THE VIRGINIA TEACHER

Volume XIII

NOVEMBER, 1932

No. 8

A SURVEY OF CONTEMPO-RARY PSYCHOLOGY

DETERMINATION of the date marking the beginning of modern psychology is bound to be an arbitrary one. Authorities would doubtless differ with any attempt in that direction. However, it seems to the writer that a study of the history of the development of psychology during the last century will disclose a rather sharp change of objective, or perhaps one might better say a crystallizing of opinion, in the seventies of the last century. In the year 1874 there were published in Germany two books which had a profound influence upon the thinking of psychologists both in Europe and in America. These books were Principles of Physiological Psychology by Wundt, and Psychology from an Empirical Standpoint by Brentano.

At the time of the publishing of these books psychology had been waging for about twenty-five years a war with philosophy for its independence, as, in fact, most bodies of knowledge had to do at one time or another. Philosophy always objected strenuously to the separation from itself of any body of knowledge. While the content of the two books was different and differently treated, both can be credited with a large part in the final break with philosophy.

Although Wundt and Bretano differed in many beliefs, they had the following points of view in common:

1. Psychology should hold a high place in scientific thought.

2. It should know the mind before the natural sciences.

AUTHOR'S NOTE:—This paper does not attempt to discuss the various technological phases of psychology, such as social psychology, educational psychology, or comparative psychology, important as they are.

3. It should give up the idea of mental substances for mental phenomena.

4. The unconscious should be given up as a method of explanation and psychologists should stick to observables.

5. Consciousness should be regarded as a unit. In this, both differed from Herbart. Here the likeness ends.

Brentano differed from Wundt in his approach to psychology in that he believed it a matter of argument while Wundt regarded its method as descriptive. As to the material of psychology, Brentano thought of it as including only the purely psychical He divides all psychology into three parts:

1. ideating—sense-perception. (I see or I understand.)

2. judging—(I believe.)

3. feeling—(I hate, or desire, or love.)

He believed psychological content to be that of imminent objectivity, that is, that there is always an object for every mental act. His was the psychology of the mind in use, or, as it has been most frequently called, act psychology. The following sentence will illustrate his position:

I remember I saw blue.

(act) (act) (content)

Brentano refused to accept content, relegating that to the realm of physics.

To Wundt the phenomena of life and life itself are one, but may be observed from different points of view. From one point of view it may be biological, from another, psychological. Herbart and Kant had said that psychology could never become an experimental science. Wundt held out the promise of an experimental science in his method of observation. Observation may be said to be the basis of experimental science.

Wundt felt that the best way to break with philosophy was to show results, concrete facts, that would justify psychology as a separate body of knowledge. This he tried to accomplish by setting up the following methods of study: analysis, synthesis, and explanation. Although persuaded that objective observation was the most fertile approach to the subject, he drew heavily on introspection as a method peculiar to psychology. Sensation and feeling were the only two elements he recognized, but by the turn of the century image was recognized by most psychologists and thought and will by a few. Wundt, then, is classified as a content psychologist.

The following diagram, Fig. 1, illustrates the development of psychology from 1874 to the present time. Reference to it as the article proceeds will help the reader follow the development.

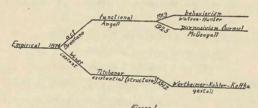


FIGURE 1—Diagram representing the development of the various schools of psychology since 1874.

As soon as psychology gained recognition as a separate science, the common cause that had, at best, held the psychologists together half-heartedly was now wiped out and they began breaking up into separate and frequently conflicting schools.

