Journal of the American Scientific Affiliation

The fear of the Lord is the beginning of wisdom. Psalm 111:10

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The opinions and conclusions published in this *Journal* are those of the authors. The American Scientific Affiliation studies relationships between Christianity and science in the conviction that the frameworks of scientific knowledge and evangelical Christian faith are compatible. Open discussion is encouraged. Non-members as well as members are invited to submit manuscripts, letters, and brief contributions for consideration for publication. Instructions for contributors are published on page 2 of the March 1963 issue.

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All content should be related to the purposes of the ASA (see inside back cover). Articles which are not obviously or clearly related to these purposes should be accompanied by the author's reasons for submitting them.

Suitable subjects include reports on scientific theories, findings, methodology, and interpretations which are pertinent to Christianity; reviews of the recent or past history of science-religion relationships; implications of scientific data for Christian doctrine and practice, and challenges to traditional Christian positions, provided these are constructive rather than destructive in the sense that they stimulate critical thought and evaluation.

Articles should be scholarly, well-written, and interesting. Highly technical materials which would be understood only by specialists in a narrow segment of the sciences will not be published. Technical language, abbreviations, symbols, formulae, etc. should be used only when clearly interpreted for non-specialists.

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II. *Refereeing.*

All manuscripts submitted are subject to evaluation by the editorial staff and, with rare exceptions at the discretion of the editor, by other referees. Authors who wish to have their names withheld from referees to promote objectivity in evaluation may attach a separate cover page with the title of the manuscript and information about the author, leaving only the title on the manuscript.

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III. *Abstract.*

Each substantial paper should be accompanied by an abstract of about 25 to 100 words. It should present the principal substantive and methodological ideas of the article.

IV. *Preparation of copy.*

1. All copy, including indented matter, should be typed double-spaced on standard white paper with margins of at least 1¼ inches on all sides. Whenever convenient, submit two copies.
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3. A footnote to the author's name should give his title, affiliation, and, if desired, books, other significant publications, memberships, relevant research activities, etc. (This information is subject to editorial revision before publication. It may appear either on a title page or on the first page of the manuscript.)
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JOURNAL OF THE AMERICAN SCIENTIFIC AFFILIATION

March 1963 Volume 15, Number 1

The ASA Periodical: The First One and One-Half Decades

DELBERT N. EGGENBERGER*

The show window of an organization is usually its publications. Internally, a periodical is the glue that provides the cross-linking of information between members, and contributes to the progress of the society.

The minutes of the first annual meeting of the American Scientific Affiliation contains references to the importance of a periodical and the need for proceeding with such a project. The first results of this endeavor were in the form of annuals. The 1946 and 1947 *Yearbooks* contain some of the papers given at the respective conventions. News items, business meeting minutes, and membership lists—there were 65 members in 1946 and 73 in 1947—are included. Nine papers were presented at the 1947 Convention, of which four were published. The *Yearbooks* were compiled by M. D. Barnes, who was Secretary-Treasurer of the A. S. A. They were mimeographed with hand-drawn covers.

The next step was taken in 1949 by printing three issues of *The Bulletin of the American Scientific Affiliation,* the first of which was dated January 7, 1949. Dr. Barnes was the editor of the *Bulletin.* The 1949 issues were labelled Volume 1 and the numbering has continued since then with one volume each calendar year. In 1950, the *Bulletin* was changed to the *Journal.* It was embellished with printed covers but continued to have mimeographed inside material.

Dr. Barnes asked to be relieved of the Editorship and D. N. Eggenberger became editor beginning with the September 1951 issue.

Printing of the *Journal* was initiated with the March 1952 issue. The page size continued to be the same as in previous issues, namely, 8½ by 11 inches. Two years later the size was reduced to 8 by 10½ inches to conform more nearly to other technical periodicals. There were requests to reduce the size to pocket dimensions. However, the trend in technical journals as well as in religious and other periodicals was to a page size of about 8 by 10 inches. It was felt that a larger page size was more desirable, not only for conformity with periodicals in general, but also because binding was easier and printing costs were less. At the same time the type size was increased in response to some complaints over the difficulty of reading the earlier printing.

Regular columns were instituted in the June 1953 issue in an attempt to fulfill several needs: 1) to communicate to people outside of that particular field something of what is going on, 2) to stir up some thinking on problems in the field, and 3) to provide a wider field of content for the *Journal,* particularly in those issues in which the papers are all on one theme.

An index was published in the March 1956 issue covering the previous seven years by both author and analytical subject. This was followed in December 1959 by a supplement.

The largest single issue was the 59-page September 1955 *Journal* in which the papers from the joint ASA-ETS (Evangelical Theological Society) meeting held that year were published.

Through 1961 there were 189 papers published, not including columns nor the *Yearbooks,* for an average of 14½ papers a year. Most of the papers have come from conventions and local meetings. Excluding the first year, when three issues contained seven papers, and 1955, when the ASA-ETS symposium was printed for a total of 25 papers, the number of papers varied from nine to twenty annually.

Of more interest, perhaps, than raw statistics of milestones are trends in the nature of material discussed. For comparison, the percentage of papers in given fields for the years 1949-52 and for the years 1958-61 are shown below.

	1949-52	1958-61
Anthropology	4	5
Archaeology	5	0
Astronomy	9	2
Biology	11	17
Chemistry	0	8
Geology	5	3
Mathematics	5	0
Medicine and Physiology	7	5
Physics	11	0
Philosophy	5	15
Psychology	5	3
Sociology	5	17
Miscellaneous and Theology	28	25

Although there may be differences of opinion as to where some papers should be assigned, the trends seem reasonably clear. Large increases in activity are noted in Sociology, Philosophy, and Chemistry. Notable decreases occurred in Physics, Mathematics, and Archaeology. It is difficult to generalize, for activity often reflects the in-

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terest of only a few persons, sometimes only one, in a particular topic. To some extent, editorial selection affects the results, although they have not appreciably modified significant trends.

Some subjects were active in the earlier years but have waned because they were pretty well threshed out at conventions and in papers. Editorial selection prevented later duplication of the same material. An example of this is flood geology. Other subjects have continued at a fair level of activity over the years, evolution being an example.

The marked increase in sociology papers is probably tied in to some extent to the general awakening in evangelical circles toward social responsibilities of Christians. On the other hand, the increase in chemistry papers is to some extent due to the generation of interest within the organization by one or more chemists who are pursuing the connections between chemistry and Christianity.

As the Affiliation grows and more activity is evident in papers at section meetings as well as at annual conventions, trends become clearer. In earlier days selection was difficult because there was little more than enough material available to publish each issue of the *Journal*. With more material, editorial direction into more important subject matter becomes possible, as noted in some more recent issues where the main papers have been devoted to a single theme. The future will likely see more of the benefits of editorial guidance in the content of the *Journal*.

The *Journal*, being the only regular medium of information until 1959, carried some news items of temporary interest. In that year the *Newsletter*, edited by F. A. Everest, was started. The *Newsletter* now carries nearly all of the material of more immediate or brief interest, while the *Journal* contains material of more permanent value.

In 1961 the writer resigned from the editorship, effective June 1962, and was succeeded, beginning with the September 1962 issue, by D. O. Moberg of Bethel College. At the same time an editorial staff was formed, consisting of the editor, three associate editors, a book review editor, and a managing editor.

The Give-and-Take Between Science and Religion*

ROY PEARSON**

Many a modern man may rule out religious faith in favor of scientific theory. But, says the author, many areas of science are riddled with inconsistency and ignorance. He explains why there is a great need for healthy skepticism in both science and religion.

It was a famous astronomer who wrote: "In the beginning was the Word, it has been piously recorded, and I might venture that the word was hydrogen gas." To say that this remark contains the whole conflict between religion and science would clearly be unwarranted, but it is no exaggeration to claim that it accurately suggests the principal source of disagreement.

Was God the beginning "Word," as the Hebrew-Christian tradition affirms? Or was hydrogen gas, as the astronomer supposes? Is there a plan behind the patient evolution of the centuries? Or does the universe simply do what comes naturally? There is much more to the conflict of science and religion than this, but most of the other points of dissent have their origin in this fundamental variance.

The determination of the facts is not an academic issue, but a matter of the most profound significance to every human being. It is anybody's guess what an honest ballot would reveal about the convictions of most people in this country today. Mine is that hydrogen gas would be an easy winner, and this disturbs me because I have become increasingly sure that many men and women desperately need to cultivate a healthy skepticism about the science to which they so readily ascribe both omniscience and omnipotence.

