

POWER OF PROPHECY IN LIFE AND LITERATURE

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I

Motivational power of prophecy forms no inconsiderable theme in texture of English literature. This theoretical view of the main stream of English literature can readily be confirmed by the historical fact that almost all the major English poets and writers express their deepest concern with this theme. While the origin of their concern with this theme should be considered to be attributable to the Biblical truth that "the testimony of Jesus is the spirit of prophecy (Rev. 19:10)," the motives which stimulate man to this particular concern have been found grounded on scientific truth of human nature revealed by experimental psychology in the recent years.

Prophecy has the strongest power to motivate man. Man cannot live without hopeful anticipation of prophecy fulfillment because man cannot outgrow the need for his hope for tomorrow. From this it may be affirmed that man is truly optimistic when he is motivated by the spirit of prophecy.

Our traditional understanding of prophecy may be defined as the foretelling of future event by prophet. The important aspect of this traditional concept of prophecy is that prophecy is to be made by one person (prophet) for some other person about the event he is going to face in future. However, the more significant aspect of prophecy has been found recently by psychologists and sociologists as the power to fulfill one's own expectancy which he entertains for himself.

Man's dominant motivational power is his hope for his own prophecy fulfillment. A man's destiny is molded by his own "self-fulfilling pro-

phesy," Man desires to have his prophecy fulfilled because, it is agreed by many psychological theorists, man wants at least a minimal stability, consistency, order, or predictability in his world. Man avoids suffering from a painful state of mind which psychology calls "cognition dissonance," and seeks stabilized state of mind which is termed "cognition consonance." This is in general agreement with the traditional "conflict" theory.

What is more important to man is not the objective (real) but the subjective (biased) truth, not ontological truth outside of himself, but epistemological truth in himself. Man suffers more from conflict in himself than from conflict with the outside world. What man needs most is psychological unity in himself. So long as man is subject to his need for psychological unity in himself, he is not free from his own bias or slant. Bias per se is not either good or bad, but man tends to seek for bias only to keep his own internal unity. This view of man's need of "bias" for his internal unity has been established by two different channels of research in psychology and sociology. Just as social bias entertained by the majority in-groups against the minority out-group is a deception engendered from measuring all the social values only by the majority's own "norms" to keep their system of social institution in unity, so the psychological bias entertained by man in his expectancy to have his prediction fulfilled is also a deception engendered from his desire to avoid cognition dissonance to keep his psychic system in unity.

If bias is a deception to keep unity in himself, expectation is also a deception to keep unity in himself. Here, in this view of priority of man's own internal relationship with himself to his external relationship with outside world, is to be found a reason to assume that a man's own prophecy to himself made in the monadic self-context has more self-motivating power than other's prophecy about him made in the dyadic interpersonal context.

From this scientific observation of man's relationship with himself over others, a new insight will be gained into the significance of our orthodox view of man as free agent that makes his own decision in his free choice of good and evil. Man is allowed to mold his own destiny for himself.

Man himself is solely responsible for the action he has taken from his ethical judgment in his freedom of choice. The reverse of this statement is also true that man can realize his anticipated goal of his life if he is sincerely true to himself in his desire for his self-fulfillment. A truth that a prophecy one makes for himself will eventually come true can be a valid and strong support for an optimistic view of life for our care-bit humanity.

The development of experimental psychology in the recent years has made it necessary to formulate the new technical term—"self-fulfilling prophecy"—to explain and to employ the theory that if one prophesies an event the expectation of the event changes the behavior of the prophet in such a way as to make the prophesied event more likely because men behave as they believe they are expected to behave.

The coinage of this new word in modern psychology, however, seems to be an echo of the old idea to be found in the fable of Pygmalion in classical mythology. The Greeks were right when they believed that it was possible for Pygmalion to fulfill his own prophecy to create and marry a woman of his ideal beauty. Today, in our twentieth century; confronted with the complex problems of interpersonal relationships in a highly organized society, man has found it necessary to have his Pygmalion once more in all his places where he finds himself related to other people in social context.

The central idea underlying the term of self-fulfilling prophecy, as it has been found by behavioral scientists, is that one person's expectation for another person's behavior can quite unwittingly become a more accurate prediction simply for its having been made. This is not a new idea, and anecdotes and theories can be found that support its tenability, but the very first study of this idea of self-fulfilling prophecy published under the title of the specific term of self-fulfilling prophecy was done by sociologist, R. K. Merton (1910-) in 1948 as an article for a periodical, which was incorporated later, in 1957, in his book, *Social Theory and Social Structure*. However, as it is explained by Merton, the germination of his idea of self-fulfilling prophecy is to be traced back to the dean of American sociologists, W. I. Thomas (1863-1947), who set forth a theorem basic to social science: "If men define situations as real, they are real in their consequences."

Much of the experimental evidence for the operation of interpersonal

self-fulfilling prophecies comes from a research program in which prophecies or expectations were experimentally generated by psychological experimenters in order to learn whether their prophecies would become self-fulfilling. It is evident that the study of the concept of self-fulfilling prophecy has been rapidly developed in the past decade by many behavioral scientists, and its rapid program has culminated in the experimental achievements by social psychologist Robert Rosenthal of Harvard University.

Rosenthal's experimental research works on the function of self-fulfilling prophecy have been published in books and periodicals. As the subject of self-fulfilling prophecy studied by behavioral science is so vast and complicated in its sophistication that it is beyond my reach to express in a simple and clear formula what it is, I am, quite as necessarily, indebted to Rosenthal for the materials used in the ensuing pages to explain certain outstanding features of the experimental evidences of the function of self-fulfilling prophecy.

II

It is unpleasant to have one's expectations disconfirmed though a windfall does not ordinarily lead to psychological depression. But, by and large, people do not like to be wrong. This common-sense assertion is supported by experimental evidence, evidence that is desirable because from common sense alone we "know" too many things that are not true. J. M. Carlsmith and E. Aronson (*Journal of Abnormal and Social Psychology*, vol. 66, 1963) showed that when subjects were expecting to taste a bitter substance but were given a sweet substance instead, the sweet tasted less sweet. When they were expecting to taste a sweet substance but were given the bitter, the bitter was judged more bitter than usual. The everyday analogue of this experience is that occasional experience when one misperceives one delicate morsel for another. An unpleasant gustatory experience results from ingesting an unexpected food item even when it would normally rank high in one's hierarchy of food preferences.

Aronson, Carlsmith, and Darley (*Journal of Abnormal and Social Psychology*, vol. 66, 1963) provided further experience by showing that

subjects sometimes prefer an objectively more unpleasant task over one which is more pleasant but unexpected. Subjects also seem to be more satisfied with their task performance when they have done about as expected. Aronson and Carlsmith (*Journal of Abnormal and Social Psychology*, vol. 65, 1962) showed that subjects who performed poorly but expected to do so seemed more satisfied than even those subjects who performed well but had not expected to.

Consistent with these findings is an experiment by O. J. Harvey and W. F. Clapp (*Journal of personality and Social psychology*, vol. 2, 1965) which found that when subjects expected others to say nice things about them they reacted more favorably to hearing nice than not-nice evaluations. This finding was not surprising. But, when subjects expected to hear unpleasant things said about them and subsequently did hear them said, they reacted more favorably than when they expected unpleasant evaluations but received pleasant ones instead.

These studies were all done in the 1960's, but there had been some preceding research experiments done a decade earlier in the 1950's establishing the similar theory about the importance of the choice situation in conflict. According to these preceding experiments, (for instance, see Jack W. Brehm, "Post-decision Changes in the Desirability of Alternatives," *Journal of Abnormal and Social Psychology*, vol. 52, 1956, or Judson Mills, "Post-decision Exposure to Relevant Information," *Journal of Abnormal and Social Psychology*, vol. 54, 1957) all cognitive elements (items of information) that favor the chosen alternative are "consonant," and all cognitive elements that favor the unchosen alternative are "dissonant" with the choice behavior. The purchase of a new automobile, for example, is usually a rather important decision for a person. Considerable dissonance should exist for a new car owner immediately after he has bought his car; all good features of the makes he considered, but did not buy, and bad features of the one he bought are now dissonant with his ownership of the car. We should attempt to reduce this dissonance. Thus, after a decision persons tend to seek out dissonance-reducing information, trying to read advertisements of their own cars more often than those of cars which they considered but did not buy.

From all these studies about man's behavior in his responses to discrepancy from expectancy, it appears that there may indeed be a measure of pain in nature's unpredictability, even when nature's response has been cordial; and that nature's unkindness may be far easier to bear when it has been prophesied. There may be an evolutionary advantage to this state of affairs. If, in the long run, man does not like surprises too well, that may foster the enterprise of gaining greater understanding and therefore greater control of nature. A greater understanding of nature gives greater power to control it or adapt to it, and then the potential surprises can be reduced still more. If man has been able to survive better for having been more accurate in his prophecies, then it seems reasonable to think that man has a vested interest in predictive accuracy. Reassurance of such accuracy may be more rewarding to man than some minor unpredictable boon of nature. In any case, it is agreed by many theorists (See, for instances, Van Rensselaer, "Society and Science," *Science*, vol. 146, 1964, or Donald K. Adams, "Conflict and Integration," *Journal of Personality*, vol. 22, 1954) that man wants at least a minimal stability, consistency, order, or predictability in his world.

Apart from this bio-evolutionary view of man's concept of predictability value for survival, this theory, it must be emphatically pointed out, has paramount significance in the development of the whole scheme of the idea of self-fulfilling prophecy. It provides the basic theoretical understanding of man's motivating desire for his prophecy fulfillment, leading to the fundamental view of this motivation theory as stemming historically from the traditional "conflict" theory (avoidance of conflict) to the theory of "reduction of dissonance." This view of historical development—avoidance of conflict→reduction of dissonance→desire for prophecy fulfillment—is very interesting in view of the fact that man is basically more concerned with the unity in himself than the multiplicity outside of himself, that is, in other words, the epistemological unity (order) rather than ontological multiplicity (disorder).

Though it was the sociologist Merton who drew heavily upon and contributed greatly to the concept of self-fulfilling prophecy in the 1940's, the concept was applied half a century earlier in a clinical context.