Existential Psychology

Existential psychology developed from the experimentation of Wundt, Titchener being its strongest exponent in America. Titchener puts his whole trust in experimentation and in observation, both introspective and objective. He also used as methods analysis, synthesis, and explanation. The components of mental activity which he lists are sensation, image, affection, relational perception, and thought. His experimental work might be called psychophysical, most of it being in the realm of sound, light, mass, time, and space. In fact, he said his field was the world of experience and it depended on the viewpoint whether it was physics or psychology. For example, mass in physics is constant: a gram is always a gram; but in psychology mass is not so easily dealt with. If one takes a large bottle and a small one, fills the large with water and the small with mercury until both weigh exactly the same, the smaller one will feel much the heavier. Kulpe, head of the experimental laboratory at Wurzburg and author of Outlines of Psychology, 1893, considered by many to be the best book on psychology ever written, added to the elements mentioned above, duration and extensity. Wundt and Titchener, about the same time, but independently, added the element of vividness. Upon these elements were set up the following integrations:

Elements Sensation quality intensity duration extensity vividness	Simple Perception	ComplexRecognition (apprehension)	Higher
	Idea	Memory retention imagination	Thought (judgment)
Affection	Feelings	Emotions Mood-passion- temperament	Action (will)

The term existential is the newer term, structural being the original title suggested by James in 1880 and accepted by Titchener in 1889. Structural or existential psychology is systematic and represents a refinement of technique over former methods in psychology.

Functional Psychology

After psychology became established as a science, dissatisfaction arose concerning the sterility of the results of structural psychology in its benefits to mankind. Many psychologists were not satisfied for the subject to develop into a science to be studied for itself alone. Also, according to Wundt, it offered no way to attack the problems of the higher processes of the mind. The criticism of structural psychology was that it was merely descriptive. On the other hand, the functionalists claimed as the basis of their psychology "the mind in use." That is, the purpose of psychology was not only to describe processes, but to show how they could be used.

Angell was a fair representative of the functional school. Dewey in his early years wrote a psychology from the functional point of view. James, if he belonged to any school, was a functionalist. The following outline is Angell's concept of how consciousness operates:

	ATTENTION	
Knowing	Feeling	Doing
sensation	emotion	reflex action
perception	mood	instinct
imagination	passion	impulse
en om orti	temperament	volition

The functional point of view is that of a technology. Particularly did it emphasize attitude and its rôle in directing behavior. The structuralists claimed a function cannot be observed, only its consequence, therefore functional psychology cannot be scientific. They also criticized it on the basis of its being like the old faculty psychology. This the functionalists denied and countered with the charge that structuralism

claimed to be all-sufficient when it was merely descriptive, allowed no way for the organism to adjust itself to environment, and was sterile as to its contribution to the welfare of mankind. And so the battle went on, sharply, but, in the main, in a friendly manner.

This difference of opinion reached its peak about the turn of the century and was dying out, each group broadening its beliefs and accepting more and more of the ideas of the other, when Watson announced his position on behaviorism. Strictly speaking, we have neither structural nor functional psychology today.

Behaviorism

R. S. Woodworth, in a radio address in the fall of 1931, humorously defined a school of psychology as "a red-faced, loud-voiced group of men who are attacking a traditional position." Karl Dallenbach also made the comment that "a movement always thrives by attacking some other position, calling it old and worn-out, and then over-emphasizing its own virtues.

While we think of John B. Watson as the center of the behavioristic movement, we must remember that late in the nineteenth century arose a group of psychologists in Germany called "Objectivists" who tried to interpret behavior entirely separated from mental behavior. So also Pavlov and Bekhterev in Russia developed an objective psychology in their studies of conditioned reflex. However, Watson crystallized the movement and has been regarded, and probably rightly so, as the founder of the school. In 1913 he stated that he could no longer be content to work with intangibles, and although he was a product of functional psychology, his quarrel was more with that school than with the structuralists. He set up a program which outlined a psychology based solely on the biological sciences and rigidly excluding every reference to conscious states or processes.

Watson's doctrine may be considered from two points of view, positive and negative.

Positive Aspects

- 1. Object—Universal and objective psychology.
- 2. Aim—Utilitarian. To predict and control behavior.
- 3. Data—Concerned only with changes in the muscles and glands.
- 4. Point of view—Adjustment to environment.
- Descriptive categories—Stimulus and response, and heredity and environment.

But, as we said before, for a system to thrive it appears that it must attack the old system, so a negative side of Watson's position was set up.