Skepticism is often a virtue — in religion as in everything else. It was only when Moses began to doubt the soundness of unlimited vengeance that he laid down the principle of no more than an eye for an eye or a tooth for a tooth; and many centuries later it was only when Jesus doubted Moses that he proposed the need to turn the other cheek and go the second mile. Monotheism would have been impossible had no one been skeptical of its polytheistic predecessors; human sacrifice would have gone unchecked had no one challenged the assumption that God coveted such evidence of man's loyalty; and slavery would still have been counted a divinely ordained institution had no one wondered whether God really loved the master so much more than the slave.

"Skepticism," writes British clergyman Geoffrey Arketell Studdert-Kennedy, "in its proper place is just as necessary and just as much a duty as faith. I must not, and cannot, accept any story that I would like to be true, nor must you. Intellectual honesty in matters where the intellect applies is just as necessary a virtue as the honesty which forbids you to steal your neighbor's Sunday boots . . . Religion leaves a million questions unanswered, and apparently unanswerable. Its purpose and object is not to make a man certain and cocksure about everything, but to make him certain about those things of which he must be certain if he is to live a human life

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at all. Religion does not relieve us from the duty of thought: it makes it possible for a man to begin thinking."

"It ain't necessarily so" is not always an irreverent assertion. It was a wise theologian who said that "God must take all of the risks of honest inquiry," and skepticism is often not an affront to religion but its most relevant expression.

But the skepticism which is justifiable when applied to religion is equally warranted when turned on science. Why? Because science is not nearly so consistent, objective or successful as many laymen assume.

For one thing, it is not so *consistent.*

Alfred North Whitehead pointed out, for example, that since the beginning of the present century absolutely nothing of the seemingly solid structure of mathematical physics built by men like Newton and Descartes had been left unshaken and unchallenged — "not a single major concept."

Ian G. Barbour reminds us that the Swedish chemist Svante A. Arrhenius received the Nobel Prize for his electrolytic theory of dissociation and that the same prize was later given to Peter J. W. Debye for showing that the theory of Arrhenius was unsatisfactory.

Marcel Proust warned: "Medicine being a compendium of the successive and contradictory mistakes of medical practitioners, when we summon the wisest of them to our aid the chances are that we may be relying on a scientific truth the error of which will be recognized in a few years' time."

And the earth which once was thought flat and later declared round has now become pear-shaped.

Inconsistency can be an evidence of growth, and the confession of error is a token of the scientist's integrity. But the layman's impression that science is a monolithic, unchanging and infallible expression of incontestable facts is as far from the truth as it is from the conviction of the reputable scientist himself.

For another thing, science is not so *objective* as the average man supposes. "The statements of science," writes Warren Weaver, "were once thought of as being wholly objective. We now know that this view was an illusion. No scientific statement is an absolute and objective dictum. It is merely a statement concerning a relation between man, the observer, and nature, the thing observed. And since the observer is essential to this relationship, science always contains a subjective element."

Indeed, there is probably nothing more narrow than the unconscious bigotry of the resolutely broad-minded man, and it is not uncommon to discover that materialistic science has been made as closed a system as the most conservative form of religion. Hence is created what Edwin C. Kemble, Harvard professor of physics emeritus, calls a "scientific orthodoxy," which can be at once a protection of the scientist against wasting his energy in pursuing foolish suggestions and as surely an instrument of prejudice as any fundamentalist theology. "It would be foolish," writes Kemble, "for orthodox scientific opinion to claim immunity from professional prejudice. Einstein's theory of relativity was not welcomed with joy by the physicists of the first decade of this century. Freud had to win his way against the prejudice of academic psychologists, and even today the development of psychiatric understanding is retarded by the prejudice of orthodox medical science in favor of the therapeutic properties of drugs."

This is not to castigate the scientist for being what he cannot help being — a human person. It is only to insist that he *is* a human person and that both he, himself, and the discipline he embodies share the fallibilities of the rest of his fellows.

For still another thing, science is less *successful* than the layman assumes. In spite of the amazing scientific advances of the centuries the chasm of our ignorance is still so vast that one able observer could say: "We don't know the millionth part of one per cent about anything. We don't know what water is. We don't know what light is. We don't know what gravitation is. We don't know what enables us to keep our feet when we stand up. We don't know what electricity is. We don't know what heat is. We don't know anything about magnetism. We have a lot of hypotheses about these things, but that is all."

It is a frequent assumption that we explain an object or a phenomenon when we give it a name. But you do not explain emotional disturbance by calling its victim "a psychopathic personality." You do not explain the "manna in the wilderness" of the ancient Hebrews by dubbing it "a precipitate of nutritive carbohydrates." You do not even explain a cat by naming it a cat.

Modern science is so complex that the average man can never hope to understand all of its implications. Hence we face the irony that a discipline which depends upon reason is both accepted on faith and accepted with a credulity which would be incredible if awarded to the religion which considers faith one of its principal virtues.

The fact is too easily forgotten that man's world has far wider horizons than those of science.

Consider William Macneile Dixon: "There is, as everyone knows, a province of human life — and only upon reflection do we perceive how vast, how boundless is that province—to whose interests and problems the most extensive knowledge or control of nature's machinery affords no entrance, a country upon which the bright sun of science sheds not a ray of light. It is the country of the soul. We have our affections and sympathies, we have loves and friendships, we have hopes and fears and admirations, inmates of a province of real things as broad and deep as the telescopic heavens above our heads. Of these things science never speaks. She sits above the battle and has no share in our joys and sorrows. Of good and evil, freedom and justice, science has nothing to say."

In other words, the successes which science derives from its method of abstraction are matched by corresponding limitations. For example, a man has a box half-filled with marbles and half-filled with acorns. If

he decides to study only the marbles and throws the acorns away, he simplifies his task — but he also tacitly acknowledges the partial scope of his investigation. When we ask the universe physical questions, we get physical answers. When we ask it biological questions, we get biological answers. The nature of the question determines the nature of the answer, and beyond the borders of the particular query and response there are other realms to which both may be almost wholly irrelevant.

"The heavens declare the mathematical accuracy of God," said a famous theologian, "and the firmament showeth his geometrical mastery; but that is all of glory or handiwork that science can find there. We need not be dismayed at this; for physical science is not concerned with moral questions, and no science, as the word is now understood, is concerned with ultimate explanations; there is no occasion for alarm in the fact that science has not found what it never sought." But if science is not concerned with "moral questions" or "ultimate explanations," man certainly is; and outside the fences of science there are fields that matter even more to human beings than the undeniably abundant treasures of their scientific heritage.

Thus it is a matter of tremendous consequence that the religious spirit ultimately dominate the scientific interest. And let me hasten to add that this does not mean the domination of science by religious *institutions*. Rather, it recognizes that science is rightly no more than the means to an end, that however important means may be, the ends are even more important.

The domination of the scientific interest by the religious spirit is essential in the scientist himself. This is true, in part, because the effectiveness of science as a discipline depends upon the integrity of the scientist as a man. "Science cannot be divorced from ethics," writes D. Elton Trueblood, professor of philosophy at Earlham College, "because science would not be permanently possible except upon a prior basis of trustworthiness. If we should ever give up the basic moral position, according to which a man is strict with himself, even when he might not be detected, in reporting negative evidence as carefully as he reports evidence which supports his favorite thesis, science would soon come to an end. Without trustworthiness the finest laboratories would be relatively worthless."

In part, however, this is also true because the scientist cannot wholly divorce himself from responsibility for the use which other people make or are likely to make of his discoveries. "To blame the scientist for misapplication," says Yale University's Professor Edgar Boell, "is like blaming Stradivari because the instrument that can make sensible the art of Beethoven or Paganini also can give rise to the desecration of boogie woogie." But Boell's words paint only one portion of the picture. The man who is a scientist is still a man, still a moral agent, still responsible when he knowingly puts in the hands of his fellows instruments for their perversion or destruction. The scientist who releases a discovery to mankind is releasing it to an entity of which he himself is inescapably a part and for whose use of his discovery he himself is partly answerable. Whether the power of science is wielded for good or evil depends primarily not on principles inherent to science but on goals and motives which belong in the domain of religion.

