ECONOMICS IN ITS RELATION TO PSYCHOLOGY.

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Ву

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INTRODUCTION

An eminent psychologist has said (1:11) it would be a libel, not altogether devoid of truth, to say that the classical political economy was a tissue of false conclusions drawn from false psychological cassumptions.

assumptions underlying the work of the chief classical economists to estimate the extent to which their conclusions are invalidated by their false psychology to consider what gains for political economy have resulted from the use of psychological methods and data and to indicate the manner in which the two sciences may profitably co-operate in the future.

PART I HISTORICAL A. The Classical Economists

1. Adam Smith

I commence this study with an examination of Adam Smith's "The Wealth of Nations", partly because Adam Smith has been regarded by many as the founder of economics, and partly because his writings have been very generally misrepresented.

It is commonly believed that Adam Smith represented man as actuated entirely by motives of self-interest; that he regarded the individual as always the best judge of his own interest; and that the individual would always serve the best interests of society by seeking his own interest.

It is indeed true as Seligman says (2:IX) that

^(1:11) William McDougall, Introduction to Social Psychology.

⁽²⁾ E. R. A. Seligman, Introduction to the Wealth of Nations (Everymans)

this idea of self-interest as a social force: "permeates the whole of Smith's work." But the same author continues:
"It must indeed not be imagined that Adam Smith conceived of men as actuated exclusively by this motive. On the contrary, in his "Theory of Moral Sentiments" he posits the doctrine of sympathy as the real bond between human beings in their ethical relations." I wish to show by a few brief quotations from the Wealth of Nations", that Adam Smith realized the diversity of the springs of human action, the fallability of human judgments and that self-interest in this result is socially beneficial only within limits.

"This division of labour is not originally the effect of any human wisdom, it is the necessary consequence of a certain propensity in human nature, the propensity to truck, barter, and exchange one thing for another." (3:12)

The above quotation has been much ridiculed and it is here quoted merely to show that Adam Smith did not regard all human action as determined solely by rational self-interest.

"The wages of labour vary with the honourableness or dishonourableness of the employment. Honour makes a great part of the reward of all honourable professions. In point of pecuniary gain, all things considered, they are generally under-recompensed. Disgrace has the contrary effect. The most detestable of all employments, that of public executioner, is, in proportion to the quantity of work done, better paid than any common trade whatever." (3:89)

⁽³⁾ Adam Smith, "Wealth of Nations". (Everyman's)

Whether we agree with this doctrine or not, it clearly shows that Adam Smith recognized the influence of other than pecuniary motives. Further, in discussing the proposition that wages vary according to the probability or improbability of success, he makes the following illuminating observations on human behaviour:

"The overweening conceit which the greater part of men have of their own abilities is an ancient evil remarked by the philosophers and moralists of all ages. Their absurd presumption in their own good fortune has been less taken notice It is, however, if possible, still more universal...... That the chance of gain is naturally over-valued, we may learn from the universal success of lotteries..... That the chance of loss is frequently under-valued, and scarce ever valued more than it is worth, we may learn from a very moderate profit of insurers..... Moderate, as the premium of insurance commonly is, many people despise the risk too much to care to pay it When a great company has twenty or thirty ships at sea, they insure one another The neglect of insurance upon shipping, however, is the effect of no such nice calculation but of mere thoughtless rashness and presumptuous contempt of the risk. The contempt of risk and the presumptuous hope of success are in no period of life more active than at the age at which young people choose their professions." In subsequent passages he shows how this explains the irrational popularity of the life of a sailor or soldier.

Further, discussing slave labor he says: (3:345) "The experience of all ages and nations, I believe, demonstrates that the work done by slaves, though it appears to cost only their maintenance, is in the end the dearest of any." If that were true the continued existence of slavery would be inexplicable to anyone holding the view that men were guided solely by their pecuniary interests. Adam Smith held no such one-sided view, on the contrary he says: "The late resolution of the Quakers in Pennsylvania to set at liberty all their negro slaves may satisfy us that their number cannot be very great. The pride of man makes him love to domineer, and nothing mortifies him so much as to be obliged to condescend to persuade his inferiors. ever the law allows it, and the nature of the work can afford it, therefore, he will generally prefer the service of slaves to that of freemen." Substitute the phrase "The instinct of selfassertion" for the phrase "The pride of man" and we have an explanation in terms of contemporary psychology.

Smith thought the human mind to be so constituted that the individual would never seek his own interest in socially undesirable ways. The whole of his argument to prove this communitive interest shows that he recognized many motives other than the pecuniary, but that it happens that the workings of these other motives tend to bring about socially desirable results.

The general proposition that the individual in seeking his own interest is led by an invisible hand to achieve a result that was no part of his intention, is limited by the qualification so long as he does not violate the laws of justice.

and that the individual does tend to violate the laws of justice may be seen from the following quotation: (3:231) "The interest of the dealers, however, in any particular branch of trade or manufactures, is always in some respects different from, and even opposite to, that of the public. The proposal of any new law or regulation of commerce which comes from this order ought always to be listened to with great precaution, and ought never to be adopted till after having been long and carefully examined, not only with the most scrupulous, but with the most suspicious attention. It comes from an order of men whose interest is never exactly the same with that of the public, who have generally an interest to deceive and even to oppress the public, and who accordingly have, upon many occasions, both deceived and oppressed it."

Quotations might be multiplied but the above will suffice to show that however inadequate the formal psychology of Adam Smith may have been, his wide knowledge of human institution and close observation of human conduct saved him from serious error.

Finally it should be noticed that one of the chief contributions of Adam Smith to the science of political economy-his analysis of the benefits of the Division of Labor, is a truth that is independent of psychology. No psychologists will deny that men (and women, too, for that matter) want pins, and it is a genuine contribution to science to show as Adam Smith does how the Division of Labor enables ten men to do what would otherwise require twenty-four hundred men: and the value of this exposition way is in no vitiated by Adam Smith's false psychology.

2. David Ricardo

It has been said (4:97) that Ricardo assumed business men to be universally rational as he had found them on the Stock Exchange, and quite inconsistently assumed with Malthus that the laborer was irrationally reproductive.

It should be noted that it is not logical inconsistent to believe that one class act quite differently from another: though it may be a psychological error and if so, we must consider to what extent it vitiated Ricardo's economics.

The chief contributions of Ricardo to the science of economics, where on the subjects of rent and value.

As to the former, little need be said here. The facts on which it depends—e.g. the fact that some land is more productive or better situated than other land, or the fact that after a certain point successive amounts of labor and capital applied to any piece of land yield a proportionately smaller return—these are physical facts and, therefore, independent of psychology. It should be noted in passing, however, that the Ricardian theory of rent is one of the cardinal principles of the classical school of economists, and to include this part at least, of classical theory in the "tissue of false conclusion," would be a libel entirely devoid of truth.