Albert Moll in 1898 spoke specifically of clinical phenomena in which the prophecy causes its own fulfillment. He told of insomnia, nausea, impotence and stammering all coming about when their advent was most expected. But his particular interest was in the phenomenon of hypnosis. It was his belief that subjects behaved as they believed they were expected to behave. Much later, in 1959, Martin Orne, ("The Nature Hypnosis; Artifact and Essence," *Journal of Abnormal and Social Psychology*, vol. 58, 1959) showed clearly and dramatically that Moll was right. Two matched classes in introductory psychology were each given a lecture on the subject of hypnosis. As part of the lecture there was a demonstration. In one of the classes the hypnotic demonstration included three subjects showing catalepsy or rigidity of their dominant hand. If the subject was right-handed the demonstration would show rigidity of his right hand; if left-handed, then the rigidity would seize the left. The other classroom received essentially all the same information about hypnosis, but there was no mention made, nor any demonstration, of the dominant hand catalepsy. Subsequently, nine subjects from each of the two classes were hypnotized by an experimenter who did not know which lecture the subjects had attended. Among the subjects who did not expect catalepsy of the dominant hand, none showed catalepsy of the dominant hand alone. However, among the the subjects who had learned that "hypnosis implies dominant hand catalepsy" most of the subjects showed just that.

This study is not dealing specifically with the hypnotist's expectancy as an unintended determinant of the subject's response. It was more a case of the subject's expectancy as a determinant of his own response.

Similar case of expectancy is reported by Gordon Allport (*Journal of Religion and Health*, vol. 4, 1964-1965). Allport described one patient, dying of an unknown illness. The attending physicians told him quite frankly that he could not expect to be cured since the diagnosis was unknown. The only hope they offered him was that a distinguished diagnostician had been called in and was soon to give his expert opinion. The specialist arrived but needed only a little time to reach his conclusion. To the physicians in attendance and almost out of the patient's

earshot he pronounced "moribundus." After some years, the patient, who did not die called on the specialist to report on his good health and to thank the physician for saving his life. The ex-patient explained how the medical staff had told him that he could be cured only if the disease could be diagnosed. Therefore, he explained, he knew that he would recover as soon as he heard the consultant's diagnosis of "moribundus."

In Allport's anecdote there is something of a paradox. The staff and the patient expected that if a diagnosis could be made the patient could be cured. The diagnosis was made and the patient was cured although the diagnosis was itself a prophecy for incurability. Such anecdotes by themselves cannot be regarded as strong evidence for the operation of expectancy effects or of prophecies self-fulfilled. Such anecdotes are, however, supported by the results of more formal investigations into the effects of the placebo in medical practice.

Arthur Shapiro (*Behavioral Science*, vol. 5, 1960), in his excellent review of the history of the placebo effect, points out that until very recently, perhaps the late nineteenth century, virtually all medical treatment was treatment by placebo. Treatments worked, though, as evidenced by the high esteem in which even physicians of long ago were held. Shapiro tells how well they worked. In 1794, Professor Ranieri Gerbi of Pisa devised a cure for toothache guaranteed to prevent recurrence for a full year. A particular worm was required, *curculio antiodontaligions* by name, which was crushed between the thumb and forefinger of the right hand. The fingers were then applied to the painful tooth. In order to establish the scientific validity of this cure, an investigatory body was convened in order to assess the efficacy of the treatment. The commission's inquiry revealed that 68.5 percent of the hundreds of toothaches investigated yielded immediately to the power of the worm.

Modern medicine is vastly more sophisticated though it has been observed that new drugs always seem most efficacious early in their career, losing some of their therapeutic potency with the passage of time. This phenomenon, like the operation of placebo effects in general, can be partially understood in terms of the healer's expectation for the efficacy of the preparation. When a new drug comes onto the market, the advantage and

efficacy well-publicized, the doctor might say to the patient: "Here is a new drug, one not available yesterday, which has been shown to be effective for just your medical condition." The voice in which this is said is enthusiastic. Another patient is told by another physician who, perhaps in a more matter-of-fact, even tentative, tone of voice, says: "Here is a farly new drug which has been sometimes useful in the treatment of your condition." While speaking, he may have in mind the research, which shows most of the efficacy of the new drug to be in the mind of the patient and, perhaps, in the mind of the physician. This knowledge may materially reduce the efficacy of the drug. It would seem to be quite likely that the first patient would be more benefitted than the second patient. New drugs become less effective over time because the healer's doubts about the drug increase. These doubts, which are communicated to the patient, tend to increase as less favorable research reports become available.

Sometimes it is not therapeutic potency, or "undesirable side effects." Gregory Pincus (*Science*, vol. 153, 1966) of the Worcester Foundation for Experimental Biology gives the details and shows that the reported side effects of oral contraceptives are probably placebo effects. He employed three groups of women. One group was given the oral contraceptive with usual warnings that there might be undesirable side effects. A second group was given a placebo instead of the real contraceptive, but was also given the usual warnings. These two groups of women were asked to continue using their usual mode of contraception throughout the course of the experiment. The third group of women was given the oral contraceptive but was not given the usual warnings to watch for undesirable side effects. Reactions of nausea, vomiting, headache, vertigo, gastrogia, and malaise occurred about 6 percent of the time among the women who had not been led to expect side effects. In both groups in which the women had been warned about side effects they occurred about three times that often. The women who received the placebo with warning showed about the same degree of side effects as the women who received the real drug with warning. When the symptom considered was amenorrhea, the side effect occurred three times more often when the placebo was administered than when the drug was administered with the usual warning.

When the drug was administered without the usual cautions, amenorrhea did not occur at all. Oral contraceptives are "real" chemicals that no doubt perform their functions without much assistance from the expectation of the patient or of the physician. But as it is learned from Pincus' research, the alleged side effects can hardly be attributed to the specific effects of the drug. In Shapiro, there is considerable amount of evidence to show that an almost limitless number of side effects can be found when only the pharmacologically inactive placebo has been prescribed. The research dealing with placebo effects suggests the wisdom of that physician who admonished: "Treat as many patients as possible with the new drugs while they still have the power to heal." (Refer to David Rosenthal and Jerome D. Frank, "Psychotherapy and the Placebo Effect," *Psychological Bulletin*, vol. 53, 1956).

In most of the discussions so far, the emphasis has been on a single prophet, the hypnotist, the psychotherapist, the physician. Soemtimes it is less easy and less useful to think of the prophecy of a specific healer when many healers are involved as in the rehabilitation treatment of a given patient.

There is an experiment in which the entire staff of a hospital was led to believe that a new tranquilizer or a new energizing drug was being introduced into the hospital. Actually the new drug was a placebo, but only the hospital director and the experimenters were aware of that. The drug was found very effective in patient treatment. At the very least, staff prophecies or expectancies can effect their perception of patient improvement; very likely staff prophecies can also affect patient's actual improvement (Jack Zusman, "Some Explanations of the Changing Appearances of Psychotic Patients," *International Journal of Psychiatry*, vol. 3, 1967).

Behavioral scientists are said to be so self-conscious about their science making that one day there will be a science of those scientists who study scientists. The social situation that comes about when a behavioral scientist meets his research subject is a situation of general and unique importance. The general importance derives from the fact that the interaction of investigator and subject, like any other two-party interaction,

can be investigated empirically so that more about two party interactions in general may be learned. The unique importance derives from the fact that the interaction of investigator and subject, quite unlike any other two-party interaction, is the source of so much of what is called human behavior.

Several aspects of the interaction between investigator and subject have been examined, and a summary of many of the findings is available elsewhere. We are concerned with only one aspect of the investigator-subject interaction, the effect on the subject's behavior of the investigator's hypothesis or prophecy about the subject's behavior. Some such hypothesis or prophecy about the subject's behavior is virtually guaranteed. Behavioral scientists, like other scientists, would not conduct research at all if they did not have some expectation or prophecy about the result. Even in those more loosely planned investigations sometimes called "fishing expeditions" the expectations or prophecies of the scientist are reflected in the selection of the entire pool of variables chosen for study. Scientific "fishing expeditions," like real ones, do not take place in randomly selected pools.

One of the earliest studies deliberately creating differential expectancies in interviewers was that conducted by S. M. Harvey (*British Journal of Psychology*, vol. 28, 1937-1938). Each of six boys was interviewed by each of five young undergraduates. The boys were to report to the interviewers on a story they had been given to read, and the interviewers were to use these reports to form impressions of the boys' characters. Each interviewer was given some contrived information about the boys' reliability, sociability, and stability, but told not to regard these data in assessing the boys. The results of standardized questions asked by the interviewers at the conclusion of the study suggested that biases of assessment occurred even without interviewers' awareness and despite conscious resistance to bias. Harvey felt that the interviewers' bias evoked a certain attitude toward the boys which in turn determined the behavior to be expected as well as the interpretation given to that behavior. We cannot be sure that subjects' responses were actually altered by interviewer expectancies. The possibility, however, is too

provocative to overlook.

Most of the evidence presented to show the occurrence of interpersonal, self-fulfilling prophecies has so far been anecdotal or only a little stronger. The series of experiments begun by Stanton and Baker (*Sociometry*, vol. 5, 1942), in which the experimenters were led to expect different replies from their subjects, provide stronger evidence than most of the research presented so far. In most of that research what was shown was that an interpersonal prophecy about another's behavior was accurate. But such accuracy could come about in different ways. To show that a prophecy is accurate does not necessarily show that the prophecy led to its own accuracy. The prophecy that the sun will rise is not the effective agent in bringing on the dawn. When a prophecy is based on the prior observation of the event prophesied, the prophecy is, in a sense, "contaminated by reality." The prophecy itself may or may not play a role in its own fulfillment.

When a physician predicts a patient's improvement, we cannot say whether the doctor is giving a sophisticated prognosis or whether the patient's improvement is based in part on the optimism engendered by the physician's prophecy. If school children perform poorly, it might be that the teacher's prophecy is accurate because it is based on knowledge of past performance, or it might be accurate because it is self-fulfilling. In order to disentangle the self-fulfilling nature of a prophecy from its non-self-fulfilling but accurate nature, experiments are required in which only the prophecy is varied experimentally, uncontaminated by the past observations of the events prophesied. That was the intent of the experiments conducted by Rosenthal (*Experimenter Effects in Behavioral Research*). They were part of the research program specifically designed to investigate the selffulfilling effects of a psychological experimenter's hypothesis or prophecy. In the first experiment, ten advanced undergraduate and graduate students of psychology served as experimenters. Each student-experimenter was assigned as his subjects a group of about twenty students of introductory psychology. The experimental procedure was for the experimenter to show a series of ten photographs of people's faces to each of his subjects individually. The subject was to rate the degree of success or failure shown in the face of each person pictured in

the photos. Each face could be rated as any value from -10 to +10 with -10 meaning extreme failure and +10 meaning extreme success. The ten photos had been selected so that, on the average, they could be seen as neither successful nor unsuccessful, but quite neutral, with an average numerical score of zero. All experimenters were given identical instructions on how to show the photographs to their subjects; all were given identical instructions to read to their subjects, and all were cautioned not to deviate from their instructions. The purpose of their participation, it was explained to all experimenters, was to see how well they could duplicate experimental results which were already well-established. Half the experimenters were told that the "well-established" finding was that people generally rated the photos as successful (ratings of +5), and half the experimenters were told that people generally rated the photos as unsuccessful (ratings of -5). Then the experimenters conducted their research. The result was clear. Every experimenter who had been led to expect ratings of people as successful obtained a higher average rating of success than did any experimenter expecting ratings of people as less successful. Such clear-cut results are not common in behavioral research, so two replications were conducted. Both these subsequent experiments gave the same result; experimenters tended to obtain the data they expected to obtain.

