light, that can be aimed at one of these ballistic missiles in its boost phase, and destroy it by the bolt of energy from the beam weapon. . . . By basing a laser on the ground, it is able to shoot at a missile or warhead coming in, and to protect a relatively small area. But by adding an orbiting satellite system we are capable of dealing with literally tens of thousands of launched missiles and destroying them before they begin to reenter the atmosphere. . . . A set of approximately 50 orbiting beam weapon stations would be capable of providing 'continental defense' against the largest conceivable ballistic missile attack. . . .

"It is not an accident that the technologies required for the solution to the problems of development of beam-weapon anti-ballistic missile defense are the technologies required for the development of nuclear fusion. . . . You have the same energy-storage and pulsed-power problems, the same transmission problems. Mastering those in either area gives you a solution to both.

"An even clearer indication of the overlap is that they present the same scientific challenges. We are creating a new physics to deal with the energy self-compression of plasmas—the physics of shock waves and their propagation. This is a whole new branch of physics, only now beginning to be studied seriously in the United States. . . . a new scientific endeavor to solve the physics of production and control of ultra-dense energy sources. It also has applications in the chemical industry, in the production of all basic metals . . .

"The Soviet Union, by the report of our government, spends between three and five times as much money, manpower, and effort as does the United States, in the pursuit of these technologies," Dr. Bardwell noted in conclusion.

New LaRouche volume science of psychology

"This book was triggered by the scandalous role of psychiatric witnesses at the Hinckley trial," *EIR* contributing editor Lyndon H. LaRouche, Jr. describes the manuscript delivered to his publisher in early July.

LaRouche blames the takeover of most of the U.S. psychological profession by postwar influence of Brigadier Dr. John Rawlings Rees' London Tavistock Institute for the shocking performances in the Hinckley trial itself. He notes that all of those witnesses, defense and prosecution alike, as well as one member of the jury, have dossiers linking them to the Reesian network in the United States.

That serves as the point of departure, rather than the principal content of the book as a whole.

Returning to this question in the concluding chapter of the manuscript, LaRouche poses the issue: Why has the psychological profession in general failed to "blow the whistle" on the policies and practices which Tavistock networks have used to virtually take over control of the U.S. psychological profession as a whole? Where were the ethics of these numerous psychiatrists, psychoanalysts and psychologists generally? Where were the scientific principles it might be generally assumed they would defend?

LaRouche warns his readers against extravagant condemnation of the profession as a whole. Before "Reesian shocktroops" subverted the profession, classical psychiatrists and psychoanalysts had contributed important, unduplicatable service to many of the mentally ill and their families.

However, he adds, "The competence within the profession must be understood as a pragmatic body of skills acquired by successive generations of often gifted and dedicated professionals, a pragmatic competence achieved despite the rejection of elementary scientific criteria by the profession as a whole." He added, "When pressured to make step-by-step concessions of the sort demanded by Tavistock's backers, they retreated step by step. There existed no scientific principles to force them to say at some point, 'Beyond this point I will not be pushed another inch.' "

"Despite the good work done by many professionals," LaRouche continued, "the profession as a whole

will pull the out of the mud

was tragically doomed from its beginnings. Like anthropology and sociology, psychology had the misfortune to be one of several new pseudo-sciences developed over the course of the past hundred years." In the manuscript, he stresses evidence that the way in which the area of the profession was carved out doomed the professional to outrageous fallacies of composition of fact in every matter bearing on fundamental questions of mental health. He adds that the definitions of "psychological facts" employed by all branches of the profession are intrinsically absurd definitions by provable standards of clinical as well as general scientific evidence.

"There are limits to the possibility for achieving even pragmatic competence in a profession based upon such rotten foundations. Such a poorly founded profession has no intrinsic defenses against the malicious quackery of the sort Rees, Dr. Eric Trist and their ilk used to corrupt the psychological profession generally," LaRouche stated.