He was right who said that there can be bitterness in air-conditioned houses and gross injustice among people who drive to the courtroom in fenderless cars, that neon lights do not make men more virtuous than kerosene lamps, and that trivialities are just as trivial when transmitted by the wonders of television. It is more than sentimental piety to remind ourselves that in an age of science man's highest life and deepest need are still found only in that area of his being for which no better word has been found than "soul." For the fulfillment of his life and the meeting of his need, science is a tool, and the incontestable requirement that the tool be kept free of superstitious corrosion does not refute an even more urgent insistence: The tool is no more than a tool, and its noblest use is for the noblest ends of man.

Observation

GORDON H. CLARK*

English speaking people, even those who use correct grammar and an attractive style, often do not know the rules of grammar as well as a foreigner who has deliberately studied them. An accomplished musician also and a skillful painter may not know very much about art. Similarly a practicing and brilliant scientist may be relatively hazy on the grammar of science.

At the joint meeting of the ASA with the Evangelical Theological Society in 1961, one of the scientists asserted that observation was *the* authority in science. Two or three other speakers confirmed the idea that science depends on observation, and in a context that suggested that observation is the only basis and authority in science. Since such an idea carries with it important conclusions for the philosophy of science and strongly colors one's views as to the relation of science to theology, this paper will advance certain negative considerations.

To avoid misunderstanding at the outset, it must be said that this argument does not deny that observation is an authority in science. The thesis is that observation is not the sole authority. There are other factors, other grammatical rules, other bones and sinews that determine the form of scientific law.

The simplest example is no doubt the use of the arithmetic mean. After the experimenter collects a list of readings, he adds them and divides by the number of readings. No observational necessity dictates this step. So far as experimentation is concerned, he could have used the mode or the median, instead of the mean. Similarly, to take a slightly more complex example, when a scientist uses the standard deviation, he squares the x's; but there is no observational necessity that prevents him from cubing them. If the scientist should reply that the standard deviation ties in with the principle of least squares, one need only ask him why he does not choose to use the principle of least cubes. Many other examples could be mentioned. Now, since the laws of science depend on the mathematical forms chosen, and since different mathematical forms could be chosen, it follows that scientific law does not depend wholly on observation.

Ordinarily one might say that observation places certain limits upon the range of choice. The arithmetic mean leads to the use of a plus or minus variable error. Such values, transferred to graphs, become areas and not points. Through a series of areas any one of an infinite number of curves can be passed. Therefore there is no observational necessity for choosing one scientific law rather than any other that passes through these areas. Although this permits an infinite range of choice, it also excludes an infinite range. Observation prohibits the choice of a curve that falls outside the limits of the variable error. Hence observation is *an* authority, even though it is not *the* authority.

But while this is the ordinary situation, it is not always true that the scientist chooses within the range of observation. Perhaps the most famous example is that of the Copernican astronomy. When Copernicus resurrected the heliocentric theory of Plato and Aristarchus, the Ptolemaic mathematics could more accurately predict the positions of the planets than the heliocentric theory could. Moreover, the heliocentric theory implied a stellar parallax, and there was none observable. To be sure, a stellar parallax was observed three hundred years later. But for these three centuries the heliocentric theory made its way in spite of observation. The charm of the mathematics overbalanced the force of the visible data.

At the last joint meeting of the ASA-ETS not only were there speakers from the physical sciences, there were also representatives of the social sciences, and these too stressed observation. Whether or not these speakers actually asserted that observation is the only authority in science is beside the present point; the present point is that social science can even less proceed on blind trust of observation.

One difficulty in sociology is that so few fundamental measurements can be made. The units are so often very poorly defined, or not defined at all. Therefore numerical laws and derivative measurements are impossible.

But the factor which removes sociology from sole dependence on observation, and which does so more obviously than in the case of physics, is the prominent part played by ethical norms. No one is satisfied to count the number of divorces or the number of burglaries. Everyone, and sociologists above all, rush to explain the cause and the cure. But these proposals are essentially ethical and political principles. They are assertions of what ought to be; they are not descriptions of what is. For this reason ethics is not an observational science. Norms cannot be obtained by descriptive methods. Yet so often a sociologist refuses to justify the norms which he uses.

There are some philosophers who do indeed claim to raise norms on a descriptive basis. The argument against them cannot be detailed here. My ideas on this point can be found in the references (1, Chaps. 3-4; 2, pp. 13-41). But enough has been said, I hope, to establish the need for a philosophy of science that will define the role of observation and indicate what other factors must be brought in play.

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The Dimensions of Psychiatry*

ORVILLE S. WALTERS**

By virtue of the fact that the psychiatrist is a physician, he participates in the scientific dimension of medicine. He has been introduced to the basic disciplines of anatomy, physiology and pathology. It is possible for the psychiatrist to devote his full time to activity in this dimension. The psychiatrist who seeks the cause of mental illness through research in biochemistry or neurophysiology works almost entirely in the scientific dimension. Our present understanding of phenylketonuria is a product of research in the dimension of pure science.

Most physicians devote their efforts to combating illness and assisting the healing process. They are applied scientists, pitting their knowledge and skill against disease rather than seeking to extend the frontiers of knowledge. When he turns his efforts toward healing, the physician sacrifices the objectivity of the scientist. He must earn his fee or vindicate his competence by producing a favorable outcome if he can. Since his prestige will be reduced or enhanced by the result he obtains, he now has an interest in the outcome. Because of his personal involvement, the applied scientist is no longer the neutral observer. Most psychiatrists, as physicians, work in the healing dimension.

In modern medicine, methods of treatment are underlain by a broad factual knowledge of physiology and pharmacology. As medicine became more scientific, the multiplicity of curative systems declined and most of the sects in medicine disappeared. Psychiatry has no solid empirical foundation of knowledge about human personality. There are various theoretical systems dealing with personality, most of them growing out of some limited empirical observation. There are numerous sects in psychiatry today, as there were in general medicine fifty years ago.

Each psychotherapeutic sect has its own doctrine of man, which is primarily philosophical since there is no authoritative science of personality comparable to the physiology which underlies internal medicine. As a philosophical system, the Christian doctrine of man is no less scientific than the philosophies with which it competes as a groundwork for psychotherapy. In no other medical specialty does the physician find himself so deeply involved in the philosophical dimension as does the psychiatrist when he engages in the practice of psychotherapy.

The Christian view of man leads into still another dimension. Depending neither upon scientific canons nor intellectual constructs, this dimension involves transempirical experience that affirms the reality of a divine-human encounter. The validity of the transcendental dimension is supported by human testimony from every century.

Can psychiatry function in the spiritual dimension? Some psychiatrists, like Freud, mistrust the testimony of experience in the transcendental dimension. Others acknowledge the validity of such experience even though they have never sought to make personal replication. Still others, like Pascal, have shared the common experience of Christians in every century and acknowledge that God personally known is "not the God of the philosophers." Only those who have directly experienced the reality of the divine-human encounter can empathize fully with Christians who offer such a testimony.

The Christian, whether patient or physician, needs to be assured that nothing in the empirical corpus of psychiatry is incompatible with the Christian doctrine of man. The non-Christian needs to be reminded that the Christian heritage presents an impressive record of healing influence upon personality, as well as a cogent and coherent groundwork for understanding man and the universe.

*Abstract of a paper presented at the Seventeenth Annual Convention of the ASA held at St. Paul, Minnesota, Aug. 1962.

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Implications of Freudianism for American Social Work*

RAYMOND R. HERJE**

Professional social work has adopted Freudianism as the basic framework within which it attempts to understand and help people. The Freudian theory of man is a composite of naturalistic philosophy and empirical theorizing. Social work is confronted with problems when it incorporates either aspect of this composite. By adopting the naturalistic outlook, it comes into conflict with Conservative theology and other non-naturalist philosophy. This problem is compounded by the fact that most social work is practiced under public auspices. The increasing criticism directed toward Freudian theory from within the scientific community has also provided anxiety to a profession so heavily rooted in this psychological tradition. Fundamental changes are needed.

In recent months we have again been reminded of the status of religion with respect to public education in America. The majority decision of the Supreme Court's recent elaboration on the meaning of the First and

Fourteenth Amendments to the Constitution read: The Constitution's " . . . prohibition against laws respecting an establishment of religion must at least mean that in this country it is no part of the business of government to compose official prayers for any group of the American people to recite as a part of a religious program carried on by the government." Thus read the latest footnote in the American tradition of separation of religion and state.

With all due respect for the Law which created and preserves this great tradition, the recent decision can hardly be interpreted to imply that the Court was addressing itself to a new and threatening alliance between religion and the state. No, the American citizen need not be too concerned about religion's invading contemporary education. For, practically speaking, this threat has been removed—perhaps too far removed for the public good.