On the subject of value there is more room for argument. Ricardo gives a clear analysis of Cost of Production. His assumption of perfectly free competition and complete mobility of capital and labor may be unwarranted in the case of many commodities, but they are economic rather than psychological

⁽⁴⁾ W. D. Mitchel, "The Rationality of Economic Activity" J.P.E. 18.

errors. By that I do not mean that the movement of capital and labor are uninfluenced by psychic facts, but that the extent to which capital and labor are mobile. In other words, the extent to which Ricado's analysis of Cost of Production is faulty is a matter to be settled by an objective examination of the facts of the marketplace rather than by psychological analysis. No doubt the same facts are fit subject matter for the psychologist whose business it is to explain human behaviour. No doubt, also, the causes limiting the mobility of capital and labor are largely psychological. But for Ricardo, whose problem was to explain price, the question of the causes of this immobility did not enter, so that his analysis of cost is independent of psychology.

When we come to the relation of utility to value there is more room for criticism. In the chapter on value (5:1) he dismisses the question of utility as follows: "Utility is not the measure of exchangeable value though absolutely essential to it..... Possessing utility, commodities derived their exchangeable values from two sources: from their scarcity and from the quantity of labor required to produce them."

"There are some commodities the value of which is determined by their scarcity alone. Their value varies with the varying wealth and inclinations of those who are desirous to possess them."

In other words, he does not analyze demand at all.

Moreover, he did not distinguish short period or market value from
long period or normal value, and hence considered the effective
demand as a matter of small consequence. In a letter to Malthus

⁽⁵⁾ David Ricardo, Works, (McCullough)

he says: (6:173) "M. Say has not a correct notion of what is meant by value when he contends that a commodity is valuable in proportion to its utility. This would be the if buyers only regulated the value of commodities: then, indeed, we might expect that all men would be willing to give a price for things in proportion to the estimation in which they held them; but the fact appears to me to be that the buyers have the least in the world to do in regulating price; it is all done by the competition of the sellers, and however willing the buyers might be to give more for iron than for gold they could not because supply would be regulated by Cost of Production...... You say that demand and supply regulates (sic) value; this I think is saying nothing; it is supply which regulates value and supply is controlled by comparative Cost of Production."

In the next letter we read: "I do not dispute either the influence of demand on the price of corn or on the price of all other things: but supply follows close at its heels and soon takes the power of regulating price in his (sic) own hands: and in regulating it he is determined by Cost of Production."

I quote this passage at length because Ricardo's neglect of the utility and demand was the basis for attacks on his doctrine by the psychological school of economists; and it is necessary to have his statements before us when we come to consider their criticisms. The theory of value is the central problem of economics and it is on this that controversy has centred. We must postpone judgment until we have examined the arguments of the critics.

⁽⁶⁾ David Ricardo, Letters, (Bonar).

3. Robt. Thomas Malthus

The name of Malthus is associated not only in economic theory but also in popular speech with the question of population. (7:2nd Ed)

Popular interpretations of Malthus would make it appear that his great work was merely an elaboration of an abstract argument to the effect that population increases in a geometrical ratio and subsistence in an arithmetical ratio, and some writers, e.g. Henry George (8:91) have denied any validity to the Malthusian doctrine, while even a trained economist (9) says: "It remains a matter of some difficulty to discover what solid contribution he has made to our knowledge."

Professor Mitchell (4:97) says his contribution to economic psychology lay in presenting the passion between the sexes as an ineradicable human instinct -- modifiable (in a second edition) by reason."

We might note in passing that this is largely in accord with modern social psychology, thus McDougall (1;275) says:
"It is probably that these two instincts (the reproductive and the parental) directly impel human beings to a greater sum of activity, effort and toil than all the other motives of human action taken

⁽⁷⁾ R. T. Malthus, Essay on Population, 2nd Edition.

⁽⁸⁾ Henry George, Progress and Poverty.

⁽⁹⁾ Encyclopedia Botannica, 11th Edition. art. Malthus.

together."

of Malthus was a great inductive study covering many lands and many ages which proved that population had tended to outrun food supply. This tendency was obscured for a time by the era of industrial and agricultural expansion of the latter nineteenth century, but it is being forced to the attention of economists again now, e.g. Keynes (10:340) and insofar as it forms part of the doctrines of classical political economy it has an inductive historical and statistical basis, and hence is unaffected by any psychological errors its exponents may have entertained.

It is, of course, admitted that any attempt to make the doctrine of Malthus the basis of a prediction that all progress will forever be nullified by the increase in the population of the earth would be unwarranted, but this position is not an accepted part of classical political economy.

⁽¹⁰⁾ John M. Keynes, "An Economists View of Population" in Manchester Guardian Commercial, 1922, Reconstruction in Europe, section 6.

4. Wm. Nassau Senior

Senior claims to have been the first to formulate the psychological premises of economic theory. This he did in his famous "four propositions on which the science of political economy rests." Of these, two may be considered psychological, one; embodying the principle of population, and the other stating that every man desirous to obtain additional wealth with as little sacrifice as possible. Of the latter, he says (11): "It is in political economy what gravitation is in physics, the ultimate fact beyond which reason cannot go."

Now it is to be observed that these principles were not borrowed from psychology at all, but from the older economists, and we must therefore deny Senior's claim to being a psychological economist.

abstinence theory" of interest. Interest being a necessary reward for abstaining from the present consumption of wealth. This proposition has been ridiculed by psychologists and economists alike who point out that most interest is received by people who live in wasteful extravagance, and of whom it is ridiculous to speak of abstinence. It is also pointed out that saving would take place if no interest were paid. Marshall (17) substitutes "waiting" for abstinence as a more suitable word. But the question that we have to decide is: "Does the payment of interest induce lending or the payment of a higher rate of interest induce more lending? And it is a patent fact that it does.

⁽¹¹⁾ W. N. Senior, Principles of Political Economy.

⁽¹⁷⁾ Alfred Marshall, Principles of Economics.

The same question may be put negatively: Has any other motive than the payment of interest been found capable of producing the same result? - and again the patent fact is that it has not.

Opinion were found insufficient throughout the middle ages to prevent the taking of interest on capital; and all the arts of modern journalism and salesmanship, working on a very strong sentiment of patriotism, were unable to produce a loan for war purposes without the inducement of high interest. The doctrine of the payment of interest as a necessary part of the expenses of production is a fact of experience independent of Senior's psychology.

5. John Stuart Mill

As J. S. Mill is generally considered to be the ablest exponent of classical political economy in its complete form -- "the apogee of classicism", Gide and Rist (12:348) it will be fitting to discuss in connection with his name some further doctrines of political economy which have not been particularly associated with any single individual, and to sum up the results of our examination up to this point.

With regard to the theory of international trade

little need be said. The assumptions on which it depend -
differences in comparative costs of production, immobility of

capital and labor as between countries combined with mobility

within countries -- are not psychological assumptions except insofar

⁽¹²⁾ Gide & Rist, History of Economic Doctrines.

as they are part of the general theory of value which will be discussed later.