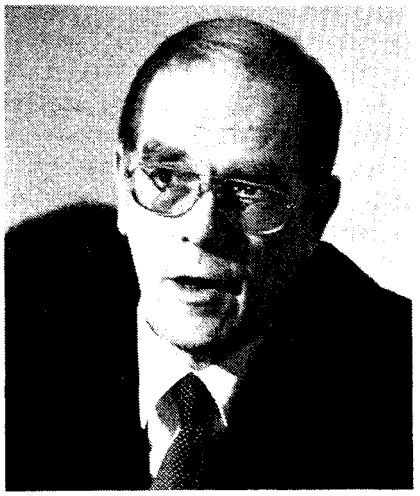
The book as a whole is based upon an intensive examination of the interrelationship among what LaRouche identifies as "the two central fallacies" which notable psychological professionals themselves have frequently identified as the obviously central fallacies in the work of the profession. These are the widely acknowledged point that psychology has never developed a positive conception of mental health, plus the most limited exploration of what the late Dr. Lawrence S. Kubie, in LaRouche's account, "rightly located as the crucial clinical phenomenon of mental processes": the interconnection between what psychoanalysis broadly defines as "preconscious" functions and the ebb and flow of creative mental behavior in individuals. LaRouche develops the thesis, that an adequately scientific definition of mental health and the role of "preconscious" functions in creativity are interrelated questions of competently directed and fundamental inquiry.

The book assorts contemporary trends among psychologists into two principal categories, those who adhere to the more traditionally "normative" definitions of mental health, and those who reject "norms" in favor of British philosophical radicalism's emphasis upon the individual's supposed "inner psychological needs." Quickly dispensing with the second group, LaRouche focuses on examining the implications of the "normative" approach, using the case of Sigmund Freud's demoralization during the post-Versailles period to show how and why the traditional "norms" collapsed, paving the way for a "radicalism" which Freud resisted even as he partially succumbed to this trend—leading him and his daughter Anna to hand over control of the international psychoanalytic profession to Rees and Trist. He emphasized: "Freud, typical of the 'normative' psychologist, accepted the notion of norms of human behavior in society identified with the writings of David Hume. Mental health became broadly defined as merely a lack of such a degree of mental pathology, that such problems do not interfere significantly with the subject's pursuit of reasonable contentment in meeting the prevailing norms of functioning in that society." When the norms break down, he added, such psychology breaks down.

LaRouche argues that the key to this problem is what he describes as "Freud's outrageously obvious folly in the way psychoanalysis approaches the question of 'repression' in the etiology of mental illness." In every case, the clinical literature insists that mental disorders have the common, general characteristic of "infantile regression." It should have been recognized long ago, LaRouche emphasized, that it was not the "repression" of infantile impulses which characterizes pathology, but rather the repression of some anti-infantile principle in mental processes.

"I have cited Kubie's work," he added, "not merely to give credit where credit is due." LaRouche referred to a conversation between Kubie and two of his own collaborators on this matter before Kubie's death. "Kubie was correct in stressing the correlation between repression of creative potentials of the 'preconscious' and neurosis, and correct in defining such creative activity as ipso facto beneficial to mental health. That represented a major and implicitly crucial step forward for psychoanalysis, if it had been followed through. Unfortunately, Kubie's work appeared during a period when the psychologists generally were losing interest in anything which resembled scientific inquiry. It ended with Kubie's death. Nonetheless, Kubie's clinical work continues to have the special importance of pointing the honest clinician directly to the appropriate categories of mental phenomena."