The threatening factor in public education is not the illegal alliance of religion with the state, but the bold and legal alliance of non-religious philosophy with the state. In fact, our public institutions of learning have become a *privileged sanctuary* for non-religious, and often anti-religious, philosophy!

Strangely enough, the laws which were designed to separate religion and the state have contributed rather directly to this situation. For while such laws effectively screened out "religious" philosophy from the doors of the state, they did not serve to screen a-religious and other sectarian philosophies from its abode—for such philosophies are not easily subsumed under the ordinary criterion of "religion." These other philosophies—naturalism, empiricism, pragmatism, positivism, humanism, etc.—which are just as sectarian and aggressive as religion, have been freely propagated throughout our public institutions of learning.

For lack of a better term, this unofficial *Weltanschauung* of contemporary public education may be termed *scientific naturalism*. Generally speaking, this philosophy forms the background into which the particular sciences have been integrally woven. Physics, biology, sociology, anthropology, psychology, etc.—all, in varying degrees, have been profoundly influenced by this philosophy. Social work provides no exception to this generality; in fact, it provides excellent illustrative material along this line.

Social Work and the Freudian Composite

The understanding of human behavior as found in contemporary professional American social work is an integral *composite* of naturalistic philosophy and "science." The primary source of this composite, as it exists in contemporary social work, is the Freudian psychoanalytic tradition. The remaining parts of this essay will be devoted to an analysis of several of the philosophical implications of contemporary social work. The term "philosophical implications" is used in a broad sense to include the metaphysical, scientific and pragmatic implications. Inasmuch as contemporary professional social work education has chosen to prescribe a predominantly psychoanalytic orientation in terms of which it hopes to understand and help mankind, this essay will give special attention to the philosophical implications of this frame of reference. Before analyzing the Freudian composite, a brief elaboration concerning the relation of social work to psychoanalysis is in order.

No single term can be found which more accurately characterizes modern social work than *Freudianism.* Generally speaking, the Freudian psychoanalytic tradition (including neo-Freudianism) forms the basic viewpoint within which modern professional social work understands the humanity it serves. Statements and studies by social workers and others have amply substantiated this assertion.

As early as 1926 psychoanalysis had begun to make its impact on social work. In that year Dr. Marion Kenworthy addressed the National Conference of Social Welfare with a paper entitled "Psychoanalytic Concepts in Mental Hygiene." Dr. Kenworthy concluded her address by stating, "It is through the contribution of the psychoanalytic school to mental hygiene that the understanding of the root beginnings and processes of the neuroses, psychoses, criminal careers, and other problems of adjustment have been made" (14, p. 223).

In the *Social Work Year Book* (1941) Florence R. Day noted:

> Social casework moved rapidly to identify itself with the psychiatric and psychoanalytic sciences, seeking what they had to offer in explaining psychological dynamics (9, p. 519).

In 1950 Hertha Kraus stated:

> The contribution of psychiatry and psychoanalysis to casework is too well known to call for a detailed statement. Its concepts have helped caseworkers increasingly to understand human behavior, to recognize its deeper meaning (16, pp. 139, 140).

In 1954 Arthur Miles wrote:

> American casework theory and practice has been dominated by the principles of Freudian psychology . . . by 1940 deviation from it was looked upon by some as heresy . . . The psychoanalytic explanation of personality has been the only explanation of personality that has had wide acceptance among social workers (20, p. 214).

In 1959 Ruth M. Butler, assisted by eighteen panel members from various schools of social work, undertook a content analysis of materials written between 1952 and 1956 concerning the social work human growth and behavior sequence. This analysis was done by a careful scrutiny of " . . . course outlines, examinations, assignments to students, and lists of required readings" (6, p. 11). Materials from thirty schools were examined. Among other things they found:

> Freud's theory (with one school excepted) was used with such emphasis as to suggest that it constituted a theoretical base required for developing an understanding of human personality on which to base social work practice (6, p. 13).

A study completed in 1960 further illustrates the influence of Freud on social work. When 144 professional social workers were asked which of fourteen personality

*This is a revision and expansion of "The Implications of Freudianism" published in *Minnesota Welfare,* Spring 1961. It grows out of the author's M.A. thesis at Oberlin College.

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theories influenced their clinical thinking the most, 133 cited Freud as the major influence upon their clinical thinking. It was interesting to note that social workers were significantly more Freudian than the psychiatrist and psychologists surveyed by the same study (8).

In 1961 Selma Fraiberg wrote:

> For nearly forty years psychoanalysis has been a major influence in the development of social work theory and practice and has supplied the basic psychology taught in the schools of social work. It has become so much a part of the fabric of social work theory that we cannot easily identify many elements of our theory that are not directly borrowed from psychoanalysis (12, p. 196).

Within the next ten years over twenty thousand professionally trained social workers will graduate from the sixty schools of social work in America. Most of these graduates will move into key positions in public and private welfare agencies. Since the principles, policies and practices of these agencies will be increasingly modified by the leadership of these professionals, it is imperative that a better understanding be gained of this profession to which has been entrusted the welfare operation of the public and private social agency.

The Metaphysical Component of Freudianism

The Freudian tradition forms the framework in terms of which contemporary professional social work understands the humanity it serves. Inasmuch as the Freudian tradition is a composite of naturalistic philosophy and scientific psychology, it would seem that an analysis of this composite and its implications would be of value to the scientist and the religionist.

Freudian psychology is integrally interwoven with the scientific naturalistic *Weltanschauung*. What, then, is scientific naturalism? Scientific naturalism asserts there is only one kind of reality, totally describable in terms of spatial-temporal entities and their causal interrelation. Scientific naturalism denies that nature is derived from or dependent upon mindistic or supernatural entities—since there are no such entities. Metaphysically speaking, scientific naturalism tends to be monistic, materialistic and deterministic. Epistemologically speaking, it limits itself to knowledge based on sense experience and, within this empiricist theory of knowledge, to the scientific aims of description, explanation and prediction. Axiologically speaking, it views values as either subjective or "objective" only in relation to cultural or subcultural mores.

Scientific naturalism can also be discussed in terms of its negations: metaphysically, it negates all dualisms and pluralisms; epistemologically, it negates the validity, or significance, of all theories of knowledge other than the empiricist theory; axiologically, it negates objectivism in values and morals.

Perhaps a restatement of these negations which are logically (in terms of thought) and psychologically (in terms of attitude) implicit in this philosophical movement will prove helpful. Scientific naturalism stands opposed to all forms of classical supernaturalism, all forms of metaphysical and epistemological idealism, mysticism, spiritualism, intuitionism, absolutism, mind-body dualisms, etc. It negates in terms of belief and attitude those views which are held by the majority of people in American society (26).

Freud's ingenious and comprehensive theory of personality was formulated within this scientific-naturalistic-humanistic outlook. Insofar as it involved philosophical commitments, it was static and complete; insofar as it was a scientific theory, it was tentative and incomplete. From within this framework, Freudianism attempts to understand man in terms of his origin, drives, conflicts, illusions, etc.

Affirmatively, man is a creature who stands in continuity with, and who must be understood in terms of, his animal life. The influence of the biological theory of evolution on Freudianism is extensive. Many of the terms employed in psychoanalysis have been taken directly from the field of biology—"instincts," "organism," "adaptation," Sexual language such as "anal," "oral," "phallic," "genital," are stages in the "genetic" process. The structural terms, id, ego, superego, while relatively unbiological in flavor, are viewed as crystallizations of the basic libidinal stuff. Freud's theory of neurosis is biologically rooted in the Oedipal situation. *All* human behavior, from its most symbolic forms to its more simple forms, is directly or indirectly motivated by, and can be understood in terms of, the development of instinctual needs: hunger, thirst, self-preservation, sex. Of course such behavior includes: religious behavior, valuational behavior (ethics, aesthetics), political behavior, philosophical behavior, scientific behavior, and so on.

Negatively, any view of human behavior which is grounded in any other position than that of scientific naturalism is categorically negated. This negation would include, among others, the Hebrew-Christian view of man, the Idealistic view of man, and the Rationalist view of man.