A recent experiment by S. J. Marwit and J. E. Marcia (*Journal of Consulting Psychology*, vol. 31, 1967) was designed to test the hypothesis that the number of responses given by a subject to a series of inkblots was a function of the examiner's expectation. Thirty-six undergraduate students enrolled in a course in experimental psychology served as the examiners. Their task was to administer an inkblot test to a total of fifty-three students enrolled in an introductory psychology course. Some of the examiners prophesied many responses from their subjects either on the basis of their own hypotheses or because of the principal investigator's hypothesis. The remaining examiners prophesied few responses from their subjects either because that was their own hypothesis or because that was the principal investigator's hypothesis. The result showed that the source of the hypothesis made no difference. Examiners prophesying

greater response productivity obtained 54 percent more responses than did examiners prophesying fewer responses. Both in terms of the statistical significance and in terms of the magnitude of the test, it can be concluded that an examiner's prophecy may be a significant determinant of his subject's productivity in responding to an inkblot stimulus.

In another recent experiment, Masling (*Journal of Consulting Psychology*, vol. 29, 1965) led half his examiners to believe that relatively more human than animal percepts should be obtained from their subjects in inkblot tests. The remaining examiners were led to believe that relatively more animal than human percepts should be obtained from their subjects. This latter group, it turned out, obtained a ratio of animal to human percepts which was 33 percent higher than that obtained by examiners looking for relatively more human percepts in their subjects' response. From the two experiments described, it seems that at least the interpretation of inkblots can be determined in part by the expectancy of the examiner who administers the task.

The analysis of subjects' ratings of their examiner's behavior show that the subjects' responses are more directly related to examiner's behavior. When the examiners behave more warmly toward their subjects, the IQ scores obtained are many points higher than when they behave more coolly toward their subjects. There is the dramatic results reported by E. L. Sacks (*Journal of Abnormal and Social Psychology*, vol. 47, 1952) in which more warmly treated nursery school children showed a net profit of nearly ten IQ points relative to more indifferently treated children.

There are other results of research reported, but in summarizing these, it would seem that at least sometimes a subject's performance of an intellectual task may be unintentionally determined by the prophecy of the examiners. Perhaps it is appropriate to stress the unintentional aspect of self-fulfilling prophecy since in those experiments described, the examiners and experimenters tried hard to avoid having their prophecies affect their subjects' performance.

From what has been learned from research employing different manners of treatment of the subjects in their IQ test, it seems that those that are expected to perform competently do so while those

expected to perform incompetently tend also to perform as prophesied. This principle was applied by Rosenthal to his experiments with kindergarten-fifth grade children.

When certain things are known or believed about a pupil, other things about him, true things or not, are implied. That is nothing more than the so-called halo effect. When one "knows" a child is bright, his behavior is evaluated as of higher intellectual quality than is the very same behavior shown by a child "known" to be dull. Such halo effects so often occur in the education of children that it has often been suggested that children from minority groups, particularly dark-skinned groups, are especially likely to suffer the disadvantage of unfavorable halo effects.

Rosenthal's experiment was to try out this halo effects (*Psychological Reports*, vol. 19, 1966). Kindergarten through fifth-grade pupils in a co-operating school in San Francisco were given a "new test of learning ability." The following September, after the tests were "graded," the teachers were casually given the names of five or six children in each new class who were designated as "spurters" possessing exceptional learning ability. What the teachers didn't know was that the names had been picked in advance of the tests on a completely random basis. The difference between the chosen few and the other children existed only in the minds of the teachers. The same tests taken at the end of the school year revealed that the spurters had actually soared far ahead of the other children, gaining as many as 15 to 27 IQ points. Their teachers described them as happier than the other children, more curious, more affectionate and having a better chance of being successful in later life.

The only change had been one of attitudes. Because the teachers had been led to expect more of certain students, those children came to expect more of themselves. The explanation probably lies in the subtle interaction between teacher and pupils. Tone of voice, facial expressions, touch and posture may be the means by which—often unwittingly—she communicates her expectations to her pupils. Such communication may help a child by changing his perception of himself.

Brief as it is, this summary of the scientific investigations of the func-

tion of self-fulfilling prophecy will suffice to show what it is, but as the subject is too vast and complicately sophisticated to be treated here in its whole scope, I have restricted myself to drowing upon the materials provided by Robert Rosenthal in so far as they have a bearing on the subject for my present purpose.

III

From reading all these materials shown here from scientific investigations, it is plain that central theme is the prime importance of the function of expectancy bias—experimenter's hypothesis or prophecy. It must be pointed out, with special emphasis, that the historical development of the idea of self-fulfilling prophecy can be traced back to the interest in this specific psychological phenomena of experimenter's bias. It is quite natural that the idea of self-fulfilling prophecy is closely connected with the study of the consequences of experimenter's bias (prophecy), for the effects of expectancy of a particular person, experimenter, on the behavior of a specific other, the subject, may have considerable generality for other social relationships.

In this view of the germination and the subsequent development of the idea of "bias" as the basis of self-fulfilling prophecy, it is important to note that it was the sociologists, and not the psychologists, that first noticed the significance of the working of self-fulfilling prophecy as the powerful determinant influence upon various aspects of social phenomena. Only recently in the 1960's, the interest in self-fulfilling prophecy was succeeded by the psychologists and was seriously taken up as the object of their study of the interpersonal reaction between the experimenter and his subject.

In observing this evolutionary transition of the study of self-fulfilling prophecy from sociologist's theoretical approach to psychologist's experimental approach it must be noted that while the sociologist's theory was formulated by the results of their observation of actual social phenomena the empirical reality of the concept of self-fulfilling prophecy was established by the psychologists from the artifact generated in laboratory settings, not from the observations of people's behavior in the actual social

settings. The law of expectancy as experimentally generated artifice by psychologists is not necessarily implicated with the inspirational power to motivate people, but the theory formulated by sociologists about self-fulfilling prophecy is implicated with some elements of inspirational power to motivate people for the higher achievements in their activities in a social context.

In connection with this comparative view of self-fulfilling prophecy by the sociologists and the psychologists, it must be pointed out that both of them alike, sociologists and psychologists, started their study of self-fulfilling prophecy with their initial interest in the effect of what is termed as the observer's bias. Sociologists, as best exemplified in the case of R.K. Merton for his study of racial prejudice against the Semitic people in America, was first directed to the study of self-fulfilling prophecy by the social phenomena caused by the effect of bias erroneously held by the majority against the minority. Psychologists, as best shown in the various experiments described in the materials exhibited for our present purpose, were first directed to the study of self-fulfilling prophecy by the behavioral phenomena caused by the effects of bias unwittingly held by the experimenter about his subject. The only difference is in the fact that the sociologist found the bias among the people in the actual society while the psychologist found it in the experimental laboratory isolated from the actual social context. With all this dichotomous difference in the way of approach in the historical development of the study of self-fulfilling prophecy, the study of this idea by the behavioral sciences is finally directed to go beyond the laboratory to the actual society as the behavioral sciences basically occupy themselves with the behavior of men as social beings. This perspective view of the evolutionary development of the study of self-fulfilling prophecy is best illustrated in the work of Harvard psychologist, Robert Rosenthal (1933-), the best reputed exponent of the study of self-fulfilling prophecy.

As indicated by his name, he is a Jew, born in Hitler's Germany, which he left in 1938, and came to America where he studied psychology, receiving his Ph.D from UCLA in 1956. As he indicated in his book, he became interested in the study of the law of expectancy working as self-fulfilling

prophecy by reading Merton's study of self-fulfilling prophecy (1948) in which the nature of the racial prejudice against the Jewish people in America was studied from the sociological principles of bias effects. As a psychologist in the field of behavioral research, he conducted numerous experiments in laboratory settings succeeding in establishing the validity of the law of expectancy functioning as self-fulfilling prophecy. Assured of its validity in the laboratory settings, Rosenthal went beyond the laboratory to try out his theory in actual classrooms, and succeeded to prove the reality of self-fulfilling prophecy in the real social context of the education of children.

It must be remembered that the study of self-fulfilling prophecy was first started by the sociologist in his research into the sociological phenomena engendered by the effects of bias held by the majority which Merton specifically termed as "in-groups" against the minority specifically termed as "out-groups. Bias means preoccupation or prejudice, but it must not be taken as a notion whose effects work only toward the negative direction. It also works toward the positive direction. To a lover's fond eyes, a pockmark will appear to be a dimple as he was blinded (biased) to all imperfections. Blinded as it may be, love is never failing as the greatest theme of literature and life. It is a great mysterious power of bias from which no one is exempt, and everyone, at certain times of his life, must run the race of Atalanta for life's prize.

In this view of bias as the source of the theme of self-fulfilling prophecy it is interesting to note here that G.B. Shaw in his *Pygmalion* (Act IV), made his Liza to say, "---You see, really and truly, apart from the things anyone can pick up (the dressing and the proper way of speaking, and so on) the difference between a lady and a flower girl is not how she behaves, but how she's treated. I shall always be a flower girl to Professor Higgins, because he always treats me as a flower girl and always will; but I know I can be a lady to you, because you always treat me as a lady, and always will."

Bias is a deceptive notion that leads a man away from the truth or reality, working in a way either toward good or bad effect for him. The concept of self-fulfilling prophecy, from the historical view point, is a

derivative of the larger concept of bias, and as such, it is, in its essential nature, a notion to deceive. With this deceptive power, self-fulfilling prophecy, just as bias works in a way either good or bad for man, works for man either in right or wrong way. If you expect a boy to achieve a higher intellectual performance in his classroom, he won't disappoint you, but if you expect a boy to steal, he won't disappoint you, either. Robert Burns' famous work, "The Cotter's Saturday Night," has been one of the strongest driving forces in the whole movement of English Romanticism because the power of self-fulfilling prophecy is used in the right way of expectation for the cotter's hope of future for his children. The true romantic spirit of hope is expressed in the optimal degree of trust between parents and children when Burns places his thematic basis in the following two lines:

The parents partial eye their hopeful years;
Anticipation forward points the view; (Stanza V)

It is all up to you which way the power of self-fulfilling prophecy shall work for you. When the powerful function of self-fulfilling prophecy works in the wrong way, it sometimes makes a "suicidal prophecy." Suicidal prophecy is just the same as self-fulfillment, but differs in that it goes to the extremely negative way. For instance, Shakespeare's *Macbeth* is designed on the fulfillment of the prophecy made by the three witches on the heath, but when fulfilled, it proves suicidal. The same thing can be said about *King Lear*.