NEGATIVE ASPECTS

Watson claimed that all psychologists have been able to accomplish to date is to substitute consciousness for soul. This is illustrated in his first negative aspect.

- 1. He ignored the work of former psychologists as having nothing to offer modern psychology.
- 2. He denied
 - (1) Consciousness. Since consciousness cannot be perceived with the senses it must not exist. He also denied its use.
 - (2) Introspection. He said that introspection cannot grapple with such things as perception, judgment, reasoning, and imagination, and as a method of observation was not scientific.
 - (3) Sensation. All one has, according to Watson, are receptors affected by certain stimuli and giving off certain responses.
 - (4) Memory. Only a muscular or glandular learning. Simply an

- ability to perform an act that has been performed before.
- (5) Image. All images are either muscular or visceral habits.
- (6) Thought. He says it is simply an implicit muscular or glandular activity, that is, activity that takes place but cannot be seen, as in movements of the larynx in subvocal talking. In other words, thought is nothing more than subvocal talking and should be observed objectively by measurement of the muscular reactions of the larynx.
- (7) Pleasantness and unpleasantness.

 Merely tumescence or detumescence of the sex organs and other erogenous zones.
- (8) Instinct. Watson first believed in instincts (1914), but gradually lost this belief. In 1919 he was critical of them, and in 1924 he denied them entirely. "In the list of human responses there are no such things as instincts," Hence it follows that there are no inherited capacities or tempera-This led him to say in his book, Behaviorism, 1924, page 120, that if you would give him any normal child, he could, with proper environment and training, make him into "any type of specialist I might select-doctor, lawyer, artist, merchant chief and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors." So far as I know, no other psychologist has attempted to out-bid him in this respect.
- (9) Emotion. Watson denies the conscious side of emotion. He leans toward the Lange theory, which

is largely visceral in its interpretation. His three elements of emotion are fear, love, and rage, but his definitions of these are not orthodox at all. To him they are just certain responses in the neuro-muscular system, most of which are the results of conditioned reflex.

While Watson's behaviorism grew out of the functional school, it is more like structuralism. He analyzes behavior into its simplest components, the reflexes, from which concept he evolves his situation bond—response symbols.

Pavlov's conditioned reflex concept really went farther than Watson's situation—response concept in that it provided not only for the biologically adequate stimulus, but added the indifferent or substitute stimulus to produce the same response. And this was in 1905. Watson adopted the concept of conditioned reflex very slowly. In 1914 he merely mentions it. In 1919 he gave it an important place in behavior, especially in emotion. In 1922 he said it was the key to all behavior. In 1930 he called it the keystone in the arch of behavior. As instincts waned the conditioned reflex waxed.

Watson's behaviorism may be criticized on four points. First, he is not historical. His idea is not at all as revolutionary as he claimed it to be. Comte rejected introspection in the second quarter of the nineteenth century, Charcot criticized it in 1851, Thorndike in 1911 defined psychology as the science of behavior, as did also Pillsbury. Second, he was logically irrelevant. Behaviorism is not a new psychology, as he claimed, but simply a new chapter of the science. It cannot replace all the rest. Third, he is not consistent. He denies many of the precepts of psychology and then admits them under another name, as for example, introspection, which he kicked out

the front door and then admitted through the back door as verbal report. Fourth, he promised much but gave little. About eighteen years has passed since Watson. first announced his system. What has it achieved? It can't lay claim to originating objective observation as a method of studying psychology, for that method was in use before the beginning of the twentieth century. Nor can he claim to have eliminated introspection, for psychologists still continue to use it and are making important contributions through its use. Woodworth says he has probably helped to simplify some sections of psychology and helped on their way to oblivion some unpsychological problems inherited from philosophy.

We would certainly be misleading in our discussion of this school if we failed to mention other behaviorists beside Watson, or perhaps it would be better to say other "behaviorisms." The reader is referred to K. A. Williams's article, "Five Conflicting Behaviorisms," in the American Journal of Psychology, July, 1931. Other psychologists who would certainly rank as behaviorists are Max Meyer, W. S. Hunter, and K. S. Lashley, all of whom differ in important ways from Watson.