One of the most serious implications of the Freudian tradition along these lines is the fact that this tradition has been particularly hostile to conservative religion (Jewish, Catholic, Protestant). The major Freudian analysts (Fenichel, Alexander, Brill, Hartmann, Reik, Klein, Frenkel-Brunswik, etc.) almost without exception have reduced religion to the status of illusion, understandable only in terms of the believers' unconscious needs. Religious systems are viewed as symbolic behavioral manifestations of unconscious motivation. The religious person thinks obsessively, acts compulsively, thinks magically and regresses to infantile modes of thought (projects the father figure as the source of the universe). Theology becomes nothing but a projective system of the immature man.

It was this sort of thing that David C. McClellend had in mind when he stated, "In intellectual circles psychoanalysis stands in striking contrast to Christianity" (19, p. 5). Anti-religion stems, logically speaking, not from Freudian psychology *per se,* but from its intimate connection with the philosophy of scientific naturalism.

The Conflict Between Social Work and Religion

Scientific naturalism is the basic philosophic position of contemporary social work. The primary source of this philosophic base as it appears in social work is Freudianism. Many social work leaders have been clearly aware of the philosophic implications of Freudianism and have spelled out this implication. In 1934 Phillip Klein noted some of these implications in an article entitled "Social Work":

> Social casework represents both historically and analytically the introduction into social work of the scientific mode of thought and specific contributions of such disciplines as psychology, sociology, economics, biology and political science. Into the details of actual performance this new spirit brought a displacement of theological, religious and ethical principles, even though in the motivation of the sponsors, and to some extent the practitioners, much of religion and ethics still continue (15, p. 167).

Grace Marcus saw that the Freudian view of man represented an alternative to the traditional view of man:

> The reverberations of a scientific orientation so alien to all the speculative systems by which man had attempted to account for his nature and his fate have been far-reaching . . . it involved a deep assimilation of the meaning of the unconscious motives and thoughts, a willingness to relinquish time-honored, essential prejudices about human nature and life (18, p. 129).

In 1941 Robert Waelder envisioned the social worker, with his psychoanalytic viewpoint, as *taking the place* once occupied by the priest with his theological viewpoint (33, pp. 23-25). Alan Keith-Lucas referred to the philosophical outlook in social work as an example of Humanist-Positivist-Utopian thinking (13). In 1952 Herbert Bisno stated that social work had substituted the ". . . scientific approach for that of the theological and/or magical approach" (3, p. 92). Mr. Bisno documented at length the Scientific-Naturalistic base of social work and further perceptively indicated that this philosophic base was the source of the existing conflict between social work and conservative religious thinking (both Protestant and Catholic). Frank Bruno, the social work historian, also depicted the philosophic base of social work as being naturalistic in character (5, p. 24).

The implication of the contemporary philosophic base of social work has not passed unnoticed by religionists. In 1937 the Rev. Edward S. Pouthier, S. J., stated:

> Undoubtedly what may be broadly termed "materialism" and "agnosticism" has today a fairly strong hold on an appreciable section of social casework thought. Its aims and its media, its objectives and plans of treatment are to a large extent purely materialist (23, p. 56).

In 1949 Frank L. Weil wrote:

> The alienation of church and social work may be attributed in large measure to the fact that training for social work in the established schools of social work, other than those under church auspices, is tied to those social sciences that claim little connection with religious philosophy (34, p. 126).

In 1956 Felix Beisek, S. J., commented that professional (secular) social work ". . . has adamantly shunned religion as a source of knowledge and values. Our profession seems to have a phobia for entering into any kind of positive relationship with religion . . . " (2, p. 86). He continued: ". . . at the present time the theories of Sigmund Freud and Otto Rank are dominant. Neither of these includes man's religious needs or his relationship to God among the totality of influence" (2, p. 89).

Protestants have also commented on social work's entrenchment in naturalism. The increasing concern in this area on the part of Protestants is clearly reflected in a three-volume study of this problem published by the National Council of Churches in 1955:

> The controlling ideas in social welfare are more subtle than dollars, and thus more difficult to appraise. Yet these ideas have a Christian and church-related derivation. It is even possible to describe these ideas as a truncated theology for in themselves they are incomplete. During the present century these ideas—about man, society, government, and the like—have become increasingly estranged from the Christian origins of this civilization. With due regards for the signs that these origins are once again being recognized and used, the guiding ideas of social welfare today are predominantly humanistic. It is therefore necessary to see the disparity between this secular understanding of the basis and motivation of social welfare, and a Christian understanding . . . (1, pp. 118, 119).

The discussion continues in Volume II:

> In the last few decades the churches—which after all preceded by centuries the profession (social work) in the rendering of social services and in the laying down of ideological basis for social welfare—have seen this field newly defined in almost completely secular (non-church) terms with its own area of operation, a set of theoretical beliefs and a method of training (7, p. 44).

The implication of all this is rather startling, indeed, frightening. Here is a profession which has been given wholesale endorsement in public and private agencies embracing a philosophico-metaphysical outlook which *categorically* negates the views held by most of the people it serves! Although this philosophy at present is not yet brandished by the rank and file professional, should it be tolerated in its present latent form? If a prayer was voiced in a school of social work, the law of the land could be invoked. When conservative religion is dismissed as a myth, there is no law to invoke.

The "Scientific" Component of Freudianism Scrutinized

Freudian psychology is composed of at least five distinguishable components: (1) a theory of personality, (2) a method of investigation, (3) a therapeutic system, (4) a body of evidence; that is, evidence which bears on the confirmation or disconfirmation of the theoretical and practical claims, and (5) a philosophico-metaphysical base in which the forementioned elements are grounded. Having elaborated upon the philosophical implications of Freudianism, the task remains to briefly comment on the remaining components of psychoanalysis.

Anyone familiar with the recent literature concerning psychoanalysis is aware of the growing criticism directed toward the Freudian tradition. Criticism directed toward this tradition is nothing new; however, the source, types and content of the current criticism are quite new and must be taken seriously.

Inasmuch as the theoretical foundation of contemporary professional social work is heavily weighted by an almost exclusively Freudian viewpoint, it would seem reasonable to argue *that any doubt which might arise*

concerning the validity and/or usefulness of this psychoanalytic tradition would likewise raise doubt concerning the validity and/or usefulness of the social work profession whose theoretical foundations are predicated on this tradition—and consequently any state institution dominated by this profession.

The purpose of this discussion will be to suggest briefly some of the types, sources and content of this "new criticism," as well as some implications of it. The discussion will be structured in the following manner: (1) First, the components, theory of personality and methodology will be considered jointly. The sources of criticism in terms of which these components will be considered are the source of philosophy of science and the source of scientific psychology. The types of considerations are: logical considerations and empirical considerations. (2) The second part will focus upon psychotherapy. The source of criticism here is that of scientific psychology, and the type of consideration is empirical.

Certain critical considerations concerning the psychoanalytic method and theory of personality become clear only when one places the Freudian tradition in juxtaposition to certain developments in scientific thought. Three basic objections have been raised concerning the scientific status of Freudian theory and method: the first is that the theory is so formulated as to be by its very nature irrefutable; the second concerns the inadequate methods used for establishing the data upon which the theory is based; the third objection is focused on Freud's metapsychology, the speculative conceptions of which are either beyond the range of scientific confirmation or inconsistent with the well-established results of other sciences. Some of these objections are the result of purely logical considerations in scientific thinking, others result from strictly empirical considerations. An understanding of this latter distinction is fundamental.

A statement by Wesley Salmon may serve as useful for clarifying the distinction between philosophical and empirical considerations in scientific thinking:

> The distinction between considerations which are in a broad sense logical and those which are empirical is a fundamental one for the philosophy of science; indeed, this distinction constitutes the basis for differentiating philosophy from the empirical sciences. It is the business of the philosophy of science to investigate and explicate the logical criteria a scientific theory must satisfy and, in cooperation with the empirical scientist, to determine whether a particular theory does satisfy them. If it satisfies the logical criteria, it must still pass the test of empirical confirmation. The logical criteria are within the domain of philosophy, but the actual empirical confirmation is not. The collection, evaluation, and interpretation of the evidence is strictly the business of the empirical scientist (28, p. 252).

Having this distinction clearly in mind the next step will be to consider some of the *formal* requirements of theory-construction. Arthur Pap stated:

> It is a truism of scientific methodology that a theory cannot serve as an explanation of observable phenomena unless it is empirically testable, and that it is not empirically testable unless its abstract vocabulary is, directly or indirectly, completely or partially, interpreted in terms of testables (22, p. 283).