Rosenthal, in his right way of expectation, succeeded to prove that teacher's positive (good) expectation for her pupils' intellectual performance resulted in a remarkable IQ again in the pupil, but he had to confess he had to decide, on ethical grounds, to test only the proposition that favorable (good) expectations by teachers could lead to an increase in intellectual competence. He could not attempt to carry an experiment to see if the unfavorable (bad) expectations make a dull boy more dullard. Here is this point of ethical implications that the psychological study of self-fulfilling prophecy from the standpoint of behavioral sciences goes back to the original study by the sociologist done from the standpoint of research

in humanity as social being in actual society.

Man's deepest concern with the effect of self-fulfilling prophecy working either for good or bad has been ineradicably imprinted in centuries old proverbs and adages. Following examples may be cited:

- I. The pig dreams of acorns, the goose of maize. (Kaho wa nete mate)
- II. Coming events cast their shadows before. (Ichiyo chitte tenka no aki wo shiru)
- III. Talk of the devil and he will appear. (Uwasao sure ba kage toyara)
- IV. Talk of an angel and you'll hear his wings. (ditto)
- V. To mention a wolf's name is to see the same. (Kabe ni mimiari)
- VI. Wall have ears. (ditto)
- VII. There is many a true tale told in jest. (Uso kara deta makoto)
- VIII. Curses come home to roost. (Hito wo norowaba ana futatsu)
- IX. Every lover sees a thousand graces in the beloved object. (Horete mita meniwa abatamo ekubo)
- X. Faith can move mountains. (Omoo shinnen iwa omo tosu)
- XI. As you sow, so you will reap. (Urino tsuruniwa nasu naranu or Mikara deta sabi)
- XII. Every man is the architect of his own fortune. (Zenin zenka akuin akka)
- XIII. Everything come to those who wait. (Mateba kairo no hiyori ari)
- XIV. Fortune comes in by a merry gate. (Warau kado niwa fuku kitaru)
- XV. Honesty is the best policy. (Shojiki no kobe ni kami yadoru)
- XVI. The mills of God grind slowly. (Tenmo kaikai sonishite morasazu)

No man is free from his own bias or slant. Bias per se is not either good or bad. Self-fulfilling prophecy is not only the determinant power in man's dyadic interpersonal reaction, but also, and more significantly, the determinant power in a choice in freedom in man's monadic reaction to himself. Here lies the importance of self-fulfilling prophecy as the motivational potency for a man in his relationship with himself.

IV

From summarizing the preceding findings about self-fulfilling prophecy we may take it as demonstrated that man's real motivational potency is to be found in his expectancy effect in his relationship with himself, rather than with other persons. In this view of the aspect of the power of law of expectancy, it is a matter of great interest that the power of self-fulfilling prophecy had a great part to play in the formulation and the subsequent prevalence of the philosophical theories of the four greatest thinkers of our modern time.

The basis of the progress of human civilization is the shifting modification of man's outlook on man himself—man's concept of his own human nature. The most important thinkers who have radically altered prevailing views of human nature, bringing in, thereby, the bases of the new civilization of our modern time, are Charles Darwin (1809–1882), Karl Marx (1818–1883), Friedrich Nietzsche (1844–1900), and Sigmund Freud (1856–1939).

All these four great thinkers are the product of the nineteenth century, and for this reason alone, our own civilization of the twentieth century can be said to have been born and molded in the nineteenth century as the anti-thesis to the civilization of the eighteenth century.

As ably remarked by C. F. Harrold in *English Prose of the Victorian Era*, the eighteenth century, enamored of a fixed and mathematical universe, was satisfied with what it was; the nineteenth century, aware of mighty process throughout all nature and human history, was interested in what it was becoming. Based upon the hypothesis of evolution, the idea of growth and process became the master-key.

Those with this new outlook on man and his universe from the basis of growth and process are often classified as Romantics. They exalted individuality, freedom of self-development, disregard of convention, self-reliance. This was, in part, the message of such men as Goethe, Fichte, and Friedriche Schlegel in Germany, of Coleridge and Carlyle in England, of Emerson in America. Their conceptions of history, nature, activity,

reason, great men, and civilization as growth and process made a tremendous appeal to the nineteenth century. This new dynamic view of man is best exemplified in Thomas Carlye of England. In Carlye are discernible the strong influences of German idealism of Kant, Fichte, Schelling and Goethe. Much in the thought of Goethe had, for Carlye, a substantial similarity with some of the principles in the ethical idealism of Fichte. Both men had preached the doctrine of work, of the development of one's real self. The secret of living is dynamic growth "The man is the spirit he worked in," said Carlye in *Sartor Resartus*; "Not what he did but what he became." The whole nineteenth century thrilled to ideal, and saw its expression not only in Carlye's words but also in the words of Browning's Rabbi Ben Ezra:

What I aspired to be, and was not, comforts me.

The idea of exaltation of men's becoming added its weight to the growing faith in the individualism, with its exaltation of faith in the primacy of the individual,—thus forming the fundamental principles of modern civilization—the evolutionary idea and individualism. It is this idea of individuality and its growth that constitutes the core concept for the range of ideas of these four great thinkers, Darwin, Marx, Nietzsche, and Freud who have achieved the greatest modifications of the view of human nature as the basis of the civilization of our time.

In this view of the philosophical theories of these great thinkers as the predominant forces to achieve the culmination of the modern view of human nature, it is a matter of great interest that the concept of self-fulfilling prophecy as the power of personal motivation with its exalted faith in the primacy of the individual and in his growth is considered as one of the culminating points of the tradition of Western philosophy.

Because of this parallel view of modern idea of human nature as expounded by these four great thinkers from their dominant view of individuality and its growth and the idea of self-fulfilling prophecy as the power of personal motivation as one of the culminating points of the tradition of Western philosophy, it is necessary to see the main characteristic of the tradition of Western philosophy as the preliminary to the discussions

as to what part was played by self-fulfilling prophecy for the formulation and the subsequent prevalence of the philosophical theories of these four great modern thinkers.

The most fundamentals of the group of ideas of "becoming" or "growth" which is the underlying force of modern view of human nature and which, as well, is the underlying force of the concept of self-fulfilling prophecy as the power of personal motivation appears first in the philosophy of Plato. With this regard to the genesis of its fundamental idea in Greek philosophy, the concept of self-fulfilling prophecy as the power of personal motivation can be considered as one of the culminating points in the ramification of the development of European philosophy. The most fundamental aspect of the concept of self-fulfilling prophecy might therefore serve as one of the illustrations of a celebrated remark of professor White head's, that "The safest general characeraization of the European philosophical tradition is that it consists in a series of footnotes to Plato."

As expertly pointed out and explained by Professor Lovejoy in his *The Great Chain of Being*, there are two conflicting major strains in Plato and in the Platonic tradition. Plato's influence upon later generations worked in two opposite directions stemming from these conflicting strains. In the famous myth of the cave in the seventh book of *The Republic*, Plato likened the ordinary person to a man sitting in a cave looking at a wall on which he sees nothing but the shadows of the real things that are behind his back, and he likened the philosopher to a man who has got out in the open and seen the real world of the Ideas. The cleavage of these conflicting strains is what is called otherworldliness and thisworldliness. Otherworldliness is the belief that both the genuinely real and truly good are radically antithetic in their essential characteristics to anything to be found in man's natural life, in the ordinary course of human experience, however normal, however intelligent and however successful. The world we now and here know—various, mutable, a perpetual flux of states and relations of things, or an ever shifting phantasmagonia of thoughts and sensations, each of them lapsing into nonentity in the very moment of its birth—seems to the otherworldly minded to have no substance in it. The object of

sense and even of empirical scientific knowledge are unstable, contingent, forever breaking down logically into mere relations to other things which, when scrutinized, prove equally relative and elusive. Our judgments concerning them have seemed to many philosophers of many races and ages to lead us inevitably into more quagmires of confusion and contradiction.

But the human will, as conceived by otherworldly philosophers, not only seeks but is capable of finding some final, fixed, immutable, intrinsic, perfectly satisfying good, as the human reason seeks, and can find, some *stable, definitive, coherent, self-contained, and self-explanatory object of contemplation*. Not, however, in this world is either to be found, but only in a "higher" realm of being differing in its essential nature from the lower. That other world is the final goal of the philosophic quest and the sole region in which either the intellect or the heart of man, ceasing to pursue shadows, can find rest.

Such is the general creed of otherworldly philosophy. It is in the light of this primary antithesis of otherworldliness and thisworldliness that the dual role of Plato in the tradition of Western thought can best be understood.

The most noteworthy consequences of the persistent influence of Platonism was that throughout the greater part of its history, Western religion in its more philosophic forms, has had two gods. The two were, indeed, identified as one being with two aspects. The one was the absolute of otherworldliness—self-sufficient, out-of-time, alien to the categories of ordinary human thought and experience, needing no world of lesser beings to supplement or enhance his own eternal self-contained perfection. The other was a god who emphatically was not self-sufficient not, in any philosophical sense, "absolute," one whose essential nature required the existence of other beings, and not of one kind of these only but of all kinds which could find a place in the descending scale of the possibilities of reality—a god whose prime attitude was generativeness, whose manifestation was to be found in the diversity of creatures and therefore in the temporal order and the manifold spectacle of nature's process.

The idea of evolutionary development of our modern time finds its

genesis in this concept of god whose attributes and manifestations are to be found in the descending scale of great chain of beings. Its influence is so formidable that all these four great thinkers of our modern time find the core of their ideas in the application of the concept of this not-self-sufficient and not-absolute god of thisworldliness, whose nature requires the existence of other beings and whose manifestation is found in the temporal order of nature's processes.

Because of their basic position, the molding ideas of the four great thinkers are antithetic to the traditional concept of Christian God, and because of their fundamental position their ideas are of thisworldliness, leading them further and further to the realm of naturalism, secularism, materialism, and atheism. Thus the outcome of their primary antithesis in the tradition of Western philosophy is seen today in the confrontation between the idealism of the free world and the materialism of the communist world.

The idea of self-fulfilling prophecy as the power of personal motivation is one of the culminating points of the Western philosophy, as in it the basic two conflicting strains of the otherworldliness and thisworldliness of the tradition of the Western philosophy is unified. It is the idea fundamentally based on the concept of growth and becoming of the individual (thisworldliness), but in its deepest sense, it is based on the idealistic aspiration for the possibility of the world higher than the reality of this actual world (otherworldliness).

But before going into the examination of the workings of the power of self-fulfilling prophecy in the formation and the subsequent prevalence of the philosophies of these four great modern thinkers, let us see the significant point of the works of these four thinkers in the light of the great tradition of the primary antithesis in Western philosophy.