Gestalt Psychology

About 1910-11 the controversy over imageless thought which had been raging for several years petered out. The whole controversy contributed nothing to psychology. Köhler and Koffka, who at that time were in the University of Frankfort, Germany, were imageless thoughters who realized the futility of the controversy and left it. Together with Wertheimer, who was also working at Frankfort, they revolted against some of the concepts of orthodox psychology, especially that of analysis and association. They founded their own school, which they called Gestalt psychology, as a protest against these older conceptions. This

was about 1912, which you will note was about the same time Watson delivered himself of his first pronouncement concerning behaviorism. However, the World War coming on shortly afterward prevented either doctrine making any headway in the country of the other. The Gestaltists attacked the existentialists and behaviorists on the concept of analysis, so a three-cornered fight developed. The existentialists did not get excited over the controversy. They objected only to annihilation and, like "old man river," just kept rolling along.

But as a new school must have something to attack, this new school—like that of the behaviorists—set up the straw man of introspectionism which they called existentialism. Introspection is, of course, not a school at all, but one of the methods of the existential school.

On the negative side Gestalt psychology protests against:

- (1) Analysis, which they call atomism.
- (2) The constancy hypothesis, that is the fallacy of assuming a one-to-one relationship between situation—response in behaviorism or stimulus—sensation in structuralism.
- (3) Past experience, attention, attitude, or set. They say psychologists have not been able to explain satisfactorily any of these concepts.
- (4) Association. Gestaltists object to trying to integrate or associate relatively unrelated stimuli or sensations. "What is the mechanism that holds them together?" they ask.

On the positive side Gestalt psychology develops:

(1) Concept of wholeness. This is really the cardinal doctrine of Gestalt. A whole or pattern, whether mental or physical, has about it qualities which are not present in the mere sum of its parts. For example, the

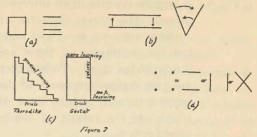


FIGURE 2—Diagrams illustrating various laws suggested by Gestalt psychology.

geometrical figure "a square" (see [a] Figure 2) has about it qualities which are over and above the sum of its four straight lines.

- (2) The law of pragnanz. This law may be divided into several smaller classifications, namely:
 - (a) the law of closure. According to the law of closure, objects tend to complete themselves, that is, if a figure is drawn leaving small gaps in it, one tends, when observing the figure, to perceive it as a perfect figure. Orthodox psychologists would explain this as the result of past experiences, but the Gestaltists believe that it is due to some inner brain dynamics in receiving a mass of stimuli from the retina. The brain process tends to spread across the gaps. brain seems to respond to figures as a whole. Difficulties in proofreading might be explained on this basis. To the Gestalt psychologist an imperfect figure produces unbalanced brain tensions while a complete figure produces equilibrium, therefore the brain gravitates toward completeness.
 - (b) the law of figure and ground. Our tendency is to interpret figures in terms of their backgrounds. Every pattern exists

as a figure against a more general and usually more vague background, but this background has almost as important a part to play in the final perception of the complete pattern as has the primary figure itself. In a landscape, the size of the tree in the foreground is determined largely by the size of the other trees in the background or by the size of the building it may be partially hiding. In the auditory field a bar of melody stands out sharply against the background of noises made by the orchestra tuning up. Nor are any of these parts of the landscape or music isolated elements, but part

and parcel of the whole pattern. (c) the law of movement. Wertheimer experimented with senseperception by throwing upon a screen in a darkened room alternating slits of light (see [b] Figure 2), one lying slightly below the other and parallel to it. It would be expected that the observer would see two parallel lines, one lying below the other and lagging somewhat behind the first as to time of appearance. As a matter of fact, what the observer actually sees is a single line oscillating upward and downward. Again if these slits of light meet to form an angle and are again alternated, the image appears as a single line rotating back and forth on an axis. This is not due, says Wertheimer, to the brain first analyzing the image into two lights and then synthesizing them into movement, but to actually sensing them as a moving image.