This simple truism has proved a stumbling block to much of psychoanalytic theory. Without doubt, the most severe criticism concerning the scientific component of psychoanalysis is that in its classical formulation the psychoanalytic theory of personality cannot even be considered as a scientific theory. This weakness of classical Freudian theory was suggested by Michael Scriven, noted psychological theorist, when he stated that psychoanalysis ". . . is in fact the most sophisticated form of metaphysics ever to enjoy support as a scientific theory" (30, p. 227).

Ernest Nagel, an eminent scholar of the logic of science, and John Dewey, Professor of Philosophy at Columbia university, gave similar expression to such representative dissatisfaction with the more theoretical aspects of psychoanalysis. Nagel stated:

> . . . the theory (psychoanalytic) does not seem to me to satisfy two requirements which any theory must satisfy if it is to be capable of empirical validation . . . it must be possible to deduce determinate consequences from the assumptions of theory, so that one can decide on the basis of logical considerations, and prior to examination of any empirical data, whether or not an alleged consequence of the theory is indeed implied by the latter. For unless this requirement is fulfilled, the theory has no definite content . . . (furthermore) at least some theoretical notions must be tied down to fairly definite and unambiguously specific observable materials, by way of rules of procedure . . . for if this condition is not satisfied, the theory can have no determinate consequences about empirical subject matter . . . In respect to both these requirements, however, Freudian theory in particular, seem to me to suffer from serious shortcomings (24, pp. 39, 40).

Without continuing an extended discourse on method, a number of general statements by various eminent authorities in the philosophy of science and psychology concerning the scientific status of Freudian psychoanalytic theory and method may better serve to assist the uninitiated and indoctrinated to the flavor of current thinking concerning this tradition.

In 1941 R. R. Sears of Harvard was commissioned by the Social Science Research Council to prepare a report concerning the evidence for psychoanalysis. In 1943 he published his report, *A Survey of Objective Studies of Psychoanalysis*. The survey evaluated no less than 166 articles dealing with various efforts to empirically verify Freudian theory. Sears found the evidence inconclusive and said ". . . perhaps a dozen other theories would provide as good or better explanations . . . " (31).

In 1950 E. G. Boring of Harvard wrote:

> We can say without any lack of appreciation for what has been accomplished, that psychoanalysis has been prescientific. It has lacked experiments, having developed no technique for control. In the refinement of description without control, it is impossible to distinguish semantic specification from empirical fact (4, p. 173).

In a similar vein, H. J. Eysenck, professor of psychology at the University of London, declared in 1953:

> The answer to the question which forms the title of this chapter—What is wrong with psychoanalysis?—is simple: Psychoanalysis is unscientific. It is only by bringing to bear the traditional methods of scientific inference and experimentation, that we can hope to reap all the benefits of its founder's genius (10, p. 241).

Criticizing methodological procedures, B. F. Skinner

remarked in 1956: "Freud's methodological strategy has prevented the incorporation of psychoanalysis into the body of science proper" (32, p. 86).

David Rapaport, one of the staunchest and most sophisticated supporters of psychoanalysis, would seem to concur with respect to the dearth of significant evidence for Freudian psychoanalytic theory. In 1958 Rapaport said:

> The extensive experimental evidence for the system (psychoanalysis), which would seem to confirm it in terms of the usual criteria of psychological experiments, cannot be considered conclusive in terms of the psychoanalytic theory, since most of the experiments disregard the theory's definitions. The extensive clinical evidence, which would seem conclusive in terms of the system's internal consistency, fails to be conclusive in terms of the usual criteria of science, because there is no established *canon for the interpretation of the clinical observations.* Thus only a few observations and experiments (themselves in need of reduplication) offer evidence acceptable both in terms of the theory and in terms of psychology at large (25, p. 143, italics added).

Many of the above statements concerning the evidence (lack of evidence) for Freudian theory have been occasioned by the experimental research on psychoanalytic theory by men such as Dollard and Miller, Mowrer, Piaget, R. R. Sears, and others.

Michael Scriven considered it a "disgrace" to the Freudian tradition that in view of its 50-year history it is still no more than a set of unverified hypotheses. He further stated that there is an "absolute moral obligation" on the part of psychoanalysis to subject its theory and practice to crucial experiment" . . . before encouraging and condoning the further practice of psychoanalysis" (30, p. 226).

Admitting the problem of selection in gathering the above criticisms, the fact remains that a significant group of distinguished psychological theorists are in basic agreement that Freudian theory, at best, is in a prenatal stage with respect to the canons of modern science.

Contemporary criticism has not stopped with a scrutiny of theoretical and methodological aspects of psychoanalysis. In recent years the scientific eye has turned toward an examination of the general field of psychotherapy. The findings have taken a lot of wind from the spinnaker of psychoanalytic therapeutics in its various forms. Indeed, the findings have sent more than one analyst to seek the "favorable" winds of the Zen-Buddhist and Existentialist positions.

The empirical status of psychotherapy has been the subject of large numbers of psychological studies during the past decade. This confrontation with fact has not been conducive to a rosy optimism concerning the immediate possibilities of psychotherapy. The fact of the matter is that the first approximations toward the laborious task of building the empirical foundations of psychotherapy have resulted in a sort of disillusioning process to a number of practitioners. The cause of this "therapeutic pessimism" seems to stem mainly from the earlier wishful thinking, and almost magical notions, about the effectiveness of psychotherapy. Such notions still remain intact among the ranks of professional social workers who have only recently hung out their shingle.

As a prescription for the current disease termed *therapeutic pessimism* one writer suggests that outcome studies be de-emphasized because they " . . . do not explain anything and threaten practitioners because they lead to the conclusion that therapy is ineffective" (27, p. 400). But perhaps such a prescription is inappropriate, considering the nature and extent of the problem.

In 1958 Dr. Bertram Schaffner delivered a presidential address before the William Alanson White Psychoanalytic Society. In this address, Dr. Schaffner gave an extended analysis of what he aptly termed "therapeutic pessimism." He discussed the problem in terms of both its causes and results. An extended quotation from this address will clearly convey a mood characteristic of many therapists today.

> . . . there are many analysts today deeply affected by what I would call . . . a kind of therapeutic pessimism.
>
> I suppose that by therapeutic pessimism I really mean a group of feelings possessed by an analyst, feelings of uncertainty about psychological theory, uncertainty about psychological illness, about human nature, about human health, uncertainty about therapeutic goals, even uncertainty about what one has the right to call therapeutic success.
>
> It is my observation that gnawing feelings of therapeutic unclarity and inadequacy and helplessness have been quite prevalent. (29, p. 339).

Among the suggested causes of therapeutic pessimism, Dr. Schaffner cited:

> They (the psychoanalytic pessimists) have profoundly missed a sense of definition, of precision, of process, such as they feel is available in other sciences . . . it (psychoanalysis) does not seem to be "true to life," that in some ways it fits and in others it does not, that the theory seems to satisfy but in application it somehow lacks psychological realism.
>
> A large measure of insecurity and dissatisfaction among today's psychoanalysts may be traced to too heavy a dose of psychoanalytic ambition, not enough emphasis on the natural difficulties in producing psychiatric change, and not enough solid foundation in the study of human nature and psychology. (29, p. 340).

Concerning therapy he emphasized:

> . . . too much has been promised too soon . . . most of us are trying to accomplish more therapeutically than we as a profession are really able to do (29, p. 345).

This disillusionment with psychoanalysis is poignantly illustrated by O. Hobart Mowrer, noted learning theorist and former president of the American Psychological Association:

> Psychologists were, as we know, among the first of the outlying professional groups to "take up" psychoanalysis. By being analyzed we not only learned in an intimate personal way about this new and revolutionary science; we also (or so we imagined) were qualifying ourselves for the practice of analysis as a form of therapy. Now we are beginning to see how illusory this all was. We accepted psychoanalytic theory long before it had adequately been tested and thus embraced as a "science" a set of presuppositions which we are now painfully having to repudiate.
>
> Despite some pretentious affirmations to the contrary, the fact is that psychoanalysis, on which modern dynamic psychiatry is based, is in a state of virtual collapse and imminent demise (21, p. 302).

As an alternative to what he felt to be a dead-end, Mowrer suggested a move to agnosticism and a concentration on research, or perhaps an examination of the

existential emphasis in terms of fruitfulness.

In 1959 the noted psychoanalyst, Dr. Kubie, of Harvard stated:

> I want to state unequivocally my regret that from the very outset psychoanalysis became a therapeutic instrument, instead of having had the benefit of starting out as an instrument for, and as an object of, basic research in the technique of microscopic psychological investigation, unbiased by therapeutic needs, demands, and urgencies (17, p. 58).