On the subject of money, however, more must be said. Mills states: "Money is a machine for doing quickly and conveniently what could be done less quickly and conveniently without it." And in his analysis of value he proceeds on the assumption that men in business are really seeking some form of consumable commodities, whereas the fact is that business men want to make money and do not go further in their analysis. This position has been criticized by Professor Mitchell whose argument may be summarized as follows: nothing shows how ungit hedonistic psychology is for uses of modern science than the fact that the more perfectly its preconceptions are worked out in economics the less does the theory correspond to facts. The money concept aided by accounting trains the reason and jostles people out of unprofitable habits. Further, it establishes norms of conduct in business and finally it constitutes a system of which we have lost control. Therefore, no theory can satisfactorily account for the present system which slights the roll of money. If it be answered that economic theory does not account for but give an account of, the present system we may answer, -1. Modern science reckons no theory adequate as an

- Modern science reckons no theory adequate as an explanation unless it indicates the line of derivation of the phings explained, since this is a fundamental part of the understanding of anything.
- An attempt to explain the present without reference to the process of evolution is artificial, superficial and incomplete. It is artificial because what is clearly in the business

man's head is read out and a substitute is read in. It is superficial because it does not reveal the institutional basis and partial character of economic rationality. It is incomplete because it does not take account of the reflex influence of pecuniary institutions on economic activities, e.g. the making of goods is subordinated to the making of money. The theorist who leaves out pecuniary concepts in an effort to get a clear view of the realities that are supposed to lie behind the symbols is superficial where he tries to be profound. In many cases little does lie behind the symbols.

Paradoxically exonomists have been spared from worse error by over stressing the money spirit while ignoring money; that is, "pleasure-pain" is translated into "profit-loss", and modern men are enough swayed by pecuniary logic to make such a view possible, but its plausibility is due to a confusion of thought.

A further case of error due to this reading out of the business man's head what is really there is seen in Mill's treatment of overproduction. He considers it a sufficient refutation of the theory of general overproduction to say that men produce things for the sake of securing other things, and therefore, everything that is produced constitutes a demand for something else. This would be true if things be taken to mean consumable commodities, and in this meaning the statement is obviously untrue. Business men are not seeking to obtain commodities but to make money. The theory of overproduction may be fallacious, but the above exposition by Mill which has been accepted by most economists certainly fails to expose the fallacy.

is another proposition that does not depend on psychological assumptions for its validity. There are, however, many phenomena in connection with the theory of money, banking, credit, business cycles, currency inflation and depreciation, which are psychological in their nature. In collecting information concerning matters of this kind an investigator will be doing work that is both psychological and economic, and a knowledge of human psychology will be of great assistance in understanding them.

Nevertheless, when an economist wishes to arrive at an explanation of a crisis, for instance, it is the facts of crisis, discount rates, bankruptcys, etc., that he is seeking to explain. He uses the methods open to all sciences, namely, observation of facts, generalization therefrom where possible, reference to accepted principles, test and, if necessary, revision of principles, in the light of the facts. point to be insisted on is that the principles to which phenomena are to be referred are economic and not psychological principles and although a sound psychology will make the understanding of the facts easier, still if the observation of facts is broad and accurate enough and the logical induction correct enough, the explanation arrived at should be valid even though the investigator is not a trained psychologist. The literature on this subject is voluminous and constantly growing. Professor Mitchell has collected several distinct theories of busines cycles. (13) examination of these reveals that such differences as exist (and they are many and wide) are not mainly dependent on psychological

⁽¹³⁾ W. C. Mitchell, Business Cycles.

assumptions of the various authors, but are due to different analyses of the facts, or in some cases to preconceived economic theories, and in any case the questions that issue between the different writers on this subject can only be settled by reference to the facts of the marketplace.

Dicey (14) says that Mill represents a transitional stage in the development of political theory, that is, a stage between Benthamite Individualism and Collectivism. Mill himself considered that his chief contribution to economic theory was the distinction he drew between the Laws of Production and those of Distribution, whereas Ricardo's followers had represented the laws of distribution as something of a nature of immutable natural laws. Mill regarded them as subject to modification by society.

This may be considered as an error resulting from his intellectualism, though Mill was under no delusion as to the ability of the average citizen, yet he probably overestimated the improvement that is to be expected from education. This question of evaluating the present order will be discussed later, all that need be said here is that Mill's views on this subject have not been accepted by other writers and can hardly be called a part of classical political economy.

There remains for discussion the question of value.

On this he says (15) "Fortunately nothing remains for the present or any other writer to clear up."

As this is the main question dealt with in the next section of this thesis, it will not be discussed further here.

⁽¹⁴⁾ A. V. Dicey, Law and Opinion in England in the 19th Century.

⁽¹⁵⁾ J. S. Mills, Principles of Political Economy.

Our investigation of the older classical economists is now closed. We have seen that most of their important doctrine, except the theory of value which is still to be discussed, are not invalidated by their false psychology.

We have seen, however, that the false assumption that men produce commodities in order to obtain commodities has led to serious confusion if not to actual error.

B. PSYCHOLOGICAL ECONOMISTS

We now come to study the contribution made to political economy by a group of men whose conclusions have so much in common that there is no nied of distinguishing individuals. Their common feature as Gide and Rist say: (12) "Is fidelity to the doctrine of final utility, whatever that may mean."

has their name suggests, their work was avowedly based on psychology and up to the last few years it was in the work of this school that the contribution of psychology to economics consisted.

W. S. Jevons (18:265) openly based his discussion of value and distribution on a theory of pleasure and pain. Approaching the subject from this angle he naturally gave greater prominence to utility than did his predecessors; though one might not be prepared for his dictum: "Value depends entirely on utility."

This statement became the kernel of the theory of value put forward by the Psychological or Austrian School of Economists, chief of whom were Carl Manger, F. von Wieser, and Eugen von Bohm-Bawerk.

It is not easy to give a fair summary of the argument by which it is attempted to prove this point in the short space at my disposal, but it must be undertaken, since what has seemed to be valid in the reasoning of these economists, has been accepted by later writers and forms an integral part of accepted economists.

⁽¹⁸⁾ W. S. Jevons, Theory of Political Economy.

Following Smart (19) the outline of this theory is as follows:

value is the result of being a condition of the satisfaction of a want, e.g. as capable of quenching thirst all water is useful, but it does not obtain any value till some limitation of the quantity available makes it the indispensable condition of a satisfaction, that is, when used without qualification by these writers value means subjective value.

"The scale of values adopted by the old economy (necessaries, comforts and luxuries) corresponds to no actual scale, it is adapted to circumstances so simple as to have no resemblance to any known form of society, e.g. in ordinary course of life diamonds have a greater utility than bread......

"Suppose a Crusoe on an island with five sacks of corn, two he needs for food, the third he feeds to poultry, the fourth he makes into home-brew and the fifth he feeds to the birds. The value to him of each sack (since all sacks are alike) is measured by the importance of the want satisfied by the last sack of corn, here, the feeding of pets. Thus the value of any good can be found by inquiring what want would go unsatisfied if the good were lost. There is always a least want satisfied, the importance of this want determines the marginal utility of the good that satisfied it. What determines the value of a good is not its greatest utility nor its average utility, nor yet its lease conceivable utility, but its marginal utility in a given circumstances.

"In actual life the value of a good is rarely measured by the utility it affords, but by the utility of some other

⁽¹⁹⁾ Wm. Smart, Introduction to the Theory of Value.

good. The thrifty housewife who has lost her supply of butter does not do without butter altogether, but gets some more and does without something else, always the least in her particular scale of wants.

