William James, most honored of psychologists, records the note of failure in describing his own great text -- since become a classic -- as "a loathsome, distended, putrified, dropsical mass, testifying to nothing but two facts: first, that there is no such thing as a science of Psychology, and second, that W.J. is an incapable." He carried on his psychological genius to the more congenial dimes of philosophy. G. Stanley Hall, psychologist for a lifetime, confessed his "growing dissatisfaction with the results and a growing uncertainty as to whether we are really on the right trails." He sets forth "that the condition of psychology is far from satisfactory, and that the promise of two decades ago has not been fulfilled" (1923). Both these pioneers in American psychology I knew, and knew from them the sources of their discontent. If I may presume to render a verdict in 1935 -- admitting my own peccavi -- it would be one of agreement, confirmed by the nearer outlook. James had in mind -- and Hall partly so -- the mode of emergence of modern psychology, as made in Germany. Hall's encyclopedic spread subordinated his early addiction to Teutonic midnight oil; James ever found that lamp of learning stuffy, yet indispensable. He called Muensterberg to be his laboratory vicar.

The present generation has but a waning interest in origins of a half-century ago. They know that the psychological laboratory was first established at Leipzig by William Wundt, where the innovation aroused suspicion among the Geleherte, sceptical as to whether the soul had really been captured and placed on the dissecting table; also that it attracted the freer venturing minds of a small but influential following from beyond the seas. A new career in psychology, patterned after the manner of the exact sciences, was heralded in Hall's first book, Aspects of German Culture -- an ominous title today. Some decades before there halt been an attempt to reduce psychology to measurement. It began with so lowly a performance as judging, by lifting, which of a pair of weights was the heavier and plotting endless series of "just observable differences." It culminated in the Psychophysics of Fechner -- a strange fusion of a mystic and an exactist -- described by James as "the patient whimsies of a dear old man" to whom belongs "the imperishable glory" of setting psychology on the wrong tack. Wundt's
experimental explorations of the mental structure grew to comprehensive proportions; they placed psychology on the academic map. They inspired Hall's pioneer efforts at Johns Hopkins, leading to doctorates in psychology, of which I happened to be the first recipient. The most complete parallel of Leipzig in America was established cosmopolitanly at a new-world Ithaca by a British Titchener who in Oxford gown and manner inducted Yankee disciples into Teutonic methods. Up to the end, in 1927, he resisted the tidal wave of innovation all along the psychological front, particularly the swarming hosts of applied psychology, resolved that the academic robe of pure psychology should not be defiled by the overalls of practice. To him psychology was a Fach, a pedigreed Wissenschaft. What to Titchener was the glory of psychology was to James and Hall -- and to each differently -- the warrant of its failure. They looked beyond horizons, as we do today ever more hospitably, more world-consciously.

Experiment continues to be the major occupation of psychologists; by that route psychology became an accredited science. To attempt a balance-sheet and consider how far the psychological plants are paying dividends is too large a venture for the present purpose. Despite the rapprochement of worldly reference and scientific pursuit the psychologist's laboratory is still too much a bowling alley where artificial pins are set up in formal patterns and tumbled down and scored. The strikes made have only a distant relation to the set-up in the rest of the world. What is measurable is not by that circumstance made more significant. We measure what we can, not what we would, and reach the measurement by way of assumptions that weaken, coerce, or distort the very relationships we would appraise. The essential measure of rationality may escape the ingenuity that devises the tests. The worship of the golden foot rule is a modern form of idolatry. The assurance of many an experimentalist is conditioned upon an insensitiveness to psychological values. There is no inherent validity in numbers, no sanctity in equations. They may embody important and valid truths or trivial inconsequences or pretentious errors. Laboratory artefacts are imperfect substitutes for complete human situations. Until psychology becomes more critical of its line of march James's scepticism and Hall's disappointment will hold and my sympathetic repetition of their lament remain pertinent.

The early misdirection of psychology was the failure to follow wholeheartedly the biological lead -- from the beginning to the end of the chapter. The concept of evolution was at hand, its power to fertilize the psychic pastures feebly appreciated. A sense of it appears in the eclectic contributions of Francis Galton, who was a keener psychologist for not being one professionally. In them is foreshadowed the true consummation: that the psychologist is to become the naturalist of the mind. The banner under which the representative majority of present-day psychologists are actually enrolled -- though they do not say so and may not know it -- I have labeled "naturalistic psychology." Its scope has expanded far beyond the vista of twenty years ago. The necessity of a name I deplore, for there is but one Psychology -- as there is one physics, one physiology; I am merely designating a basic position. It is not -- God save the mark! another schism, another proprietary solution. It indicates a trend dominant for decades, productive of sober and significant contributions. The conflict of the psychologies in learned arenas and in popular forums is a further dismal evidence of its crucial failure. Exposed to persuasive appeals that this or that system alone is the gospel truth, and none genuine without a personal signature, the layman is justifiably irritated into exclaiming: A plague on all your schools! [p. 264]