The theory of evolution had long been advocated before Charles Darwin, by some French speculative philosophers (Montesquieu, Maupertius, Diderot), by Darwin's grandfather Erasmus Darwin, and by Lamarck. But their neglecting to provide evidence for evolution led other scientists to reject their evolutionary theories. Darwin was the first to provide adequate evidence for evolution and to explain how the process of natural

first book, *The Birth of Tragedy*, Nietzsche acknowledged the Greek's genius of measure, restraint, and harmony which he called "the Apollonian"; but he argued that one must not ignore "the Dionysian."

His mission and the image of his spirit was the glorification of power. He believed that all life evidences a will to power, and that human behavior can be better understood with this in mind. Instead of worshipping gods in an alleged beyond, men should concentrate on his own elevation, which Nietzsche symbolizes in the "superman." The superman is the passionate man who can employ his passions creatively instead of having to extirpate them. From this belief in "creative passion," Nietzsche criticized Christianity for its otherworldliness, and found resentment at the heart of Christian religion—resentment of this world of the body, of sex, of the critical intelligence, of everything strong and healthy. One speaks of Christian love, but according to Nietzsche, the early Christian "loved" his enemies to make sure that he himself would go to heaven, from where he hoped to behold the torments of his former enemies in hell. For this kind of penetrating insight into egoistic motivations of human psychological behavior, he received lavish tribute from Sigmund Freud, who said of Nietzsche that his "insights often agree in the most amazing manner with the laborious results of psychoanalysis," and that "he had a more penetrating knowledge of himself than any other man who ever lived or was ever likely to live."

Thus by establishing the new commandment for man to "be hard" for the "will to power" Nietzsche succeeded in radically altering the prevailing view of human nature. He finds man whose life and existence is under the control of the power of the law of justification of every cause for the "good" war.

Nietzsche is widely associated by interpreters of his thought with Darwin and evolution, then with the Nazis, and more recently with the protestant theologians. It is no less legitimate to stress his relationship to Freud or to such writers as Thomas Mann, Herman Hesse, Rainer, Maria Rilke, and Andre Gide. No other philosopher since Kant has left so undeniable an imprint on modern thought as has Friedrich Nietzsche. Not only in ethics and literature do we find the molding hand of Nietzsche

at work, invigorating and solidifying; but in pedagogics and in art, in politics and religion, the influence of his doctrine is to be encountered. But in so achieving a great success he had to find it necessary to make his obiter dictum that "God is dead" in order to pass his verdict that the Christian "slave morality" must be repudiated for the strong man's "master morality."

Nietzsche was lavishly extolled by Freud for his psychology of self-knowledge. If Freud finds in Nietzsche's psychology a legitimate relationship to his psychoanalysis, it was largely because both of them were the children of the same *Zeitgeist*.

Freud, for his great work in psychoanalysis, was strongly influenced by the post-Kantian idealistic philosophy, especially that of Schelling. Freud's early interest was determined by the type of German romanticism of the post-Kantian idealistic, but represented by Schelling's *Naturphilosophie*. In his *Naturphilosophie*, nature is conceived as dominated by forces, activities, and creations, organized in eternal basic conflicts and in polarities like good and evil. Reason and the conscious life as represented by mind, are only the reflection and emanation of this unconscious turmoil in every aspect of the universe. Moreover, implicit in this view is the attribute that neither empirical observation nor scientific theory is an adequate tool for explaining this verity, whose features are most directly apprehended by speculation in intuition. Thus, through both these views that of mechanistic science of his profession of medicine and that of the *Naturphilosophie*, Freud conceived the "forces" at work in nature but somehow hidden from man. From this concept of the "forces" at work in nature but hidden from man, Freud's most important contribution to the knowledge was made possible by his discovering the mental mechanism at work in the depth of the unconscious mind hidden from man.

Thus by establishing the theory of the unconscious mechanisms of human psyche Freud succeeded in radically altering the prevailing view of human nature. He finds man whose life and existence is under the control of the power of the law of sexual etiology.

His brilliant theories, therapeutic techniques, and profound insights into the submerged areas of the human psyche opened up a whole new

field of psychological study. But in so achieving a great success, he had to find it necessary to leave the limitation of the realm of psychobiology to enter the realm of transcendental metapsychology where he expressed his conviction that psychological motivation alone, of wishes and fears, was adequate to account for the existence of religious beliefs, particularly those in God and immortality, without there being any need to invoke the existence of supernatural powers.

In this Godless way of thinking, Freud had to de-Judaize himself, as he had to conclude his life and career by writing *Moses and Monotheism* in which he derived the characteristic belief of Judaism, not from Moses, but from stimulus given to that tenet by the revolutionary Egyptian pharaoh Ikhnoton, the first person to promulgate it.

In thus reviewing the philosophical bases of modern view of human nature, it is easy to see that the theories of these four great thinkers are characterized by the features evidently attributable either to naturalism as opposed to idealism, or to secularism as opposed to clericalism, or to materialism as opposed to spiritualism, or to this worldliness as opposed to otherworldliness, or to agnosticism as opposed to belief, or to atheism as opposed to faith. The common characteristic equally shared by all these four great modern thinkers in molding their theories as the foundation of the civilization we live in today is the absence of God in the center of their view of human nature. If judged from this fact alone, it is quite justifiable to believe that man is going to have nothing to do with God in his handling of himself and in his dealing with his fellowmen of his society.

In coming back to our discussions about the power of self-fulfilling prophecy for its bearings upon the formulation of the philosophies of these four great thinkers, we are reminded of what professor W. I. Thomas had said about self-fulfilling prophecy:

“If men define situations as real, they are real in their consequences.”

If this Thomas theorem of self-fulfilling prophecy and its implications were more widely known more men would understand more of the workings of our society and its underlying philosophy. Though it lacks the sweep and precision of a Newtonian Theorem, it possesses the same gift of rele-

vance, being instructively applicable to many social processes and their underlying philosophies.

The suspicion, "if men define situations as real, they are real in their consequences," that Professor Thomas, the dean of American sociologists, was driving at a crucial point becomes all the more insistent when we note that essentially the same theorem had been repeatedly set forth by such disciplined and observant minds as those of the four great thinkers long before Professor Thomas wrote this theorem.

When we find such otherwise discrepant minds as the hard-headed Darwin in his assertion of the survival of the fittest by law of natural selection, the irascible genius Marx in his revision of Hegel's dialectic theory of historical change, the resentful Nietzsche in his propagation of his new commandment to be strong to win, and the seminal Freud in works which have perhaps gone further than any others of his day toward modifying man's outlook on man, we may find the vital role played by the power of self-fulfilling prophecy.

The first part of the Thomas theorem, "if man define situations as real, "provides an unceasing reminder that men respond not only to the objective features of a situation, but also and at times primarily, to the meaning their situation has for them. And once they have assigned some meaning to the situation, their consequent behavior and some of the consequences of that behavior are determined by the ascribed meaning. What is a case in point in the formulation and the subsequent prevalence of the theories of these four great thinkers?

Darwin's development of "scientific mind," is the case in point. A few weeks before he served on HMS "Beagle" he did not even know what science was until Rev. Adam Sedwick showed him that if certain fossil shells of a tropical mollusk had really been found in a certain glacial deposit, it would overthrow all that was known of geology in England; for science is a consistent and organized body of knowledge. It was therefore no experienced scientist who sailed on the "Beagle" but an undistinguished candidate for Holy Orders equipped mainly with courage and horse sense. The man who returned, however, was the "hardest-headed" biologist of the century. Part of this mental metamorphosis was, as

explained earlier in this chapter, due to his reading Lyell's *Principles of Geology*, and applying them in the field of his expedition to the facts that he observed. Another fact was his conviction from what he saw that the account of the creation in the Bible was demonstrably false. So far as this mental metaporphosis is concerned, Darwin's mind was "scientific" because the conclusion came from the facts actually observed. But, at the same time he was astonsihingly naive in such general matters as methodology. In his day, science was supposed to make progress only by inductive methods originated by the founding Father of modern science, Francis Bacon. Darwin wrote, "I worked on true Baconian principles and without any theory collected facts on a wholesale scale." This was invalidated by Darwin himself when he wrote to Lyell (June 1, 1860): "Without the making of theories, I am convinced there would be no observations." Thus he recognized that there are no such things as purely inductive observation, for if the observer had not always in his head an idea of what he was looking for, derived from deduction, he would not observe anything at all. Darwin's method was to spin a hypothesis about anything that struck his attention, anything that he was predisposed by ideas to see and then to deduce from it consequences that should follow and could be refuted or verified. This "hypothetic-deductive," method, as Sir Peter Medawas has called it, is exactly what is to be called self-fulfilling prophecy, and this is best illustrated in Darwin's letter to F. W. Hutton (April 20, 1861): "I am actually weary of telling people that I do not pretend to adduce direct evidence of one species changing into another, but I believe that this view is in the main correct, because so many phenomena can thus be grouped and explained."

Darwin's methods were not certainly in keeping with the then prevalent, authentic, method of induction of science, but this Darwin's "hypothetic-deductive" method is very interesting if it is seen by the light of what is explained earlier in Chapter II about the self-fulfilling nature of predictions of scientific "fishing expeditions" of behavioral scientists, that their "fishing expeditions" do not take place in randomly selected pools.

The power of self-fulfilling prophecy is also evident in the formation

and the subsequent prevalence of the philosophy of Karl Marx.

In the history of the development of the philosophy of socialism, Marx's philosophy stands out overriding all other philosophical theories of socialism. The unsurpassed strength of Marx's philosophy is largely due to his synthesizing mind. He fused German idealistic philosophy with British political economy and French socialism, but the real basis of the supremacy of his doctrine over all other social theories is to be found in the power of its convincing predictions of the future.

The term socialism, in its modern sense, made its first appearance around 1830 in the writings of such men as Fourier and Saint-Simon in France and Robert Owen in England. Later, in 1840's, other socialist doctrines were put forth by many others, particularly in France. Louis-Auguste Blanqui evolved a radical socialist doctrine based on a democratic populism. Etienne Cabet, in his influential utopian work, *Voyage en Icarie* (1840), carried on the tradition of Thomas More as well as Fourier. Louis Blanc is best known for *L'Organisation du Travail* (1839), in which he advocated the establishment of national workshops with capital advanced by the government. Pierre-Joseph Proudhon is best viewed as one of the founders of the anarchist tradition. In England, the first half of the nineteenth century saw the emergence of a number of writers attacking the inequities of capitalism and basing their indictment of wage laborer on radical interpretations of the thinking of an eminent economist, David Ricardo. Somewhat later, a Christian socialist movement led by F.D. Maurice and Charles Kingsley attempted to combine radical economic views with political conservatism. The radical Chartist Movement of the 1830's and 1840's is better viewed as a political movement of the working class than as a specifically socialistic formation, though anticapitalist ideas played a strong part in it.