"It is the relation between a man's wants and his resources that determines what particular use of a thing is the last. Thus, when transportation in the middle west was poor, when coal was scarce and corn plentiful, corn was often used as fuel, that is, its marginal utility was low. The value of an additional dollar to a rich man is small because he has few unsatisfied wants.

"Usefulness and scarcity are the ultimate determinants of the value of goods. Usefulness indicates the height to which the marginal utility in the most extreme case may rise. Scarcity decides to what point the marginal utility actually does rise in a concrete case.

"Of course, every man's subjective scale of values is different from every other men's, but we are unconsciously influenced by the valuations of others. We might value a certain thing at a hundred dollars but if we find it everywhere valued at fifty we would refuse to pay more, hence it comes that objective values or prices may coincide in spite of the differing subjective valuations and differing wealth of various individuals.

"In modern industry goods are produced for the market and it may almost be said that such goods have no subjective value for the sellers, price is determined by the valuation of the marginal buyer.

"If the Cost of Production theory were true the

value of a good would come from its past. That the cause of connection runs the other way may be seen from the phenomenon of "dead stock". However great the cost expended on an article, if the public will not have it, all the costs in Christendom will not give it a value. Suppose that an article, of which there is a stock, goes out of fashion, the value and the price of it fall at once. The first thing the immediate manufacturer does it to ask himself if he can reduce his costs to suit the new price: if he cannot he abandons the manufacture, and it passes probably to some man who is able to produce more cheaply. In any case the cost must conform to the value."

What we're to say of this doctrine? One does not need to be an economist to see that it is a one-sided statement, nor a psychologist to see that it is a false account of human behaviour. And when we read: (43)44) "Diamonds and gold are the luxuries of the rich and are paid for in the measure of the purchasing power of these classes. Food and iron are at the other end of the scale because they are goods for the people." - We feel that their effort at consistency has led them to absurdity.

The statement of Ricardo, quoted above, that prices are determined by competition of the sellers, might seem a sufficient reply. The explanation of the older economists certainly shed more light on the subject; by determining expenses of production of any given commodity a person can arrive tolerably nearer the price at which it will be found actually to sell, a result which cannot be obtained by inquiring into the subjective valuations put on a goods by any number of individuals. An unkind

⁽⁴³⁾ Be von Wieser, Der Naturliche Werth.

critic of the Psychological School might say that utility can determine anything but price, i.e. it can determine what will be produced and how much, but value or price is determined by expenses of production.

However, the doctrine of marginal utility has been incorporated into current economic theories, a typical example is the following from Taussig; (20:121) though similar statements may be found in Marshall, Nicholson, Seligman, Seager and Ely:

"One set of knives and forks is essential to cleanly eating. A second set is highly convenient, a third somewhat less so; there is a decline in utility, until at last the stage is reached where an additional set is a mere encumbrance. To this general tendency we give the name of the principle, or law, of diminishing utility. The price of a commodity depends, as the case is commonly stated, on the least of the utilities yielded by the supply, or on final utility. Price, or value, depends on the utility of the last increment."

In subsequent passages he shows how demand, reflecting utility, can supply, as governed by expenses of production and values, are not independent but mutually determined. The older theory was wrong in representing as a chain of causation what was really mutual causation. The psychological economists simply reversed the chain of causation.

Now the fact of diminishing utility is not a psychological fact, but the fact of diminishing valuation, through which alone price is effected, is. But that it is a fact may be proved by the objective criterion of price. It may be proved by

⁽²⁰⁾ F. W. Taussig, Principles of Economics, Vol. I.

observation that a person will pay less for a thing the more he has of it. The orthodox theory of value, however, requires more than this, it requires that the utilities of different things be compared, as well as the utilities of different quantities of the same thing, and this contention is capable of no such simple proof, in fact, this is the weak point in the current theory of value.

Thus we see that the theory of value -- the central theorem of economic science -- is based on a psychological assumption. We have to inquire whether that assumption is true or false and if false to what extent economic theory is thereby invalidated.

PART II
THE PRESENT CONTROVERSY
A. The Attack by the Psychological
Economists.

As indicated above, it is upon the doctrine of marginal utility that the attacks of modern phychological economists have been directed. A hedonistic psychology, we are told, is false. It fails absolutely to account for the undeniable examples of self-sacrifice of which history from Regulus down is full. We now regard man as a product of an evolutionary process, an animal differing, to be sure, from other animals, but still an animal with his full share, most psychologists since James say, more than his share of the instinctive equipment of animals. Hence any account of man's actions which overlooks this facts is false.

"Man is only a little bit reasonable, and to a very great extent unintelligently moved in quite unreasonable ways. (1:11)

This is the real basis for the attack on the theory of marginal utility, but the attack appears in many forms chief of which will next be briefly summarized in succession, after which the reply that other economists have offered, will be stated and some reflexions on the controversy put forward.

1. E. H. Downey (24)

"To apply the hedonistic calculus to every day economic affairs requires no small dialectical finesse, but the marginal utilitarians are quite equal to the feat.

"It was already observed by them of old times that sales of a commodity fall off when its price rises, it adds nothing to say that sales fall off because some persons buy other things or keep their money, which is all that is left of marginal utility when you subtract hedonism, or the balancing of utilities.

"Marginal utility is equally unable to explain price. Hogs fall 7% in ten days. Why? It is no more an explanation to say that price tends to coincide with marginal price offer, than to say it is such as to equate demand and supply. The explanation is not a phrase that described the outcome, but an analysis of the forces that make the outcome what it is.

"There is a complex market organization capable of producing quite wide variation in price independent of variations in pork-eating habits of the population or the aggregate supply of hogs.

"Marginal analysis gets nowhere, because the margin is fixed by the forces that fix price. The marginal utility of turkeys at Thanksgiving is the resultant of very numerous demand forces and supply forces, which are the factors of market price.

"It is not the value problem, as a whole, much less the ultimate ground of value, but particular prices with which economists must deal if their science is to be more than intellectual pastime.

"Elementary human nature may or not be fairly uniform, but it works through institution which are not. Marginal utility economics is an admirable body of dialectics, - scarce surpassed for subtlety range and want of content but the finest products of mediaeval scholasticism, but it has not contributed and cannot contribute to the elucidation of any practical problem."

⁽²⁴⁾ E. H. Downey, The Futility of Marginal Utility. J.P.E. 18.

2. W. C. Mitchell

"The assumption of rationality fits the Department of Consumption nowhere outside of economic treatises. Habit, suggestion, imitation, are the actual forces at work.

"More fundamental is the problem of accounting for economic rationality itself. We must explain the technical methods, the institutions, and the traits of human nature, e.g. how reconcile the irksomeness of labor with man's success in outstripping all other animals, that is, economic rationality is an acquired aptitude, and as such it is a central problem in economics. Even if economists start with it as an assumption they are not justified in stopping before they have made it a problem, and in so doing they will work back to habits, instincts, etc.

failure to understand concepts having a social origin. A good proof of the importance of economic concepts is furnished by the blunders economists have made by imputing modern concepts to primitive men. It is a no less serious blunder to take the modern concepts for granted as part of man's native endowment, and this is the result of passing the evolutionary phases of the subject over to other sciences. A further result is to prevent the comprehending of the true character of the limited range of phenomena with which the economist professes to deal."