Two claimants to the psychological dominion are peculiarly belligerent, behaviorism and psychoanalysis. Behaviorism McDougall calls a bastard product. I view its parentage more charitably. It represents a legitimate protest against the anti-naturalism of the orthodox psychology which was so long in the saddle -- more precisely, against the neglect of the naturalistic axiom that the human organism, mind and all, from guts to cortex, and all its expressions from sigh to soliloquy, is root, stem, and blossom an instrument of behavior. In any meaningful sense substantially all American psychologists were behaviorists long before 1912, which Watson makes the year of annunciation of the dispensation, renunciation of the error of previous ways, and denunciation of the rest of his brethren. Unfortunately the Knight of Behaviorism has set his lance at an untenanted windmill. The fallacy of the behaviorist's formula lies in the omitted terms with the result that, were he consistent, his cupboard would be as bare as Mother Hubbard's; he smuggles in his provender from stores which he ignores. He
naively sets forth that under the stimulus of a falling apple a horse in the pasture responds by munching it; under the same stimulus a Newton responds by evolving the law of gravitation. The difference is said to be explained by the different habit-systems of physicist and horse, or by recalling that they were differently conditioned by their respective parents. Even that illustration is unduly complimentary to the explanatory value of the behaviorist's barren formula of stimulus and response. It is nearer to his level of solution to select as a parallel the philanthropic machine attached to the pillars in the subway, which to the stimulus of a copper cent responds with a block of chocolate or if stimulated in another vent to its reflexes responds with a stick of chewing gum, ignoring the while the part played in the result by both Mr. Wrigley and the designer of the machine.

Under this simple and lucid, but somewhat adolescent, dispensation there is no more need for psychology than for the theology that discovered in the apple the Fall of Man. The folly of behaviorism, fairly obvious in its premises, becomes glaring in [p. 265] its conclusion, which requires of its believers the courage to deny large areas of compelling fact. Heredity is nullified, insanity is made an illusion of the examining psychiatrist, imagery inconsistently becomes imaginary, and consciousness a phobia, avoided by defensive circumlocutions.

There was one consoling fact imported from Russia and sadly overworked on its arrival. This was the conditioned reflex of a front-paged dog, whose saliva started rivers of ink and floods of uncritical theories. Conditioning became the universal solvent; the behavioristic redemption of mankind was at hand. So far as concerns the major reaches of human behavior the actual and important truth is that the big brain -- our chief glory and no less the source of our direct woes -- is an intricate mechanism for delivering us from the slavery of conditioning. The cerebral cortex is a proclamation of emancipation, still, however, "conditioned" by the ancient bondage.

Contemporary with the earthquake of behaviorism came the air raid of Freudianism. Strangely enough, in one point of attack -- the nursery -- they agreed. The infant was doomed by maternal conditioning in the one version, by a resurrected Œdipus incest in the other. No theological damnation of the innocents carried so awful a charge as "infant sexuality," "polymorphous pervert," hurled indiscriminately at all babes. Their later characters were destined to be molded, not by the influences of the schoolroom or the amenities of the drawing room, but by the intimate ceremonies customarily confined to the bathroom. Parents became bewildered by the antics of psychologists, popularized by news-value standards. The public forgot that the great body of safe and sane psychologists were quite otherwise minded and otherwise employed.

I have touched upon only some of the circumstances responsible for the chaotic appearance presented by psychology and the rationale of its failure to lead a respectable scientific life. Most remote from my intention is it to belittle Freud. I regard him as a master mind whose originality of insight has brought into the psychological picture an important illumination. I regret that [p. 266] the deficiencies in his logic, his ignorings, his flagrant misinterpretations of the precepts of a naturalistic psychology, have led him into woeful extravagance in application. This invited the disaster which his followers completed.

The heroic values of Freud's psychology lie in the adequate recognition of the emotional life, the play of subconscious functioning, including fantasy, the great extent of psychogenic influence, all directed to the abnormal mind and by that illumination reinforcing the understanding of our normal being. The supplementing of the laboratory by the clinic developed a truer perspective of wherein we highly psychological creatures have our being; but the homo Freudien is not an authentic rendering of the psyche of human nature. To complement psychology and investigate unexplored areas is one thing; to ignore the rest of the psychic world and the labors of others is quite another; and the dialects of Jung and Adler increase the babel of tongues.

The Freudian dispensation has indeed reconstructed the visage of homo and correctly in so far as it reinstates homo sentiens as primary to and conditioning home sapiens. It is the manner of the restoration, with its capricious license of theory and extravagance of practice, that raises its
error and menace far above its truth and benefits. Intellectual ventures may lead to as strange issues as geographical ones. The more complete analysis of hysterical patients in a then obscure Viennese clinic has changed the mental habits of an emancipated generation. Neither psychology nor civilization will ever return to a pre-Freudian stage.