(d) the concept of insight. As stated previously, the Gestaltists say that the whole is more than the sum of its parts; so it cannot be gotten by observation of its parts, but by a sort of sense-perception of a combination of conditions which they call an insight.

The Gestaltists objected to Thorndike's experiments in animal learning, because, they said, the animal never saw the whole combination of conditions at any one time. The situations were, in other words, blind situations, as, for example, the maze used so frequently by Thorndike, and were not at any one time present in their entirety before the senses of the animal. If they had been, and if the problems had not been outside the range of the ability of animals of the class used, they would have learned, not by trial and error, to use Thorndike's expression, but by insight. These assumptions by Koffka and Köhler were drawn largely from their experiments with anthropoid apes. Of the many experiments, one only may be mentioned in this paper. An ape in a cage made of poles planted far enough apart to allow him to get his arm through is presented with the situation of a banana lying outside the cage and out of reach of the ape's arm. There is also outside the cage, but within reach of the ape, a pole. The ape, after making many attempts to reach the banana with his arm alone and obtaining absolutely no success, seems about to give up when all at once and without delay he takes hold of the pole and with it pulls the banana within reach of his arm. And thereafter he does it without error. There is no gradual improvement in the process as is represented by Thorndike's curves of animal learning (see [c] Fig. 2), but a sudden insight and the total step from zero success to one hundred per cent success.

CRITICISM OF GESTALT PSYCHOLOGY

- 1. Their protest against analysis is greatly exaggerated. They claimed they would abolish all analysis. But all scientific method includes analysis. They now admit analysis, but surreptitiously. They say their type of analysis is not real analysis, but a differential analysis in the same sense as we speak of differential calculus. Not analysis into real elements, but into pseudo-elements. In this they seem to be inconsistent.
- 2. They attributed to opponents assumptions which these opponents did not make. An example of this is in the law of constancy, which means a oneto-one correlation or, translated into the situation—response hypothesis, that a certain stimulus will always produce the same response. The Gestaltists deny this and try to pin it on their opponents. The truth is that nobody believes it. An illustration of their argument may be seen by examining [d] Fig. 2. Four dots arranged in the pattern in the figure may be seen in any of the forms following it in the figure. This very example which they use to disprove the constancy theory convicts them in another of their denials, which follows.
- 3. They deny past experience, attention, and attitude. Now the only way the above phenomenon of interpreting in various ways one visual image may be explained is by past experience, attention, or association. But all these they deny openly.
- 4. They deny association and substitute for it Gestalt or configuration. But what is a Gestalt? They say it is a primitive dictum of knowledge. In easier terms, it is perceiving a situation as a whole instead of first perceiving the parts and through these

arriving at the whole. Dallenbach says it is just our old friends past experience and attitude back again.

Undoubtedly Gestalt psychology has something to offer to psychology in general. It has directed our attention with new interest on insight as a method of learning. Also it has emphasized the integrative function of perception. It is rather interesting that Gestalt psychology has had a better reception in America than in the country of its birth.

Purposive or Hormic Psychology

We have a purpose in sight for most of our behavior, although many psychologists seem to have ruled out this common sense idea. Wundt and Brentano both had a purpose in making psychology scientific; Titchener's purpose was to develop a descriptive psychology, and Watson's purpose was to make it a natural science. Even the strictest objective psychologist has a purpose in his observations and experiments.

Purpose as a motivating force in mental life has been recognized by most of the psychologists who are not definitely aligned with the behaviorist or Gestalt schools. McDougall, however, in 1908 made it the cardinal principle of his system.

McDougall had a good background for his work in psychology. He had medical training at Cambridge and London, and worked with the great English psychologist, Sherrington, and with Muller, the leading exponent of the associationist school.

Purpose, according to McDougall, means the urge or desire back of the act. Purpose implies, first, foresight and, second, desire for the outcome. Purposive psychology, therefore, is an outgrowth of act or functional psychology, as shown in the diagram presented earlier in this paper.