3. R. G. Tugwell (25)

"Economics is not independent of psychology, the past is not a reliable guide to the future, forecasts must take into account the possible reactions of all the individuals in the market.

⁽²⁵⁾ R. G. Tugwell, Human Nature in Economic Theory, J.P.E. 30.

which is not excluding human nature.

"If life were entirely on the instinctive level choice would be determined by the power of an article to call out responses of the individual, but there is a crust of habits also reflection on costs and alternatives. If we want to know what economists means by the marginal buyer, we must know what creates the least willing buyer.

"Marginal utility does not explain price, it reduces demand to an unknown quantity which is a human nature quantity. It is the task of economists turn these unknowns into knowns, and in so doing they will be making a contribution to psychology.

"The classical doctrine assumes that workers work for wages alone, that landlords let for rent alone, that capitalists lend and save for interest alone, which is a false simplification.

"Further, psychology throws dowbt on the classical doctrine, 'he conquers who does best for society' -- since it reveals the acquisitive instinct rather than the desire for commodities as a motive force.

"Acquisitivism should not be hidden under a mask of productive virtue since it becomes a ruthless and unintelligent directive force in industry, leading to the enlargement of itself and a justification of itself in our common morality.

"Most economists are normative in fact, but economic ideals involve a study of satisfaction, a psychological term, and we can't know what we want from industry for humanity without knowing the nature of the humanity that is to be effected."

(26:27)

4. J. M. Clark

"Not merely the doctrines but the very inquiries and the forms in which they are cast are dependent on limiting assumptions from which economics must make itself free. The marginal utility theory of value has presupposed an equilibrium between utilities, that is, it is oriented by a static point of view. This represents only one phase of one agency of guidance. The hedonistic phase of individual guidance.

"If the economist borrows his conception of man from the psychologist, his constructive work may have a chance of remaining purely economic, if not, he will have to make his own and, therefore, a bad psychology.

"The origin of wants is within the economistss study of value, since it may be a direct part of the business of earning a living, or an indirect result of some process of production.

"Only on the assumption that they would be unchanged under any economic system can we ignore wants and their origin.

"The 20th century is aware that environment molds man and is attempting to control the molding. We have a new conception of how wants are aroused and how they influence human action. The individual brings to the market not wants complete, but the raw material out of which wants are manufactured. In business, one department furnishes wants which other departments satisfy.

"In judging the competitive system, what profit is it to demonstrate that our productive powers are a system of maximum efficiency if price be taken as the messure of efficiency, or that prices are in proportion to the marginal importance to consumers, if the economic system determines this marginal importance.

⁽²⁶⁾ J. M. Clark, Economics and Modern Psychology, J.P.E. 26.

"Advertising has become an economic category, but utility and production are treated in a way which ignores the psychology of advertising, or is inconsistent with it, in most economic texts.

"The buyer in current theory is supposed to go to the market with a predetermined demand schedule, are the disturbing factors such as the economist disregard, evidently the business man cannot disregard them. A recent book on production devotes almost harf its matter to the creation of demand. consumers acted as the text-books say, demand would be uninfluenced by advertising.

"Decision involves effort. To know when and how to narrow activity of the will is a great part of knowing how An incontinent exercise of choice wears people out. (41:33) to live. But the working man, for instance, of Professor Pigou calculations so intricate that even that learned economist makes A good hedonist might consider the mistakes in recording them. cost of weighing cost so great as largely to follow his impulses.

"Only by the aid of habit does the marginal utility theory approximate the facts of life. But only in an extremely slow moving society can habit take care of enough of life to deceive people into thinking that conscious choice governs the whole.

"Further, morons are numerous enough to vitiate theories, depending on the assumption of a normal man. mentality may be static but they are highly suggestible and gain nothing from their mistakes.

C. H. Cooley, Human Nature and the Social Order. A. C. Pigou, Wealth and Welfare.

The theory that competition tends to direct production in the fields in which demand is greatest, is true only if demands which can only be satisfied by change of institutions can never be satisfied. Much social legislation consists in making effective demands which formerly were ineffective, and if economics is to have a voice in this legislation it must notice these demands before they become effective. At present they fall in a blind spot of formal theory.

"The static competitive standard can tell us nothing as to how much energy should be devoted to each of the classes of production, or to improving institutions.

"The classification of utility into those of form, time and place, though useful in disposing of the idea of unproductive labor are of no help in eliminating economic waste."

In another article, (29) the same writer argues:

"A defensible body of doctrine could be formed by inverting six common assumptions of orthodox economics.

- "1. The most important subject of economic study are not appropriatable, nor fully exchangeable.
- "2. The quality of activity involved in production is more important than the quantity or quality of consumption.
- "3. We need someone to save us from the possible disaster of getting what we went. (Reversing the theory that the standard of economic service is satisfaction of wants.)
- "4. Overhead costs are universal. (Reversing the motto that cost varies in proportion to output.)
- "5. Rational foresight of individuals and consistent devotion to their own interest would lead to collectivism.

⁽²⁹⁾ J. M. Clark, Soundings in Non-Euclidean Economics.

"6. Human beings are instruments of production utilized by machines."

5. W. H. Hamilton (32)

"Value should not be considered the central concept of economics at all. Economics based on a true psychology must take into account instincts and impulses, and as the product of these, institutions.

"The theory of value is really a specialized subject with as little right to the name Economic Theory as the theory of money.

"Institutional economics alone meets the demand for generalized description of the economic order. A problem of explaining why we are as well off as we are, and why some are better off than others, cannot be solved by formulas explaining the processes through which prices emerge. It must go beyong purchase and sale to the facts of the economic system which allow these things to take place on particular terms and not upon others.

Faire. We have found out that institutions are modifiable and need a theory that will tell us where and how they may be modified. Property, the wage system, etc., refuse to retain a definite coment. The economic system is a unified whole which is in process of development. A curious stream of tendencies, rather than a group of real things.

"There is more than promise in the work along this line done by Hobson, Cannan, Tawney, Clay, Adams, Veblen and Mitchell, but as yet there is no complete and consistent theory which may take a decade to work out."

⁽³²⁾ W. H. Hamilton, Institutional Approach to Economic Theory. Am. Ec. Review, 9 supp.

B. THE DEFENCE OF THE ECONOMISTS

What defense have economists made to these attacks. The hedonistic psychology on which the theory of marginal utility was based being admittedly false, two alternatives are open. One is to substitute a true psychology, and the other is to make a Declaration of Independence. It is the latter course that has been generally adopted.

Thus, Prof. Carver (33) argues as follows:

"The behaviourist economists fail to see that
the so-called orthodox economists have made ample allowance for
these instincts, emotions and impulses. They have gone to the
other extreme, their man is too much of the impulsive, unreasoning
type.

"They lay too much stress on what men are really like, and too little on the great selective principles of economy. We want to know, not only what motives work, but also what motives work best.