Freud has ignored the academic psychologists and they have returned the compliment. They find his premises so unsupported by any naturalistic foundations, his conclusions so vitiated by false logic, that most of them reject his structure completely. The more tolerant ponder and select. And the essential values of "psychoanalysis" will remain. The Neo-Freudians in England and a small group of critical Freudians in Germany have begun the salvaging. But though professional Freudians may disappear, the valid deposit of their doctrines will be absorbed into the accredited body of psychology. [p. 267]

A retrospect of a quarter-century touches a pivotal period. In 1909 Freud and Jung came to this country at Stanley Hall's invitation—in those days a bold step for Hall to take. This was the first important academic recognition of psychoanalysis. The same year is memorable for the transfer of Binet and Simon's mental tests to American soil. Their establishment gave the decisive impetus to the emergence of an applied psychology, congenial to the pragmatic temper of our pursuits. The era of tests is highly characteristic of the psychological scene. As an instrument of social, industrial, and educational diagnosis they have been vastly extended. Side by side with able leadership and significant accomplishments this open sesame to research has led to the uncritical acceptance of the I.Q. as though it were engraved on the brain structure and Binet had deciphered it. Its use by many workers in this wide-open field gives the impression that intelligence has been discovered to be the capacity to pass intelligence tests; its true nature as well as available indices remain to be determined. The I.Q. is a useful wedge and no more. It is only by having the limitations of the tests constantly in mind that they can be validly applied.

The immense vogue of applied psychology has added to the difficulty of a sound program. If judged by the volume of output the tail appears to wag the dog; if judged by the industry of many of its protagonists the intention is to reconstruct the creature in the image of its caudal appendage. When elaborate observations are arranged and calculations employed to determine how fish and orange marmalade shall be costumed in type to "express the atmosphere of the commodity" one wonders whether bringing psychology to earth has been altogether a blessing. The slums of psychological racketeering exploit the same demands for simple solutions, practical recipes, and panaceas. No country is so over-ridden with false prophets of pseudo-psychology and short-cut, uplift roads to learning as the land of "the Bigger and Better." The responsible custodians of psychology are not blameless. Devising a system seems to be the surest way to making a noise that shall be heard. The sooner systems and [p. 268] schools are relegated to the past the more promising the future, when the unity of psychology shall be accepted as a preamble to its declaration of independence and its enrolment among the league of the sciences.

If called upon to indicate the approach and temper of naturalistic psychology -- which unites the wandering tribes and points the way to the promised land -- I cannot here outline a program; I can only set down its major tenets. It proceeds upon the conviction that psychology is all one unitary story, that of the life of the mind viewed as a naturalist would view it. That story appears in two versions, the one of the evolution of behavior, the other of the evolution of the nervous system, its counterpart. Life consists of feeling and thinking and the fusion of the two. The order, importance, and treatment of topics are thereby determined. Origins, mechanisms, service: these constitute the story of mind; everything relevant finds a place in that composition.

The present text-book chaos is the work of drifting pilots. They leave the student with the impression of a patch-work quilt whereas actually the mind is a tapestry. The recent advance in the investigation of mind rivals in dramatic moment and exceeds in consequence the physicist's reconception of the vast cosmos and the chemist's revelation of the infinitesimal but potent atom. The student, and more consequentially the educated man of affairs on whose vision the fate of the future will more and more responsibly fall, loses a vitalizing contact with psychology
because its academic representatives have placed an obstructing screen of abstraction and technical ritual between the inquiring mind and the reality. More than a dislocated shoulder or fallen arches is wrong with psychology and answerable for much of its failure. The entire framework, created in the studio, is out of joint, presenting a manikin in place of a man. Gestalt psychology is as good an example as any. In itself a valid correction -- a good orthopedic job -- it launches itself with a panaceal flourish and adds to the confusion of tongues. Yet my faith in the redemption of psychology remains, for it has within itself, once the shouting and the tumult die, a valid principle of interpretation. It happens [p. 269] to be the interpretation of the most critical force in the universe; the human mind will either elevate or exterminate the race.

Any pronouncement that psychology has failed contrasts what might have been with what is. Because in the nearer perspective circumstance looms large, I have chosen as awful examples two strangely disturbing interludes, both in a measure extreme swings of the pendulum away from a too academic conception and toward mind as a living reality. Psychology as made in Germany, and psychology as made in America, have much to answer for. The American temper comes to the fore in the huge overgrowth of applied psychology, passing by stages of Avernian descent from conclusions weakly based in principle to assertions definitely unprincipled. Taking the name of psychology in vain has become a national habit; and the vanity of much that comes out of the mills, in which are ground out doctors' dissertations neither slowly nor exceeding fine, is comic in its tragic air of consequence and its actual misdirection.

The flounderings of psychology, and the bickerings of psychologists, damage its prestige. It is not only behaviorists who fail to see forest and trees in proper relation, not only Freudians who run a temperature. No sooner was the meaning of glands for the mental life demonstrated than a glandular psychology reached the conclusion that Harding gave us an adrenal administration and Wilson a pituitary one. The call is clear and loud for leaders of a broader gauge to redeem psychology and give it its rightful place as a guide to human understanding. There are consoling reflections. A science that can endure the ravages of two such distempers as behaviorism and psychoanalysis and recover without permanent disfigurement must have a lusty constitution. Still more, when I dwell upon the rich heritage of supremely significant knowledge which is all entitled to be called psychology, and the vitality of the tasks awaiting the psychologists of the future, the winter of my discontent becomes tinged with the promise of a glorious summer, when all psychologists shall practise the sanity they preach.