The whole system probably grew out of McDougall's desire to find a psychological basis for the study of sociology. In 1908

he published his Introduction to Social Psychology. Up to this time psychologists had ignored motives in human conduct, but motive is the great interest of the sociologist. Since orthodox psychologists seemed unable or unwilling to aid the sociologist, there developed various improvised, unscientific systems of psychology that seemed to throw light on the problems of sociology. So McDougall tried to write a social psychology that is both scientific and helpful in the study of motive.

Instincts, he maintains, are the primary motives of life. He also links up emotions with instinct as a mental attribute. On the receptive side he says that instinct is a predisposition to certain types of stimuli; on the doing side, a predisposition to certain types of behavior in response to particular stimuli; and between these two phases there is an emotional tone which seems to be the core of the whole.

These instincts with their various modifications resultant from environmental conditions carry all the urges necessary to social life. The modifications usually occur on the sensory side by being attached to new stimuli very much as suggested by the psychology of conditioned reflex. These modifications take care of behavior that cannot be related directly to one of his pure instincts. The instincts may also be combined into sentiments, as, for example, patriotism. Behavior is driven by these sentiments rather than by pure instincts-especially adult behavior. Nor is thinking a great factor in behavior either individual or social, behavior being more the product of instincts and sentiments.

This psychology was received with enthusiasm by sociologists, but it did not go long unchallenged by psychologists, their main criticism being directed toward the term instinct. The existence of instincts cannot be demonstrated objectively; as the existentialists deal only with observation,

they deny them. The behaviorists deny instinct because it goes against their mechanistic point of view. If the present-day trend toward non-belief in the instincts becomes a finally accepted principle of psychology, the foundations of purposive psychology will be undermined.

McDougall has never had a large following and the drift seems to be away from him, although he professed in 1930 to be getting more sympathetic recognition. His greatest following has been among the sociologists.

Psychoanalysis

While psychoanalysis will be discussed in this paper as a school of psychology, it can hardly be accepted as a scientific psychology in the sense in which we have been discussing scientific psychology. To be a science of psychology or of any other field any body of material must present a large amount of data resulting from carefully controlled experiments. The conclusions drawn from this material must be limited to that which can rightly be deduced from the experiment. Psychoanalysis, as far as the writer can determine, has neither kept such a body of experimental data, nor has it checked carefully its conclusions in the light of what little experimental data it has.

Sigmund Freud, the originator of the theory of psychoanalysis, was interested originally in the study and treatment of abnormality in human mental life. Together with Joseph Breuer, a Viennese physician, Freud developed a method of allowing a patient troubled with emotional difficulties to "talk out" her difficulties to the physician. After gaining the confidence of his patient, Freud would urge her to discuss with him frankly all her emotional disturbances, not only her present ones, but others reaching even to her early youth, and including her dreams as well as her waking disturbances. This method plus one of free association resulted often in tapping the patient's memory of things apparently long forgotten and discovering the causes of her difficulties. The bringing to light of these causes of conflict led to a release of pent-up emotions, the conflict terminated, and the mental health of the patient was restored.

Freud had not practiced this method long until he was struck with the frequent occurrence of dreams as a part of these free associations. He made a careful study of dreams which resulted in his publishing in 1900 his *Interpretation of Dreams*. To Freud dreams were expressions of wishes which had not reached fulfillment in the waking hours. Strivings that had been repressed and forced into what he called the "unconscious" found expression in dreams.

Another continually recurring factor in the talking out, free-association method and in dream analysis was the sexual element. In fact, this element in time became the core of Freud's whole system. The sexual desires being repressed during the waking hours were freed during sleep, although even then they frequently appeared in disguise. Now while these dreams were sometimes easy to interpret, such as the wishfulfilling dream of finding money, usually they were so disguised as to be meaningless to one not practiced in the art of interpreting them. Freud in course of time built up a long list of dream symbols which he claimed to be able to interpret, thus gaining light on the patient's repressions.