"It is my present belief that students of human behaviour reach different conclusions according to the kind of people they are studying, the successful or the failures.

"There is no reason for concluding that a non-calculating man whose economic reactions are wholly instinctive, is better than one who carefully compares costs. The investor who calculates whether an enterprise will pay is really calculating whether the utilities resulting will be greater or less than those destroyed."

⁽³³⁾ T. N. Carver, The Behaviouristic Man, Q.J.E. 33:195.

Quite similar is the following argument of Prof. Dickinson (34)

"Economists, generally, are not convinced that any real economic principles have been invalidated by the new psychology, or that any profitable extension of economic theory will come from that source. There are several physical facts in economics which are independent of psychology. In another sense economic principles are independent of human volitions. The Paraguayans who killed their oxen for supper will be displaced by people who act according to the orthodox theory. Hence, political economy is not "idle though true", even though it is not practiced by everybody.

The law of diminishing utility was a psychological postulate that rendered great service. If other equally regular principles could be discovered, they might be equally useful, especially if we consider desirable a closer correspondence between the wants and the needs of consumers.

"The first effect of a new psychology was an attack on marginal utility. This was easily met by saying that anyway, men want goods, there is no doubt of that. Instincts may cause their wants but they use intelligence in choosing the means of satisfying them. Habits have a rational origin. As to motivation, all that economists ever needed to say is that most men try to get the largest amount of wealth at the lowest cost.

"Another criticism is that much work would be done without wages, much money saved without interest, but a part of the needed supply must be paid for.

⁽³⁴⁾ Z. C. Dickinson, The Relations of Recent Psychology to Economics, Q.J.E. 33.

"We may admit that unequal incomes prevent our arguing that the competitive systm gives maximum satisfaction, but since money events affect social classes in about equal proportions, a general corelation between dollars and utilities may be assumed.

"Finally, it may be doubted that the ordinary man is so much and so easily influenced by advertising as the critics claim."

Prof. Haney, speaking of Prof. Clark, said: (36)

"I believe that he will not be able to develop

any laws or build up a science from those foundations, but that '
his work will remain an ever-changing description of an ever-changing
environment. It is a wise division of labor that the economist

should confine his attention to economic motives and economic values
rather than ethical, political or esthetic values."

Prof. Florence argues as follows: (35)

"An adequate defence to the psychologist's attack takes the form of a retreat toward more non-committal terms from which to make deduction, supported by a counter attack on inductive lines. To insure co-ordination between these tactics the terms used in deduction must refer to observable conditions or facts elligible for a basis for induction, and here the trend toward a behaviouristic terminology may be of assistance. Utility is simply the quality of being wanted, i.e. is such as to stimulate seeking, disutility such as to stimulate shunning. Demand will be defined as vendability rather than as utility."

⁽³⁶⁾ L. H. Haney, Discussion, Am. Ec. Review, 9 supp.

⁽³⁵⁾ P. S. Florence, Economics and Human Behaviour. p. 60.

"Economics has more to learn from anthropology, history, comparative politics and administrative theory, than it has from any social psychology of instincts, even if this were a compact and consistent body of knowkedge, which it is not."

In a review of Prof. Dickinson's Economic Motives
Prof. Robertson (23:178) writes:

"Have not economists been building on a foundation of sand? (Their false psychology.) It is a relief to find that Prof. Dickinson says "no". He argues that if men buy more of a thing when price falls, it is not of primary importance to an economist whether they do so because they desire gain or from some other reason. His second argument is, that there is not so much difference between the old hedonistic doctrines and modern psychology as is commonly supposed."

⁽⁸³⁾ D. H. Robertson, Economic Psychology, Ec. Journ. 33.

C. REFLEXIONS ON THE CONTROVERSY

In estimating the fairness of the attack on economics, and the adequacy of the defence, it is perhaps fitting to begin with an observation of Prof. Keynes (38:5):

"Those who refuse to waste time, defining their terms, are apt to waste much more time in mere verbal differences."

account of the workings of the present order, which is the prevalent view among British economists, most of the criticism that is relevant can be fairly met. For instance, Downey's statement that the theory of marginal utility adds nothing to our understanding of actual problems, is simply not true. It does add something to our understanding of how value depends on scarcity, to point out as Taussig does above, that the utility of each additional set of knives and forks is less than that of the preceding, and this fact is in no way bound up with hedonism.

Further, the conception of marginal utility is of advantage in showing what many people, even yet, having difficulty in seeing, namely, that it is possible for both parties to a transaction to gain.

Of course, if anyone expects the theory of marginal utility to explain why the price of hogs fell 7%, without reference to the facts of the hog market, he will be disappointed. What the theory of marginal utility does, and all that it should be expected to do, is to supply a formula into which the concrete facts of any given problem can be fitted and the answer determined. It may be compared to the formula in algebra for solving the typical quadratic equation ax + bx +c= o. The algebraic equivalent of x.

⁽³⁸⁾ J. N. Keynes, Scope and Method of Political Economy.

is certainly as incomprehensible as the problem of which it is the solution, but if we can find out what a, b and c are the formula tells us what x is. Similarly, if we can find out the facts influencing the demand for, and the supply of, hogs the current theory will help us to understand price. The critic says that these facts determine price, and that the theory of marginal utility is a useless complication of the problem. This is true if we do not consider that any light is shed on a problem by seeing it as one of a group of problems, all of which may be solved in the same way.

Again, the formula tells us what factor to look for and hence puts us on our guard against omitting important elements. Finally, the idea is of advantage in disposing of the mediaeval conception of a just price which still prevails in many minds.

Most of the arguments of Mitchell, Tugwell and Clark deal with the scope rather than the truth of exonomic theory. Much of their criticism can be accepted if we take the broad view of political economy, namely, that it should be regarded as an evolutionary, evaluating, normative science, rather than a positive descriptive and explanatory science. Whether this is the correct view is a question that need not be discussed here.

A good deal of Prof. Clark's criticism is well described by another observation of Prof. Keynes: (38:ch 2, note A) "Political economy is so identified with the principle of Laisse Faire that we rarely find an attack on political economy that does not turn out to be an attack on Laisse Faire."

⁽³⁸⁾ J. N. Keynes, Scope and Method of Political Economy.

Much of Prof. Clark's criticism contains the idea that economics is a defence of the present order; and that the theory of marginal utility, insofar as it represents economic values, as social utilities, and contains the view that the present system is designed to produce a maximum of economic values, thus presents itself as a complete and sufficient defence of the existing order.

Now it must be admitted that much economic theory is so worded as to give this impression, and it must also be admitted that the present order cannot be judged in any such The most that such abdysis can show is that taking simple way. the present system for granted and assuming free competition, etc., payments for capital, labor and business skill in the long run tend to be no greater than necessary under present conditions to call forthethe requisite amounts of each of the above factors. Obviously much more than this is involved in evaluating the It would be beyond the scope of this thesis to present order. enter this question here, but it is pertinent to notice that much socialist theory from Bellamy (55) to Walling (56) suffers from the same intellectualist fallacy that has been charged against orthodox economics. It is interesting to note that Prof. Clark has pointed out (29) that rational pursuit of self-interest by intelligent individuals would lead to socialism. The conclusive argument against socialism is not, as is often said, the selfishness of men but their ignorance, stupidity and gullibility. present system is obviously to the advantage of those who are clever enough to become the beneficiaries of it, and the same

⁽⁵⁵⁾ Edward Bellamy, Looking Backward and Equality.