In the perspective of intellectual history, all of these pre-Marxist socialist thinkers produced ideas of considerable intrinsic worth. But from the viewpoint of the subsequent development of socialism their ideas seem to be tributaries feeding the mighty stream of the Marxist movement that came to dominate the socialist tradition in the last third of the nineteenth century.

The basis of the supremacy of Marx over all other socialist thinkers is in the fact that while all other socialists' theories are in their essential nature merely idealistic or utopian, his doctrine is based on scientific analysis given out as a "prediction" destined to be fulfilled in the course of historical development of society.

Marx like many other thinkers such as Hegel and Montesquieu, considered societies as structured wholes; all aspects of a society— its legal code, its system of education, its art —are related with one another and with mode of economic production. But he differed from other thinkers in emphasizing that the mode of production was, in the last analysis, the decisive factor in the movement of history. The relations of production, he held, constituted the foundation upon which is erected the whole cultural super-structure of society. Marx distinguished this doctrine, which he called scientific socialism, from that of his predecessors whom he labelled mere utopian socialists. He asserted that his teachings were based on a scientific analysis of the movement of history and the workings of contemporary capitalism rather than simply on idealistic striving for human betterment. He claimed to have provided not only a guide to past history but, more significantly, a scientific prediction of the future. Because of this convincing power of scientific prediction of the future, his major doctrines were enthusiastically accepted by the leaders of communistic revolutionary movement as the guiding principles unshakable as the prophecies from above.

Marx's most important contribution to sociological theory was this general mode of scientific analysis, the dialectical model, which regards every social system as having within it immanent forces that give rise to "contradiction" that can only be resolved by a new social system. History was shaped by class struggle; the struggle of contemporary proletarians against their capitalist taskmasters would eventuate, says Marx, in a socialist society in which associated producers would mold their collective destinies co-operatively, free from economic and social constraints. The class struggle would thus come to an end. This is the strong prediction by convincing brand of politico-economic determinism. Neo-Marxists, with all the variants of Marxism in the Soviet Union or in communist China,

who no longer accept the economic reasoning in *Das Kapital* are still guided by this strong power of the "scientific" prediction for determinism in their approach to capitalist society.

In this sense, Marx's mode of predicting (prophetical) analysis, like those of Thomas Malthus, Herbert Spencer, or Vilfredo Pareto, has become one of the theoretical structures that are the heritage of the social scientist. But it must be pointed out that Marx's predicting mode of thought has, however, been opposed by such empirically minded philosophers as Bertrand Russell, John Dewey, and Karl Popper. We feel urged to ask if Marx's prediction of the future is really as valid and convincing as the law of science.

In his *Das Kapital* or *The Communist Manifesto*, Marx never claimed to have discovered the existence of classes and class struggles in modern society. "Bourgeois" historians, he acknowledged, had dealt with them long before he had. He did claim, however, to have proved that each phase in the development of production was associated with a corresponding class structure and that the struggle of classes led necessarily to the dictatorship of the proletariat, ushering in the advent of a classless society. It is difficult to see how he could have regarded the few paragraphs he had written on these themes as constituting proof by any scientific standard.

The most memorable pages in *Das Kapital* are the descriptive passages, culled from Parliamentary Blue Books, on the misery of the English working class. Marx prophesied that this misery would end when, from its own immanent contradictions, "The knell of capitalist private property sound. The expropriators are expropriated." And his *The Communist Manifesto* closed with the words of strong predicting assurances, "The proletarians have nothing to lose but their chains. They have a world to win. Workingmen of all countries, unite."

"If men define situations as real, they are real in their consequences." This Thomas theorem of self-fulfilling prophecy provides a reminder that men respond not only to the objective features of a situation—"the misery of the English working class,"—but also, and at times primarily to the meaning that this situation has for them—"this misery would surely come to an end when capitalism comes to its 'destined' (prophesied) end."

And once they have assigned some meaning to the situation, their consequent behavior and some of the consequences of that behavior—"working men of all countries, unite." as they "have nothing to lose but their chains. They have a world to win"—are determined by the ascribed meaning.

Thus the working of self-fulfilling prophecy is observed in the great contribution to the modification of man's outlook on man achieved by the great Jewish genius in Karl Marx. But a no less significant contribution was achieved by another Jewish genius in Sigmund Freud.

The idea of fulfillment of a hidden wish is the key to the cardinal theory of Freud's *Das Unbewusste* (the unconscious). On this idea is founded his whole system of philosophy of human nature. It is best shown in what is considered to be his magnum opus, *The Interpretation of Dreams*. This deals not only with the puzzling problems of dream life, which had baffled all previous investigators, and the complex mechanisms at work in the manufacture of dreams, but also with the structure and mode of functioning of the deeper layers of the mind, the unconscious. He believed that unconscious impulses were responsible for dreams. The real meaning of the dream, called its "latent content," is not directly expressed, but is instead dramatized in disguised form, the remembered aspects of the dream being its "manifest content." The construction of the dream, the so-called dream work, consists in the representation of the impulse-provoked ideas in acceptable form, commonly in the form of visual imagery. The manifest content often picks up materials that were in the thoughts of the previous day, and combines these with thoughts and emotions from the past. The main mechanisms are condensation, displacement, and symbolization. Condensation refers to the combining of ideas into more abbreviated form, so that a single word or figure may have multiple meanings within the dream: displacement permits one thing to stand for another; symbolization is the more general term for representing ideas or events by something else. Since to Freud, much of the impulsive life centers around sexual wishes (i.e. his libido theory) *the representation of the male organ by a snake or other long object is to be expected; the female is more often represented by some kind of container.* Why, according to Freud, was all this strange disguise necessary?

His reply was that by using these disguises the dream became the guardian of sleep; it got rid of the unfulfilled impulses, which might otherwise disturb the sleep, without bringing so strongly to the attention of the sleeper as to disturb him. If the raw meaning of the dream were open to the dreamer, his impulses would often be found to be of a kind that he would not find tolerable. There is no doubt that the impulsive day remnants are the actual disturbers of sleep, and not the dream, which, on the contrary, strives to guard sleep.

Freud has found that the dream represents a wish as fulfilled. He believed that the function of the dream was the gratification of some hidden drive. That is to say, in my term, the working of the principle of self-fulfilling prophecy. Indeed, the idea of wish-fulfillment is so fundamental with Freud that it is not at all an exaggeration to say that the whole system of his theory about human psyche is founded on this basic idea.

What is most prominent of Freud's theory of dreams is his originality in attributing the source of this dream to the hidden, unfulfilled wishes stored in the deep layers of the mind, the unconscious. Freud, in explaining his original thinking about the nature of dreams, says that he is induced to separate the dreams into two groups. Some dreams are plainly wish-fulfillment; and other in which wish-fulfillment cannot be recognized and are frequently concealed by every available means. The undisguised wish dreams are chiefly found in children, yet fleeting open-hearted wish dreams seem (he purposely emphasizes word—seem) to occur also in adults. Freud explains this type of fleeting wish dreams by showing an example. A somewhat sarcastic young lady, whose younger friend has become engaged to be married, is asked throughout the day by her acquaintances whether she knows and what she thinks of the fiance. She answers with unqualified praise, thereby silencing her own judgment, as she would prefer to tell the truth, namely, that he is a ordinary person (*Dutzendmensch*, which means a man of dozen, denotes a person with whom figures are everything). The following night she dreams that the same question is put to her, and that she replies with the formula: "In case of subsequent orders, it will suffice to mention the numbers." Then, Freud explains that he has learned from numerous analyses that wish in all dreams that have been

subject to distortion, like this example of the sarcastic lady, has been derived from the unconscious, and has been unable to come to perception in the waking state.

From this he goes on to say that in general, unfulfilled wishes of the day are insufficient to produce a dream in adults. He readily admits that wish instigators originating in conscious life contribute toward the incitement of dreams, but that is all. The dream would not originate if the preconscious wish were not reinforced from another source. That source is the unconscious. He explains with strongest emphasis that conscious wish is a dream inciter only if succeeds in arousing a similar unconscious wish which reinforces it. Following the suggestions obtained through the psychoanalysis of the neuroses, he believes that unconscious wishes are always active and ready for expression whenever they find an opportunity to unite themselves with an emotion from conscious life.

It may seem that the conscious wish alone has been realized in a dream; but a slight peculiarity in the formation of his dream will put us on the track of the powerful helper from the unconscious. These ever active and, as it were, immortal wishes from the unconscious recall the legendary Titans who from time immemorial have borne the ponderous mountains which were once rolled upon them by the victorious gods, and which even now quiver from time to time from the convulsions of their mighty limbs. Freud says, in emphasizing this important point of view of the unconscious, that properly speaking, the unconscious is the real psyche, its inner nature is just as unknown to us as the reality of the external world, and it is just as imperfectly reported to us through the data of consciousness as is the external world through the indications of our sensory organs. And then, from this metaphorical explanation by the story of the Titans, he goes on to the definition of the paramount importance of his theory that the wish manifested in the dream is an infantile one. Freud says we learn from analysis of dreams that the wish itself, which has given rise to the dream, and whose fulfillment the dream turns out to be, has originated in childhood—until one is astonished to find that the child with all its impulses lives on in the dream.

If Freud's great contribution to modern civilization is due to his

discovery of the dream as the fulfillment of the wish originating in childhood stored in the deep layers of the unconscious mind, it is, indeed, the matter of great significance that his great contribution has been achieved by the great power of his self-fulfilling prophecy.

Freud's greatest wish in his childhood was to become a great man. As for the circumstances for the origin of this wish, let us turn to his own description:

Here, I remember a story which I heard often in my childhood that at my birth an old peasant's wife had prophesied to my happy mother (I was her first-born) that she had given the world a great man. Such prophecies must occur very frequently; there are so many mothers happy in expectation, and so many old peasant wives whose influence on earth has waned, and who have therefore turned their eyes towards the future. The propheticness was not likely to suffer for it either. Might my hunger for greatness have originated from this source?

By the time he was graduating from the College of Medicine at the University of Vienna, his hunger for the greatness was directed to be appointed a professor of medicine at the University. But he was never able to get the appointment to the chair of professorship simply because of the prejudiced policy of the University against the Jew. Under such unhappy situations, his hunger for greatness drove him to the devoted study of psychiatry and psychology with the results of which the greatness is known to every man who lives in the civilization of today.

The far-reaching psychological intensity of his desire to fulfill his self-prophesied goal for greatness to be a professor under such a strong anti-Semitic prejudice is shown in the case of his analysis of his own dream:

IV. The following dream gives an example of really base egotistical feelings, which are concealed behind affectionate concern:

My friend Otto looks ill, his face is brown and his eyes bulge.