The book is devoted chiefly to developing a positive approach to mental health in both statecraft and clinical practice, which LaRouche summarized as "awakening policy-makers and policy-influencers generally to the way in which the policies of society and image of national leadership, as well as educational policies, foster or repress those creative mental processes of the individual upon which successful maturation of the infantile newborn to adult sanity depends." He added wryly, "This



Lyndon H. LaRouche, Jr.

nation must get back to a sound recognition of the profound truth of the religious doctrine of 'original sin,' and away from this heathen radical's doctrine of Rousseau's and Dewey's about our little 'noble savages.' "

To accomplish this original purpose, the book focuses on what it represents as two interrelated matters. The book stresses that the incompetence of the psychological profession from the outset was its sweeping mixture of either ignorance or repudiation of the accumulation of scientific knowledge bearing upon psychology, accumulated in classical scientific and artistic writings up into the early nineteenth century. Showing that every leading blunder of psychology today is an explicit avoidance of accurate discoveries widely permeating classical writings on the subject, the book uses classical sources, including Dante Alighieri's *Commedia,* to develop the principles of the creative mental processes with aid of modern references.

"Modern psychology," LaRouche described this feature of the book, "began by attempting to go through the motions of founding a new branch of science entirely from scratch. It not only rejected any interference from the influence of classical knowledge of mental behavior, but based itself on axiomatic assumptions which had been repeatedly shown over more than two thousand years to be absurd. We shouldn't discard the accumulated empirical knowledge psychologists have developed, but we must redefine that accumulated empirical knowledge by throwing out all the fundamental axioms of the psychology profession. We must reexamine the clinical evidence in the light of provably scientific principles, many of which were already conclusively proven long before some nineteenth-century scoundrels decided to take psychological inquiry back scientifically to two centuries before the discovery of mud."

Throughout the book, the author interweaves the principles of scientific psychology with the core-principles of Judeo-Christian republicanism. By citing the implications of the long struggle between such republicanism and its oligarchical-family opponents within European civilization, the author shows that a higher incidence of individual insanity is a natural outgrowth of the impact of oligarchical-family power upon society, and that the Judeo-Christian republican impulse is provably accountable for the fostering of individual sanity, as well as all of the principal achievements of European culture to date. The author insists that we must approach the problem of individual psychology as "subsumed within the requirement that society foster those policies, outlooks and practices which foster maturation to sanity among its individual members." The individual does depend generally upon the "norms" provided by society for developing mental health, but those "norms" must be defined for society on a sound psychological basis, "the same basis used in a scientifically grounded approach to the ordering of the internal mental processes of the maturing individual."

The author devotes the largest portion of the book to demonstrating the possibility of rigorously defining the creative potentials and functioning of an individual mind through correlating the empirical evidence of psychological observation with external evidence bearing upon examination of the kinds of ideas produced and the mannner in which they are elaborated.

He develops his case in three phases. First, he states the case that the continued existence of society, and therefore of individuals of societies, depends upon that long sweep of technological progress through which mankind leaps over the apparent limits of natural resources associated with any fixed level of technology. "Not only the possibility but also the necessity for technological progress defines the existence of society from the most primitive hunting-and-gathering culture to the present," he described this portion of the book, "but this demonstrates that the feature of individual practice which enables mankind to exist is the development of the individual mind's power to produce and assimilate the scientific and related discoveries by which man's knowledge of the lawful ordering of the universe is increased in social practice." From that point of reference, he proceeds to two succeeding steps.

The book turns next to examination of exemplary cases of scientific creativity. It uses, first, the case of the founding of mathematical physics by Johannes Kepler at the beginning of the seventeenth century, tracing the development of the hypothesis which Kepler proved in the course of his three books, through the origin of this hypothesis for modern times in the writings of Cardinal Nicholas of Cusa and the work of Leonardo da Vinci and others after Cusa.

The central creative feature of Kepler's own work is adduced, and also what Kepler left to be finished by his

successors. The work of the nineteenth century's Bernhard Riemann is presented as the approximate completion of the line of development in physics begun by Kepler. Riemann's central discoveries, typified by his 1854 habilitation dissertation and his famous 1859 paper predicting the process for generation of "acoustical shock-waves," is examined to the effect of adducing the characteristic features of Riemann's creative-mental activity in effecting a general breakthrough in scientific knowledge.