⁽⁵⁶⁾ W. E. Walling, Progressivism and After.

cleverness that enables them to rule an industry will enable them to rule in politics, and socialism has little chance of being inaugurated to say nothing of succeeding, while the mentality of the average citizen is what it is.

This is not to say that socialism will never be practicable because the psychologists agree that the nature of man is very plastic, what he might become under other institutions is impossible of prediction, also his original nature might be improved by scientific breeding. (57:244)

ments of Carver and Dickinson in favor, at once, of the present economic theory and the present economic system. Dickinson's argument with regard to the Paraguayans contains the suggestion that the economic man is an ideal of conduct proved to be desirable by the fact of survival. It need hardly be pointed out that the ideal must be rejected and that "the law of the jungle" argument advanced to prove its desirability is inadmissible. Moral progress involves the development of higher ideals than fitness for survival in the struggle for existence, and the creation of conditions which permit these higher ideals to be practiced.

It should be noted, however, that if the economic man is based on false psychology, it has been largely responsible for the persistence in the popular mind of that false psychology; in fact, paradoxical as it may seen, it has tended to make the false psychology true. The doctrine that "he serves best who profits most" becomes a dogma used to justify obvious exceptions, and the teaching that self-interest is the only motive of conduct tends to make it so.

⁽⁵⁷⁾ E. L. Thorndike, The Original Nature of Man.

ordinate with price. In the first place, this is true only of some articles, and only in the final purchase of them by the consumer. There remain large parts of business in which the effect of sales pressure is almost negligible. Further, the influence of this pressure is righly regarded as a disturbing element, rather than a permanent factor in the problem because it is not a necessary part of the process.

It must be regarded as of the same order as limitations to free competition. Many economists seem to consider the element of monopoly so slight as to be negligible, while others, for instance, Veblen (53) seem to regard it as the general rule and the issue, as in the present case, can only be settled by a study of the facts.

point out here that this is merely the modern form of the historical school, and we need not repeat the arguments which satisfied the passing generation of English and American economists that this method of approach was no substitute for economic theory.

The study of institutions is essential; and excellent studies of institutions have been made by economists who do not deny the need for economic theory.

The institutional economists admit that they have not yet erected a science, and until they do we must be pardoned for adhering to the present theory which gives a unified if imperfect view of economic phenomena. Finally, it has not been made evident that the difference between these schools is fundamentally a question of psychology.

⁽⁵³⁾ Thorstein Veblen, Dhe Vested Interests.

⁽⁵⁴⁾ R. T. Ely, Property and Contract in Relation to the Distribution of Wealth.

economy is not invalidated by its false psychology. It remains to show that a true psychology would lend it additional support. It is proposed to do this by taking the other horn of the dilemma and taking psychology from the students of that science, rather than try to make economics independent of psychology. Since there are psychological factors entering every sphere of economic activity, this would seem to be the only proper course.

to economics suffers from the metaphor by which economics is represented as a building on a foundation of psychology. This consception is entirely false. As I have shown in the first section of this thesis, most of the foundation stones of economics are physical facts, and (if we must retain the building metaphor) we should rather represent psychology as reinforcing material which is present from foundation to coping stone, giving added security to propositions inductively built is in the market place.

that it must all be rewritten, have contributed a few new ideas but, as is admitted, have not built up a true science in place of the present which they declare to be false. Thus, Ordway Tead (44) gives some interesting, if trivial examples, of instinct manifesting itself in industry. For instance, men waiting in line to be served by "my waitress" illustrating the sex instinct. Men objectin to being transferred from one machine to another is ascribed to the instinct of possession, etc. Similarly, Carleton Parker (46) attributes I.W.W. activities to "balked dispositions".

⁽⁴⁴⁾ Ordway Tead, Instinct in Industry.

⁽⁴⁶⁾ Carleton Parker, The Casual Laborer.

Prof. McDougall, himself, (1:288) advances a theory of the possible development of early society which was shown years ago to be false. Thus showing what a short distance deductive reasoning can take us in socialogy. Let us take the other course then, and regard psychology as reinforcing material rather than as a foundation on which the science of economics is to be built. Let us see whether, after all, social psychology does not furnish us with some of this reinforcing material.

Political economy has assumed a man to be a rational animal. Prof. McDougall says he is only a little bit reasonable. There would seem to be no support for us here, but let us look further. Prof. McDougall says the function of intelligence is to aid in securing ends set by the instincts. Now economic activity may be regarded as a means to other ends, though as a matter of fact in most productive activity there is no other end in view than money-making. Money, itself, however, is only a means and, therefore, even on McDougall's premises we may argue for a good deal of rationality in economic activity.

Most psychologists, however, assign a greater place to intelligence than does McDougall. Thus, Thorndike (57) while taking the position that instinct and intelligence are of one flesh and blood says that to think under appropriate circumstances is as natural as to run away under other circumstances. Ellwood says the largest generalization we can make about human history is that it is a movement towards the increasing supremacy of human intelligence. Keynes (38) in duscussing the statement of Knies

⁽⁶⁵⁾ Lewis H. Morgan, Ancient Society.

⁽⁵⁸⁾ C. A. Ellwood, Introduction to Social Psychology.

to the effect that an assumption of pure altruism would be as near the facts of economic life as the current doctrine, says that Knies is manifestly mistaken and that conclusions based on the assumption of an economic man are an approximation to actual conditions, and in some cases, such as stock exchange prices, and wholesale prices, it is a very close approximation.

This seems to me to contain the key to the situation. Instead of discarding economics because men do not always act as supremely intelligent beings in undisturbed pursuit of economic gain, let us consider to what extent and in what field they fail to do so. Since none but behaviousists deny that some part of economic activity is governed by intelligence, we can commence our inquiry with the assumption of some intelligence and proceed to determine its extent.

Even the behaviourists could have little fault to find with this procedure except, of course, the terminology since the habits and condition reflexes which they contend are the determinants of action will be such as have proved to be of assistance in the struggle for survival and, therefore, probably more like what is commonly called rational than other psychologists would admit the greater part of our actions to be.

Starting from this point then, and accepting the statement of Mitchell that economists have been saved from greater errors by translating pleasure-pain into profit-loss, we have to inquire to what extent the economic activities of mankind are governed by a desire to make money.

The man on the street would probably say that we are all doing our best to make money, and even Prof. McDougall

could not defend his statement if it were translated into pecuniary terms and made to read as follows: "Men are only a little bit influenced by the desire to make money." This explains why conclusions based on the assumption of an exchanic man are nearer the facts in production than in consumption. In production the making of money is the conscious aim and alternative means of attaining this end are weighed more or less carefully against one another in the pecuniary scale. In consumption there is not, except in the case of a very few, any conscious determination to make elaborate comparison between the utilities to be derived from alternative outlays of any given sum of money.