The vitriolic criticism of certain contemporaries concerning psychotherapy is not predicated on the assumption that a science must begin at maturity but rather that the claims of a science must be consistent with the body of evidence upon which it rests. And there is the further implication that the path to scientific maturity is through research.

Two types of outcome studies which have tempered the earlier exorbitant claims of the effectiveness of psychotherapy are: (1) studies comparing the therapeutic effectiveness of various systems of psychotherapy on the same types of problems or patients; (2) studies comparing the results of psychotherapy with a control group receiving no therapy. Concerning the first type, Lewis R. Wolberg stated:

> . . . published statistical data, tabulating percentages of cure and improvement and failure, reveal that the results obtained by the various methods of treatment are strikingly similar. Indeed, people seem to be benefited by all kinds of therapy, by those that have a scientific stamp of approval as well as those on the fringe of quackery (35, p. 58).

The several social work studies comparing the therapeutic effectiveness of professionals and non-professionals have resulted in essentially negative findings.

Exemplifying the second type, outcome-evaluation studies by men such as Landis, Denker, Teuber and Powers, R. G. Walker, and E. E. Kelly have proved embarrassing to those who make great claims in the name of therapeutics. Perhaps the most famous of this latter type of outcome study was made by H. J. Eysenck. The Eysenck study, published in 1952, took the percentage-recovery rate of the Landis and Denker studies, i.e., the percentage-recovery rate of neurotics receiving mainly custodial care of the general practitioner, and compared these results with the percentage-recovery rates claimed by psychotherapists (using psychoanalytic and eclectic types of therapy). Using 7,000 cases, Eysenck summarized his study with this revealing statement:

> A survey was made of the reports of neurotic patients after psycho-therapy, and the results compared with the best available estimates of recovery without the benefit of such therapy. The figures fail to support the hypothesis that psychotherapy facilitates the recovery of neurotic patients (11, p. 323).

It is in part the findings of these types of studies that shed light on many of the authoritive statements on psychotherapy which appear in the annual publication entitled, *Progress in Psychotherapy*. For example, Gregory Zilborg stated in 1956:

> Psychotherapy is in a state of disarray, almost exactly as it was two-hundred years ago. The difference between two-hundred years ago and today seems to be merely this: Two-hundred years ago we did a lot of things without knowing what we were doing, today we do things and keep screaming from the housetops that each of us knows exactly what he is doing, and that the other does not (36, p. 108).

Admitting the problem of selection of sources involved in a study of this kind, it must nevertheless be admitted that a distinguished group of authorities on psychotherapy would agree that the empirical foundations of psychotherapy are only in the earliest stages of development.

Summary and Conclusion

It was argued above that inasmuch as the foundation of contemporary professional social work is weighted by an almost exclusively Freudian viewpoint, any doubt arising about the validity and/or usefulness of this tradition *likewise raises doubts concerning the validity and/or usefulness of any profession to the degree its theoretical and practical foundations were predicated on this tradition.* It was demonstrated that current scientific analysis of Freudian theory and method indicate that psychoanalysis, at best, offers a questionable methodology and a set of wholly unverified hypotheses. The most severe criticism stated is that, in view of its present formulation, it cannot even be considered as scientific theory. The facts related to the effectiveness of psychotherapy do not indicate that any one theory or technique is superior to any other; serious question has been raised as to whether psychotherapy is effective *at all.*

Thus it appears, in view of scientific principles of justification, that the theoretical and practical foundations of contemporary professional social work are, at best, scientifically speaking, of low empirical value.

The *Weltanschauung* of contemporary public education was asserted to be that of scientific naturalism. It was demonstrated that the contemporary framework of professional social work shares this *Weltanschauung.* The theoretical and practical claims of Freudianized social work evidences need for some revision. Social work urgently needs a working distinction between the philosophy and psychology of the Freudian tradition; it is perhaps too far out on the Freudian limb now. There is great need for open-mindedness, humility and research in the area of human behavior. And, finally, perhaps it is time that the general public concern itself with legislation directed toward separation of the state from non-religious philosophy—for social work is not unique in its relation to the scientific naturalistic *Weltanschauung* of public education (cf. 37 for an example).

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Problems of the Christian Home

The following is a condensed and edited transcription from a panel session held at the Seventeenth Annual Convention of the American Scientific Affiliation in St. Paul, Minnesota, Aug. 1962. Dr. ***Norvell Peterson,*** *moderator of the panel, is a psychiatrist, marriage counselor, and group therapist in private practise in Beverly Farms, Massachusetts. Dr.* ***John Hyde*** *is a pediatrician in private practice and Assistant Professor of Pediatrics at the University of Illinois College of Medicine. Dr.* ***Paul Davis*** *is Dean of Los Angeles Pacific College and has previously done counseling in public schools and at the college and university levels.* ***Mrs. Peterson*** *is a psychiatric nurse and a housewife. She is a fellow of the American Society of Group Psychotherapy and Psychodrama and is especially interested in working with family problems. Dr.* ***Richard Cox,*** *commentator to the panel, is a clinical psychologist in private practice and, in addition, is Chief Clinical Psychologist at the Covenant Counseling Center of Chicago and Supervising Clinical Psychologist at Northwestern University Medical School.*

Dr. Hyde: The pediatrician is not a psychiatrist in the rigid, technical sense of the word; yet, with most of the people that he encounters day by day, he is dealing with inter-personal relationships. Not always do these encounters amount to problems, but probably fifty percent of the people that he sees do have problems. We doctors have real defects in our training in this regard because less than five percent of our time is involved in actual training to care for these problems, but medical schools are gearing themselves now to cope

with these needs more and more.

It's easy enough to say in a negative way what's wrong with some of the family situations that we encounter, and yet in a positive way it is more difficult to construct or frame a pattern which might lead to more stable family life, to more happiness at home. When we try to define what people need in their interpersonal relationships, we find that children and babies need just about the same things that adults need. These can be boiled down to some simple ingredients. We all need affection, approval, and encouragement. Many of the problems we encounter with babies and children have to do with these needs not being met.

Developmental Problems

Now these problems are not as difficult as they might seem on the surface in terms of deep psychiatric disease. They are problems of toilet-training, bed-wetting, and fecal-soiling. Or they are problems of feeding, such as eating too much, or eating enough, but the parents complaining that the child is not eating at all. And there are problems of sleep, such as the child who sleeps poorly and is wakeful at night. Also there are other things that parents don't complain about so much, but that the doctor observes in terms of body-motility-patterning.

Now this is kind of a mouthful to say, and yet if you are looking at infants, you will see them bang their heads, rock their bodies, or just go through repetitive motions with their hands. Simply by observing, one can see these body motility patterns. These patterns tell you that the chances are good that there is something wrong, that some emotional need is probably not being met.

There is also the problem of the grandmother in our society, since she provides acceptance and encouragement of things that shouldn't be encouraged and shouldn't be accepted. This thesis could be carried on to where one could see that the inappropriateness of the provision of emotional needs leads to disturbances.

Principle of Mutual Respect

Recently a man named Misseldine at Ohio State University has come out with the concept of mutual respect, which is important in providing the type of mental health the family needs. It is structured something like this: people in the family unit are allowed to pursue their satisfactions in their own peculiar ways, but with mutual respect. Infringement or imbalance occurs when the rights of others in the family are involved. Happiness can be promoted in the family if the members are allowed to pursue their satisfactions up to the limits of the rights of other members. Difficulties arise when there is a strain on the closeness of family relationships, that is, when some infringement is being made on the rights of others. These infringements could be in terms of over-correction, punitiveness, oversolicitude, neglect, seduction, and many other examples.

In order to provide for the problems that arise under pathological infringement on the rights of others, four things can be done. Setting limits is usually the place to begin. This, of course, presupposes that the family unit is healthy to begin with. If a catastrophe happens, such as a death, a severe illness, a disability, or something else of this sort, then limit-setting is a little difficult. Secondly, children in the family should have chores to do. This is the way they contribute in part to the family life and responsibilities. After limits have been established and chores have been assigned and carried out, then certain infringements can be overlooked. This disregarding comes under the heading of just "letting it go." And, finally, the fourth thing needed in this balanced situation is for the adults to get adequate recreation. They need to let off steam themselves. This is very important.