Following this, the books turns to the subject of language as a whole, the language of vision and the language of speech and hearing. Language so defined, the author emphasizes, defines the conscious functions of mind as a whole, and the way changes in the content and form of the usage of language as a whole determine the world-map of consciousness which the preceding generations of a culture transmit to the new individuals. The ability to determine whether or not a particular clinical state of mind does or does not correlate with creative activity, the author develops his argument, depends upon our ability to define rigorously what aspects of language-behavior are and are not expressions of creative mental activity.

The book develops the general case for language as a whole with aid of intensive focus upon three aspects of language as a whole. In principle, the language of vision is expressed implicitly by Jacob Steiner's ordering for synthetic geometry, as well as the work of Leonardo da Vinci and others earlier, which is treated earlier in the book. The aspect of the language of vision treated in the examination of language as a whole is the overlap of the language of vision and language of hearing in polyphonic musical composition. In music vision is represented by the Keplerian ordering of a well-tempered 24-key domain, and the rest is the result of poetry and principles of poetic composition applied to that harmonic domain.

In respect to music, the book defines only those features of poetic composition which enable us to distinguish thematic and developmental aspects of a composition from the indivisible "musical idea" associated only with the whole of a masterwork of composition. The manner in which the composer generates a musical idea for the audience and performers is shown to be the correlative of the quality of creative discovery previously adduced for the cases of Kepler and Riemann.

The treatment continues to the sub-topics of poetical ideas and the location of the creative activity of mind in respect to what can be defined from the vantage-point of a grammar. A rigorous definition of metaphor, and the manner of its occurrence in poetic composition, is correlated with the nature of the mental processes by which metaphor is recognized. This is a direct reflection of characteristic features of the creative process. Finally, the example of the dramas of Shakespeare and Schiller is employed to illustrate the origins and character of such classical drama, and to define its special effect upon audiences. This example of drama is employed to locate the creative principle in language as a whole, as correlative with the principle of the Socratic dialogue. The appropriateness of this knowledge for corresponding changes in psychoanalytical practice is stressed.

Asked if the entirety of this manuscript could be regarded simply as a response triggered by the author's shock at the Hinckley trial, LaRouche qualified his original report on this point. "It was that trigger combined with something else which has been stewing about in my mind recently. The Hinckley case triggered an elaboration of material upon which I have been working more or less consistently for more than thirty years; the clincher was a thought which has occupied my attention with renewed intensity during the recent several months.

"I was upset some months ago, listening to an Oistrakh recording of Beethoven's Kreutzer Sonata. I located the key to my annoyance with the performance in the manner the recording deals with the entry of the piano's voice in the introductory portion of the composition. This, if properly enunciated, establishes the root-idea of counterpoint for the entire development of the composition. Focussing on that problem at the opening it was clear how and why Oistrakh failed to understand the musical idea of the sonata.

"Then, more recently, a friend brought over to me some recordings of Mozart symphonies conducted by Casals.

"Casals was a truly extraordinary conductor as well as performer. I have been informed by those associated with both Nikisch's and Casals' conducting that Casals is closer to Nikisch than was Furtwängler. I find that credible and useful. His conducting of Mozart's Jupiter is the real Mozart, the Mozart many conductors and orchestras refuse to recognize in their performances. Hearing that Casals performance, I recognized something I could not place until I confirmed my suspicion by playing Casals' Jupiter and Furtwängler's conducting Beethoven's Fourth Symphony in alternating succession. For comparison, I tried Furtwängler's conducting of the Beethoven Third, Seventh, and the first movement of the Ninth. The relationship of the musical idea of Mozart's Jupiter and Furtwängler's conducting of Beethoven's Fourth became totally obvious as soon as one compares both conducted by a qualified conductor with a grasp of the musical ideas to be presented by the performance.

"That matter intersected the content of the book in merely the section on musical ideas, which is by no means anything of recent discovery for me in itself. But I must say that the excitement I was enjoying as a result of the implication of Casals' conducting of the Jupiter was an added driving force within me throughout the writing. Casals typifies the essentially sane personality."