A distinction must be made between the non-economic activities of man that is due to a failure to achieve the ideal money-maker, and that which is deliberately undertaken from some For instance, a manufacturer who installs new other motive. machinery and finds that it does not pay is to be distinguished from one who installs machinery knowing that it will not pay. Behaviour of the latter type is so rare, at least among the business class, that it can almost be disregarded. And failure to conform to the ideal of the economic man in this sphere is due mainly to ignorance. And it is a failure which will progressively tend to disappear with the extension of scientific management and cost accounting. The growth of humanitarian motives would tend to work in the opposite direction but their influence up to the present time is slight.

With regard to distribution the case is quite different. With so many of us the standard of living tends to equal income so that saving gives place to insurance, old age pensions, etc. Effort is directed to increasing income rather

than reducing expenditure. Under these circumstances, we see
the grounds for the statement that hedonism fits the facts nowhere
outside economic texts. We also see how much truer an account is
given by saying that men, in general, desire to make money. The
fact, then, is that we have a large proportion of the population
who make practically no attempt to save. The question is, what
determines their expenditure? Can we make any generalizations
that will be substantially true and, at the same time, give us
real information? A little observation will enable us to see
that certain general lines of conduct are followed by most people.

A person will haggle with a tradesman over a few ments on the price of some article of food, and an hour or two later spend the same number of dollars on some other article that strikes his fancy, without complaint and even without trying to find whether the same article could not be bought more cheaply elsewhere.

We might arrange these different articles in a rough scale in which the element of rationality is present in descending degree. For instance, it is observable that the ordinary necessities of life are purchased with much more care than other things. Even among necessities there is a difference. Common articles of food are bought with much attention, while less common articles may be regarded somewhat as a treat and may be bought with little reference to cost. But even among the most thrifty and even in the case of food, there is a large element of fixity The Englishman who will laugh at the unwillingness due to habit. of a Jew to eat pork against the teachings of his religion, cannot be induced, even by a great difference in price, to eat horse meat.

Similarly, when wheat in France during the war became scarce and dear, there was practically no tendency to substitute the much cheaper maize.

No doubt, one reason why food is purchased more carefully than other things, is that it is purchased more frequently, enabling the purchaser to remember previous prices; partly, also, because the quality is more standardized than in the case of other things, and partly because there is little element of display in the utility derived from food. The same reasons, except the last, tend to make expenditure for rent subject to careful scrutiny.

Clothing, on the other hand, which serves the double purpose of protecting against the cold and satisfying the instinct of display, is bought with much less attention to the utility furnished by each dollar's outlay.

Probably there is still less rationality in connection with purchases made in response to the promptings of such
powerful instincts as the sex instinct and the pugnacious instinct,
especially if the purchase is made at a time of deep emotion.

Love has long been laughed at as a species of insanity, and the
word mad, which properly means demented, in common speech at least
in this country, means nothing more than angry. It is not
surprising, then, that such articles as fancy chocolates, cab
fares and jewelry are bought with very little comparison of the
utility to be derived from their purchase with that of any alternative way of spending the money.

A somewhat similar fact, the emotional state of the purchaser, explains the outrageous prices charged by undertakers.

No doubt habit and custom largely determine the scale of funerals.

But the emotional state of those arranging a funeral prevents them from making close bargains or from canvassing alternative establishments. Hence, competition in this field works imperfectly and chiefly through other forms than that of price.

We may sum up this part of the argument by saying that we may retain the assumption of rationality in production, and to a lesser and varying degree in consumption. Further, we must take account of advertising and other ways of influencing demand, but we may do this by making room for them within the framework of the present theory, rather than by abandoning that theory altogether.

PART III

CO-OPERATION BETWEEN PSYCHOLOGY AND

ECONOMICS.

It remains to consider what aid may be derived from psychology in other departments than the theory of value. This part of the subject will be merely sketched as thesis has already extended to an unreasonable length. Psychological considerations enter at various points and there is a portion of the field that is open to investigation by both psychologists and economists.

On the subject of interest and the motives for saving, a valuable contribution has been made by an eminent psychologist, Prof. Thorndike (59)

Volumes have been written on the subject of advertising. (60)

Still other volumes (61) have been written on industrial psychology, the aim of which is to promote efficiency by getting right the right man in the right place with the attitude to his work.

Probably the field of economics in which the influence of psychology has been most neglected is that of taxation. It is true Prof. Seligman (62) noticed that farmers regard taxes more as an item of expenditure than as an annual charge, and observed that economists must take cognizance of this psychological fact. Practical statesmen and politicians have long realized the unpopularity of direct taxes, thus, the income tax has been

⁽⁵⁹⁾ E. L. Thorndike, Psychological Notes on the Motives for Thrift, An. Am. Acad. 87.

⁽⁶⁰⁾ J. Kitson, The Mind of the Buyer.

⁽⁶¹⁾ Hugo Munsterberg, Psychology and Industrial Efficiency.

⁽⁶²⁾ E. R. A. Seligman, Shifting and Incidents of Taxation.

almost universally introduced under pressure of some national emergency, and almost always has been represented as a temporary or war measure. Similarly, the lowering of the duty on automobiles by the King Government, while not particularly commendable on economic ground, was a masterpiece of popular psychology.

Nevertheless, it remains true that professional economists have neglected the influence of psychology in taxation. Since income taxation will probably play an increasingly important role in the future, it should be noticed that in large sections of the population -- farmers, petty merchants and manufacturers -it depends for its success on the honesty of the tax-payer. Something can be done by inspection and punishment of offenders to keep the straggler in line, but it is safe to say that there are peoples among whom, owing to the absence of habits of honesty and truthfulness, an income tax would be a bigger failure than prohibition was in Manitoba. Under these circumstances the educational authorities, including churches, theatres and newspapers, should make it part of their message that payment of taxation is a debt There is unquestionably a certain amount of income tax of honor. dodging by people who would not try to cheat the men with whom they deal, and the only remedy for this is education.

More important, for the purpose of economic theory, is the psychological aspect of inheritance taxation; Mr. Tawney (63) suggests taxing inheritances so heavily that there will be little left but personal belongings. Even so keen a thinker as J. S. Mill talked of such a scheme as if it were practicable. Nothing is more certain, however, that any inheritance taxation that attempted to

⁽⁶³⁾ R. H. Tawney, The Aquisitive Society.

measure by transfers, inter vivos or by the device of joint tenancies (a form of property in which the survivor of two or more owners becomes sole owner on the death of the other). Even the comparatively light inheritance taxes enforced in this province are being evaded to some extent and there is no doubt that the custom would become general once a heavy inheritance tax were introduced.

CONCLUSION

establish has already been indicated. It is satisfying to note that at least one social psychologist (64)295) has come to a very similar conclusion. Though largely of a negative character it is not altogether vain. There is some satisfaction in the thought that our science is something more than a "body of dialectics", and that it may co-operate indefinitely with its sister science, psychology, in the discovery of truth.

⁽⁶⁴⁾ R. H. Thouless, Social Psychology.