Still another important development in Freud's system is that of transferrence. This means that the feeling of the patient for the object of his or her desire which was usually unattainable was transferred to the analyst or physician. This fact had in it much opportunity for complications which led some practitioners to give up the talking-out method, but Freud claims to be able, after he has become the object of the patient's desire, to reason away this desire. As most of the sex experiences or desires

which Freud says are repressed and which later appear in some form or other to color our behavior are experiences which occurred in childhood or early youth, he makes these youthful repressions another important fundamental in the foundation of his system. Woodworth states Freud's fundamental doctrine as follows:

"If we put the two theories together, we have in a nut-shell the fundamentals of Freud's psychology. Repressed infantile sexuality—we see at once that the three words could not be reduced anyhow to two, and that the edifice stands on three pillars instead of two. The importance of repression, the importance of sex desire, and the importance of the infantile period, are Freud's three main emphases."

Space will not permit a discussion of Freud's "polarity of the individual," his conception of the libido, or his Oedipus theory.

It is hard to criticise the contribution of Freud on the basis of the criteria of scientific psychology and be fair to him. It is more a technology of psycho-therapy. And yet even a technology is based on experimental facts. Freud has never kept any data as to his cures or failures. In fact, he might say that all were really cures if the patient probed deeply enough into his past experiences. We all have a habit of forgetting failures. The best way to prevent this is to keep careful, accurate data. Had this been done in psychoanalysis, it appears that the per cent of failures would be found to be astounding.

In most cults one person, sooner or later, becomes the leader and corners the market; such leaders are Mary Baker Eddy in Christian Science, and Freud in psychoanalysis. They become a sort of oracle. Everything must be taken *ex cathedra* from them. Freud read Adler, Jung, and Wittels out of his system because they produced original ideas. There should be no corner on truth.

Probably the greatest contribution of Freud is in the field of neurosis. It is to him we owe the discovery that most neuroses are due, not to emotional shock from outside sources, but to ineffective attempts on the part of the individual to adjust his desires to the conditions of life. We must also credit Freud with directing attention to the much broader influence of the factor of sex in all phases of life both normal and abnormal. And last, Freud's investigations have shown to all thinking people who are acquainted with his work, the importance of normal, healthful childhood if we hope for normal, healthful adulthood.

C. P. SHORTS

THE SCHOOL TAX PROBLEM: A QUOTATION

OST of the higher learning in America is carried on in tax-supported state universities. The situation of all these public institutions is now so critical that unless there is some change in the attitude or condition of our people there is indeed very little hope for the continuation of that higher learning which is my theme.

The principal function of the private universities in the educational system is to provide the leadership or the recklessness which shows the public institutions what they should or should not attempt. They have led the way in research and in educational experiment and have demonstrated to the Legislatures that it is a good thing for the community to pay professors a living wage.

Such payment is not charity which the professors should accept with humility and reward with silence on controversial issues. It is an investment in intelligence. The private universities have struggled to maintain the right of the scholar to exercise his intelligence even though it led him to criticize established policies or institutions.

Their example has enabled most state universities to take the same position, with infinite profit to their states.

These spiritual values the private universities will always have for the educational system as a whole. But their income, like that of other aggregations of capital, is now so much diminished that they cannot hold out much longer in their effort to present education and research in their proper economic perspective.

Our people must, therefore, themselves believe that tax-supported education and research are important and must themselves determine to protect them. At the present time the ordinary American gives little evidence of any such belief or any such determination. We hear instead that the cost of government must be reduced.

The Chance of Reduction

Now, I do not believe that in the long run the cost of government can be reduced, or should be reduced, or will be reduced. Certain costs of government could and should be reduced. The total cost of government could and should be redistributed, with certain items increased, and other items eliminated.

The increases that we may expect in Federal taxes to support the social services and to provide for the relief of the destitute are far greater than any reductions that can be accomplished by tinkering with bureaus. Even the savings that would come from a reduction in the army and navy and from limiting aid from the Veterans' Bureau to those who deserve it would be swallowed up by the new obligations which the Federal Government must assume as a result of the collapse of our industrial system.

Take the case of education. The principal difficulty that our schools have had to face until this depression has been the tremendous increase in the number of pupils. This has been caused by the advance of the legal age for going into industry and the