Otto is my family physician, to whom I owe a debt greater than I can ever hope to repay, since he has guarded the health of my children for years. He has treated them successfully when they were taken sick, and besides that he has given them presents on all occasions which gave him any excuse for doing so. He came for a visit on the day of the dream, and my wife noticed that he looked tired and exhausted. Then comes my dream at night, and attributes to him a few of the symptoms of Basedow's disease. Any one disregarding my rules for dream interpretation would understand this dream to mean that I am concerned about the health of my friend, and that this concern is realised in the dream. It would thus be a contradiction not only of the assertion that the dream is a wish-

fulfillment, but also of the assertion that it is accessible only to egotistic impulses. But let the person who interprets the dream in this manner explain to me why I fear that Otto has Basedow's disease, for which diagnosis his appearance does not give the slightest justification? As opposed to this, my analysis furnishes the following material, taken from an occurrence which happened six years ago. A small party of us, including Professor R., were driving in profound darkness through the forest of N., which is several hours distant from our country home. The coachman, who was not quite sober, threw us and the wagon down a bank, and it was only by a lucky accident that we all escaped unhurt. But we were forced to spend the night at the nearest inn, where the news of our accident awakened great sympathy. A gentleman, who showed unmistakable signs of the morbus Basedowii—nothing but a brownish colour of the skin of the face and bulging eyes, no goitre—placed himself entirely at our disposal and asked what he could do for us. Professor R. answered in his decided way: "Nothing but lend me a night-shirt." Whereupon our generous friend replied: "I am sorry but I cannot do that," and went away.

In continuing the analysis, it occurs to me that Basedow is the name not only of a physician, but also of a famous educator. (Now that I am awake I do not feel quite sure of this fact.) My friend Otto is the person whom I have asked to take charge of the physical education of my children—especially during the age of puberty (hence the night-shirt)—in case anything should happen to me. By seeing Otto in the dream with the morbid symptoms of our above-mentioned generous benefactor, I apparently mean to say, "If anything happens to me, just as little is to be expected for my children from him as was to be expected then from Baron L., in spite of his well-meaning offers." The egotistical turn of this dream ought now to be clear.

But where is the wish-fulfilment to be found? It is not in the vengeance secured upon my friend Otto, whose fate it seems to be to receive ill-treatment in my dreams, but in the following circumstances: In representing Otto in the dream as Baron L., I have at the same time identified myself with some one else, that is to say, with Professor R., for I have asked something of Otto, just as R. asked something of Baron L. at the time of the occurrence which has been mentioned. And that is the point. For Professor R. has pursued his way independently outside the schools, somewhat as I have done, and has only in later years received the title which he earned long ago. I am therefore again wishing to be a professor! The very phrase "in later years" is the fulfilment of wish, for it signifies that I shall live long enough to pilot my boy through the age of puberty myself.

I identified my friend Otto with a certain Baron L. and myself with a Professor R. There was only one explanation for my being impelled to select just this substitution for the day thought. I must have always been prepared in the Unc. to identify myself with Professor R., as it meant the realisation of one of the immortal infantile wishes, viz. that of becoming great.

Freud admits that his desire to be called professor is too strong and he even thinks it is a "morbid ambition." About this dream he says, "I

do not know how others, who think they know me, would judge me, for perhaps I have really been ambitious." But he realized that his ambition never was to be realized because of the university policy reflecting the general anti-Semitic feelings in Austria of his day. "But," he says, "if this be true, my ambition has long since transferred itself to other subjects, than the title and rank of professor."

The other object of his desire for the "greatness" was to become a "minister of education" so that he can do something against this unfair treatment against the Jews. This great desire to be a minister was also the result of the prophecy impressed upon him in the later years of his childhood.

But here I recollect an impression from the later years of my childhood, which would serve still better as an explanation. It was of an evening at an inn on the Prater, where my parents were accustomed to take me when I was eleven or twelve years old. We noticed a man who went from table to table and improvised verses upon any subject that was given to him. I was sent to bring the poet to our table and he showed himself thankful for the message. Before asking for his subject he threw off a few rhymes about me, and declared it probable, if he could trust his inspiration, that I would one day become a "minister." I can still distinctly remember the impression made by this second prophecy. It was at the time of the election for the municipal ministry; my father had recently brought home pictures of those elected to the ministry—Herbst, Giskra, Unger, Berger, and others—and we had illuminated them in honour of these gentlemen. There were even some Jews among them; every industrious Jewish schoolboy therefore had the making of a minister in him. Even the fact that until shortly before my enrolment in the University I wanted to study jurisprudence, and changed my plans only at the last moment, must be connected with the impressions of that time. A minister's career is under no circumstances open to a medical man.

In order to reinforce the point of his theory that although the wish which actuates the dream is a present one, it nevertheless draws great intensification from childhood memories, Freud refers to a series of dreams which are based upon his longing to go to Rome. But this strong longing is also closely connected with the prophecy he made to himself when he was confronted with an unhappy situation when he was a young child.

And now for the first time I happen upon the youthful experience which, even to-day, still manifests its power in all these emotions and dreams. I may have been ten or twelve years old when my father began to take me with him on his walks, and to reveal to me his views about

the things of this world in his conversation. In this way he once told me, in order to show into how much better times I had been born than he, the following: "While I was a young man, I was walking one Saturday on a street in the village where you were born; I was handsomely dressed and wore a new fur cap. Along comes a Christian, who knocks my cap into the mud with one blow and shouts: "Jew, get off the sidewalk." "And what did you do?" "I went into the street and picked up the cap," was the calm answer. That did not seem heroic on the part of the big strong man, who was leading me, a little fellow, by the hand. I contrasted this situation, which did not please me, with another more in harmony with my feelings—the scene in which Hannibal's father, Hamilcar Barka made his boy swear at the domestic altar to take vengeance on the Romans. Since that time Hannibal has had a place in my phantasies.

Yet he refused, like his hero Hannibal, to be bound by the fetters of hostile society. Rising above prejudice, he was able to expend his energy in an explanation into a bold, hitherto undiscovered field, to the benefit of his tormentors and all makind. Thus Freud proved not only by the theories he established but more significantly by his life itself that dreams are not mere bubbles but the gracious fulfillers of wishes. With a strong tone of affirmation, Freud concludes Chapter III of his *The Interpretation of Dreams* with the following remark:

"I should never have fancied that in the wildest dream"; exclaims one who finds his expectations surpassed in reality.

We have thus far studied the power of self-fulfilling prophecy working in the formulation of Freud's philosophy from the quantitative view of its power, but it remains yet to study it from the qualitative view of its power.

Freud's concept of infantile origin of the content of the unconscious, such as his famous theory of Oedipus complex of child, is another reflection of the dominant thought of his age; the theory of evolution. But this evolutionary outlook of the content of human psyche as the growth of infantile origin is particularly significant because Freud held that the course of the development of the human mind is the evolutional fulfillment of the wishes impressed early in the childhood. In other word, life is destined to be the course of the fulfillment of the predictions impressed while in the childhood.

This idea of "destined" course of fulfillment is so important that it provoked the critical remark from O. Hobart Mower who said that, "Calvin

saddled us with the doctrine of predestination and divine election; and Freud spoke of psychic determinism and the tyranny of the unconscious—psychoanalysis goes protestant theology one better and makes us not only unable to help ourselves in the matter of ‘recovery’ but also blameless and unaccountable for having gotten ourselves into our neurotic predicament in the first place.”

This characteristic concept of “predestined” outcome of the growth of human psyche brings him in flat contradiction with his exclamation for “his expectations surpassed in reality,” or, at least, brings him in the shortcoming of the belief in the power of self-fulfilling prophecy.

Thus, anyone attempting to clarify the connection between Freud’s personal life and psychology of the wish dream will notice this discrepancy or contradiction. This is most evident in what he says about religion.

Sigmund Freud, the scientist who also happened to be a Jew, consciously treated religion as an illusion even though he paid a great deal of attention to it. To Askar Pfister, his protestant clergyman friend and follower, he wrote with inimitable pungency, “How comes it that not one of the Godly ever devised psychoanalysis, and that one had to wait for a Godless Jew?” In a humorous vein of self-evaluation and understatement, Freud called himself “an unrepentant atheist,” but his “atheistic” theory has deeply implicated religious thought with his commandment of a new morality: “Thou shalt not be afraid of thy hidden impulses.” “Religion is an attempt to get control over the sensory world, in which we are placed by means of the wish-world, which we have developed within as a result of biological and psychological necessities. But it cannot achieve its end. Its doctrines carry with them the stamp of the times in which they originated, the ignorant childhood days of the human race.”

In *The Future of an Illusion*, Freud made his strong attack on religion. The characteristic of an illusion is that it is derived from a person’s wishes. As an example he cited the illusion of a poor girl who dreamed that a prince would come and carry her away to his luxurious palace.

What he accomplished in the realm of religion is altogether ambivalent in its meaning, and is hard to ascertain and assess. His basic attitude to religion, however, can be made coherent only if it is observed from the

standpoint of Freud's organic view of evolutionary development of human mind as the course of fulfillment of the wishes originating from the early childhood. This is best shown in his *Moses and Monotheism*. Freud wrote it as a reaction to his experience of the force of anti-semitism. It is Freud's deathbed confession. In it are engraved the secret hieroglyphics of the total Freud.

Freud's aim was to de-Judanize the greatest Jew in history. He said that Moses was an Egyptian, not a Jew. The derivation of this name was Egyptian (Mose, "child") contrary to the text of the Hebrew Mashah (to draw from the water). Moses was slow of speech "not because he had a speech impediment but because he spoke Egyptian and needed an interpreter." According to Freud, Moses introduced circumcision, a specifically Egyptian rite, to the Israelites as the substitute for castration and as a ritualistic symbol of son's subjection to his father. Thus the thesis proposed by Freud was that the Jews were not God's chosen people but rather the chosen people of Moses.

Still another proposition of Freud is that the Egyptian leader was killed by the Jews who acted out again the killing of the primal father portrayed in his *Totem and Taboo*. Because of a lasting unconscious sense of guilt, the Jews became monotheistic attempting to repent for their crime against the ancient father by magnifying him above all else. Freud suggested that the belief in a messiah originated in the wish that the murdered Father—Moses would return. Mosaic religion had been a Father religion. Christianity became a Son religion. The old God, the Father, took second place. Christ, the Son, stood in His place, just as in those dark times every son had longed to do.

In his essay *A Philosophy of Life*, he maintained that in relation to the external world, man is still a child and cannot give up the protection he enjoyed as a child. Men's belief in God has a twofold origin in the emotional strength of the memory image of the father exalted into a deity and his lasting need for protection. People are after all nothing but children; they believe their parents more than anybody else. If one takes a parental attitude, it is all to the good.

With all this morbid preoccupation with the past in the childhood

of man, it is quite natural and inevitable for Freud to come to conclude his greatest work, *The Interpretation of Dreams*, with the following words.

And how about the value of the dream for a knowledge of the future? That, of course, we cannot consider. One feels inclined to substitute: "for a knowledge of the past." For the dream originates from the past in every sense. To be sure the ancient belief that the dream reveals the future is not entirely devoid of truth. By representing to us a wish as fulfilled the dream certainly leads us into the future; but this future, taken by the dreamer as present, has been formed into the likeness of that past by the indestructible wish.

His concluding prophecy that man's future is destined to be formed by the indestructible wish of the past is certainly characteristic of his theme of determinism showing that many apparently accidental and meaningless acts, and many ascribed simply to "free will" are motivated by hidden and conflicting wishes unrecognized by the subject. But if man allows himself to be deprived of his "free will" he is destined to face his destiny with pessimistic outlook. Freud says Heaven is but a form of wish fulfillment. We believe in its existence because without such a belief, life on this earth would be altogether too bleak. Similarly God, the Father, is a projection of our own male parent. With this emphasis on human wish, Freud's system is undoubtedly a predominantly liberal philosophy, but it is a liberalism with sheer egoism for its essence, with no hope in true salvation of humanity. Freuds' mistake is in his attempt to create his psychic-father by means of unification of earthly father with heavenly one. The equalization of fathers on earth and in heaven is never successful. What was needed for Freud was not the equalization of fathers on earth and in heaven but the complete shift from the human to the divine in his attempt to save man from suffering from discrepancy from expectancy of his unconscious psychic mechanism ever working for the fulfillment of his cosmic, inborn, wishes stored in the depth of man's mind. The power of self-fulfilling prophecy works but in negative way when the prophet does not see his God in the center of his outlook on man and his universe.

V

The motivational power of self-fulfilling prophecy as an concept cannot remain out of the tradition of Western philosophy where the ideal is sought in the harmonious unity of otherworldliness and thisworldliness. This ideal unity is best represented in Christianity with its assertion of primacy of the individual supported by its self-abnegatory idealism, as best exemplified in the unification of the "light of the world" (assertion) with "the salt of the earth", (sacrifice). Self-fulfilling prophecy is destined to go lame if it walks only on one foot of the power of motivation for earthly gain. It needs to rely on another supporting foot of the power of love from above. Whether it has to walk limping in the negative way or walk with a light step in the positive way, it is all up to man himself in his freedom of choice.

In the preceding studies of the history of the development of the theory of self-fulfilling prophecy, it is found that the theory is characterized, by the results of the combined research by sociologists and psychologists, as one in which man seeks prophecy fulfillment because he is subject to the painful state of mind to be caused by what psychology specifically terms as "cognition dissonance," when his fundamental need for his minimum predictability of his world is disturbed. When man's "natural" expectancy for the "natural" course of the thing or event is thwarted, as in the case, for example, of a sudden loss of his beloved child, he feels everything is all wrong with his world. Man's faith is often disturbed, or lost, as in the example of the story of Job, when he is confronted with shattering experiences of either natural or social causes which desparingly contradict man's concept of God as the one who has created and is sustaining the order of the universe in his all-mighty and all-loving power. Man feels all creation travails and groans when he sees God's acts not "geometrized." Here lies the greatest stumbling block of theodicy—justification of God's way to deal with man, or a vindication of the justice of God in permitting evil to exist. This knotty problem of discrepancy from expectancy is the central kernel of "dissonance theory" in whole system of theology.

In view of the conceptual nature of self-fulfilling prophecy as the derivative mainly from the definition of the theory of cognition dissonance as a notion that a person will try to justify a commitment to the extent that there is information discrepant with that commitment, and that commitment is a unique aspect of dissonance theory, it might be valuable to look at the self-fulfilling prophecy from the point of view of its applicability to this classical problem of theodicy in a hope at least to throw some new light to see in a new perspective the difficulties inherent to this theological problem.

It will be recalled from the preceding discussions that man's innate motivation for his desire for prophecy fulfillment is his need for unity in himself which is to be gained by the avoidance or reduction of dissonance formulation, and that bias is needed for man to make up for the discrepancy from expectancy. For that reason of its need for man, bias is a deception, a conscious escape from or forced denial of objective truth or reality. It will be recalled furthermore that bias itself is not either good or bad from ethical viewpoint. It is all up to man in his way to control it that it works either for positive (good) or negative (bad) effect.

For a man, in his sinful nature of egoism, expectancy works as a bias or deception for his egoistic purpose to keep his sociological or psychological existence in unity. For a Satan, in his fiendish nature of destruction, expectancy works as a hatred for his devilish purpose to destroy whatever he finds angelic in its work of love. In contrast to sinful man in his need of bias and to fiendish Satan in his work of hatred, God only gives us perfectly good expectancy of love.

In Apostle's tripod words to the Corinthians—faith, hope, and love—God's act of self-fulfilling prophecy is perfectly realized. Hope, that is positive expectancy, is no longer a bias nor a deception because it is supported, on one hand, by the faith in God's way to deal with man, and, on the other, by the power of love of God to fulfill his prophecy to save man. Hope, as it is used in the Apostle's word, is entirely different from the expectancy for man in his bias for his egoistic purpose, or from that of Satan in his hatred for his destructive work. Divinity, humanity, and satanity can thus be clearly marked out by these three different kind of the

nature of expectancy of love, bias, and hatred.

Salvation from sin—from deceptive bias or from destructive hatred—is ready at hand for man because there is a fountain filled with blood drawn from Immanuel's veins. Sinners, plunged beneath that flood, lose all their guilty stains. He can no longer stay in sinfully motivated expectancy for selfish bias or destructive hatred. He realizes that his savior loves him and that his expectation to him is to love God and his fellow men. He can no longer react to God's expectancy in any way, but to fulfill it, because he is so motivated from within himself by the assurance of God's love for him, shown not only by his word, but his lifeblood shed for his ransom in the agony of the crucifixion. He can sin no more and he will sing his savior's power in a nobler, sweeter song. "The Weakest Thing," a poem by Elizabeth Barrett Browning, is one of the examples of this kind of nobler and sweeter song.

Yea, once, Immanuel's orphaned cry his
universe hath shaken——
It went up single, echoless. "My God, I am forsaken!"
It went up from the Holy's lips amid his lost creation,
That, of the lost, no son should use those words of desolation!

Milton's *Paradise Lost* is perhaps the grandest cry to sing this noble and sweet theme, and Steinbeck's *East of Eden* is the reflection of this grand cry in our modern time. In his grateful reaction to his ransomed salvation, and in his freedom of choice between faith and doubt, man realizes the divine power of self-fulfilling prophecy of God's way to deal with man despite the fact that in his human eyes he seems standing amid his lost creation with its many attendant evils unaccountable from his human viewpoint. Thus his belief is driven home to the realization that if man stops believing, he stops living and that man's life itself is God's self-fulfilling prophecy. In this view of the divine idea of self-fulfilling prophecy as a new light to be thrown to see the central problem of theodicy in a new perspective, it may be justified to say that it is the power of God's self-fulfilling prophecy that it makes possible for man to keep his covenant relationship with God for the ultimate fulfillment of God's prophecies for man's final victory over Satan with the second

coming of Christ.

So long as he stays in the realm of sociology or psychology on the human level, man knows only two types of love, eros type love (such as ego-satisfying love of sexes) and agape type love (such as ego-sacrificing love of parent for his own child). Only when he comes to the realm of religion where the shift from the human to the divine is achieved, he comes to know the highest type of love, caritas, love toward God, the basis of wider and higher love for his fellow mankind. In the same way, so long as man stays in the realm of sociology and psychology on the human level, self-fulfilling prophecy works on bias functioning as deception, with its limited power to motivate man only on a dyadic basis in his relationship with others, not strong enough to motivate him on the monadic basis in his relationship with himself. Only when he comes to the realm of religion where the shift is achieved from the human to the divine, self-fulfilling prophecy operates on expectancy of true hope supported by the two wings of faith and love, extending its power to motivate him from within himself in his relationship with his own inner self, his soul. When self-fulfilling prophecy is seen from this view of Christian ideal of faith, hope, and love, it can be fully understood that man can be saved, as Martin Luther put it, not by his work but solely by his faith alone. Christian faith is no bias, let alone deception. It is man's reaction to God's expectancy. Man's reaction to God's loving expectancy generates a power in man to act for work. This is the motivation from God. Divinely motivated man performs action achieving wonderful works, but the work is the result of the motivation coming from his sense of assurance of his salvation, that is from his faith in God's way to deal with man.

The law of expectancy (hope) so long as it stays on the human level works as bias or deception and more often than not it works for the negative (bad) effects. But once it starts operating on the divine level, the law of expectancy transcends its human elements of bias and deception and becomes the agent of the holy spirit motivating man from his soul.

This shift of the law of expectancy from the human to the divine is the central theme all through the pages of the Bible. Beginning with the story of Adam and Eve in "Genesis" in which the interaction of

deception among satanity, humanity, and divinity is held as the prerequisite for the coming of Jerusalem for the elected people of the children of Israel, and ending in the mystical vision of prophecy in "Revelation," in which, just as in the beginning story of Adam and Eve, the interaction of deception among satanity, humanity, and divinity is held as prerequisite for the coming of New Jerusalem; the Bible, by thus maintaining coherency in its central theme of the shift of the expectancy tells the stories of prophecy fulfillment that "the spirit of Jesus is the spirit of prophecy" and that Jesus did not "come to destroy the law or the prophets:": but came "to fulfill." In this view of motivational potency of self-fulfilling prophecy as God's way to deal with man, the following episode reported in the *Reader's Digest*, February, 1969, will throw more light to see the significance with regard to the scriptural truth of the power of self-fulfilling prophecy.

Almost everyone who has found himself in life has someone of whom he can say, "I can do it if you think I can." The truth of this assertion was demonstrated 50 years ago at Johns Hopkins University. A young sociology professor sent his class out to a Baltimore slum to interview 200 boys and predict their chances for the future. The students, shocked by slum conditions, predicted that about 90 percent of the boys they interviewed would someday serve time in prison.

Twenty-five years later, the same professor assigned another class to find out how the predictions had turned out. Of 180 of the original boys located, only four had ever been to jail.

Why had the predictions been so wrong? More than 100 of the men remembered one high-school teacher, a Miss O'Rourke, as having been an inspiration in their lives. After a long search, Shiela O'Rourke, now more than 70 years old, was found. But when asked to explain her influence over her former students, she was puzzled. "All I can say," she finally decided, "is that I loved every one of them.

Miss O'Rourke had discovered the power of the greatest self-fulfilling prophecy of all.