Society and Development

I'd like now to move into the area of modern society and consider why we have some problems that possibly we didn't used to have. Fifty percent of the babies born today are born to women 22 years of age or younger. This means that we are dealing with earlier marriages and more young people who actually haven't had the chance to grow up themselves. This doesn't mean that they won't grow up, because, for most people, the process of having children together with the education that comes along with them brings more maturity.

Moreover, our society is a mobile society. Some sixteen to thirty-three percent of the people that are in the child-bearing age are on the move all the time—and this mobility creates problems. It is not simply a geographical movement, but it is a movement within society as well. People on different social levels encounter different social groups. Therefore, we are dealing with mothers who are, in a sense, rearing children in an environment that is different from the environment in which they were reared—and they have problems. Unfortunately, we don't have any pat answers. We have to adapt ourselves to the needs of the individual who is confronting us, and I think the key word in this counseling is flexibility.

Dr. Davis: I am going to try to touch on several points that I think will help to set the frame of reference. First of all, I should like to warn you that it is entirely possible you won't hear anything in this whole discussion that you haven't heard before, but this is one of the risks we run. Of course, truths in regard to child-rearing and family life are no newer than are the truths of the Gospel that we hear over and over again.

One important aspect is, I think, organizing this truth in a way to make it usable to us, and this is one of the things we are hoping will come out of this discussion. To start with, I should like to emphasize what all of you already know: there is no disagreement with regard to the vast importance of the first years of the child's life in terms of his eventual personality adjustment. This, I think, can now be taken as an established fact. It is important.

Currently we have an example that is particularly in-

structive. Those of us who work with children, or with parents in relation to their children, find psychological deformities and defects that have been created by the dynamics of the home atmosphere. This involves the relationship between the parents and the child during these early years. These psychological deformities are comparable to the physical deformities—the absence of limbs, etc.—that the drug thalidomide, when taken by a woman during pregnancy, apparently causes in the development of the unborn child.

Here is a physical example of what we too often do psychologically. This is one of the most frightening and disturbing things that faces the psychologist or psychiatrist who is dealing with the problem. By the time a child comes for help, when his parents bring him in, or when the school sends him because he is now in deep trouble of some sort—he has probably already been practicing the disease and pathological habits for many years.

Preventive Principles

Over the years, in working as a school psychologist, in counseling, and more recently in teaching in the area of developmental psychology, I have tried to develop some principles that I believe ought to be, and I think commonly are, helpful. If we can put them into operation in dealing with this problem of organizing and carrying on the family life, we can hope that the children will be both healthy and well equipped to realize their potential (as nearly as possible). I like to think that what I'm talking about now has a function analagous to that of preventive medicine, and has nothing to do with therapy per se. It has to do with what we hope will be the healthy home, in which we attempt to put into practice the principles that will help us to keep it healthy, and to avoid the necessity of correcting things that develop.

Now, of course you understand it would be completely impossible and rankly ridiculous for me to assume that we have the knowledge that would allow me to name one, two, three, five, ten, fifteen, or twenty principles, such that if you put them all into effect, you would have a healthy family life and your children would turn out well. Nobody can make any such guarantee, of course, and if anything we say here seems to so indicate, please recognize the prior disclaimer to any such intent.

One thing I think maybe we ought to touch on in this connection is the question some of you probably have already asked (and if you haven't, you've missed a good chance!): "Are the children of psychologists and psychiatrists better reared than are others?" Well, with reference to what Dr. Hyde said a moment ago concerning fifty per cent of the children—I know the percentage is high and I found it difficult to believe it was that size, but he said it and I believe him—fifty per cent of the children are born to mothers 22 years of age or under. I think you have to recognize that the fathers are probably somewhere in the same age range. It is likely, then, that the children of psychologists and psychiatrists are born when the fathers are young, immature, and not fully seasoned in their discipline. So, it is probably not too strange to report my impression that there is not a wide difference between the success that psychologists and psychiatrists have with their children and the success that other people have with theirs. I have thought many times that if I had known anywhere near as much about these subjects when our one child was growing up as I have known later through my professional training, I would have been better equipped to deal with some things and probably would have done a better job as a father than I did. I hope that would have been true.

One other thing—we certainly are not posing as people who have found all the answers and whose families are perfect, any more than the families of ministers are perfect by reason of *their* relationship.

Our view of the child—or I should possibly say *my* view—is based on the thesis that he is primarily a learning, striving organism. Earlier in this convention, we talked about the matter of heredity. I certainly do not deny heredity; no one who is intelligent can deny it. We know that it operates, but we can't do anything about it. I choose, therefore, to focus on the aspect of learning, because we can do something about learning and the conditions of learning for emotional as well as intellectual growth. This is the primary focus that I make, and that I think is desirable on the part of parents. Let's not waste time worrying about the child's heredity; he has it. It may be chargeable to me or to some other branch of the family—of course, the latter always—but let's spend our time productively in designing the learning conditions within the home—the emotional atmosphere that will allow the child to grow up in a healthy way within the limits set by his heredity. And I hasten to point out that learning is just as fundamental to emotional habits as it is to intellectual habits and behavior. The child learns on the base of his hereditary temperament. He learns to respond emotionally in ways that are pretty largely determined by the setting within the home. The writer of Proverbs was certainly correct in the sense in which we are now speaking, when he said: "Train up the child in the way that he should go and when he is old he will not depart from it" (Prov. 22:6). Obviously, this is not an arbitrary statement but a statistical one by the writer, and the statistical probability is high.

I now want to mention some of the principles I feel are tremendously important from a practical standpoint. The principle of love, of course, has been mentioned over and over again; and this principle is, I believe, the over-riding one. Love implies the deepest respect for the person, for the object of the love, for the person loved. Love is the most important motivational or motivation-arousing factor in the child's life. I am sure there are more children who have been deprived of love than can be estimated.

The Bible has given, I suppose, somewhat more attention to the contrary emotion than it has to love in

this direct relationship. For example, here are a couple of references in the New Testament: "Ye fathers, provoke not your children to wrath, but bring them up in the nurture and admonition of the Lord" (Ephesians 6:4). "Fathers, provoke not your children to anger lest they be discouraged" (Colossians 3:21). These verses point directly to this motivational aspect. There is hardly anything more discouraging to the healthy development of the child than the presence of anger and resentment in their parents. The expression of these attitudes and emotions by his parents tends to belittle, to depreciate, and to discourage him.

A second concept that I emphasize is the concept of worth, the development in the child of the sense of *who I am.* I can think now of families in which a high level of sense-of-worth of the family and of the person has been developed. Of course, someone will say we have to be careful about pride. Well, all right. I think most of the time we make the error on the other side. When I hear a parent tell a child: "Johnny, you're bad!", it is just like a knife into me. Perhaps Johnny is sometimes bad; but I would never tell him he's bad. He may do bad things; but he needs to get the concept of himself as a person of dignity and worth, whom Mother and Father respect and hope to see become the best person he can become.

Then, there are important ideas having to do with guidance. Dr. Hyde spoke of limits. I think I would put emphasis on pre-established limits in the interest of a good emotional atmosphere. Set the limits before any issues come up. The limits are important factors in giving the child a sense of security. Parents who let their children do whatever they want under the impression they should not be restrained, just do not properly understand the psychological dynamics involved. The child needs the security of knowing where the fences are. The fences must be flexible to some extent, but yet they need to be maintained reasonably well with a good, positive emotional method.

In addition to the principles I've already mentioned, the development of independence and consequent responsibility are primary considerations.

I think one of the places where I see many mistakes made, and where there are many shortcomings in parents, is in the matter of patience. Somebody in the group yesterday mentioned praying for patience. Perhaps there is something to praying for patience; but there is also something to training yourself for patience.

Dr. Peterson: I think it is important to emphasize what Dr. Davis has just said about limits and about love. The thought came to me that there is an even greater travesty in the love that is not given to children, depriving both the child and the parents, but depriving the parents more. "It is more blessed to give than to receive," and it is more blessed to give love than to receive love. When parents don't give love to their children, the parents are being deprived. They are depriving themselves. Maybe for some reason they can't give love. But we can learn about how to give love. It is something that is very important, and as Smiley Blanton titled his book, we must *Love or Perish.*

Effects of Marital Problems

Mrs. Peterson: I'd like to say something about the bearing of the marital relationship on the child. I think first of all there is one thing we should realize. As Dr. Hyde has said, half of the children now being born are born to mothers who are 22 years old or younger. In other words, the parents are very young, and so are the marriages. At best, perhaps, even one who has completed all his training is immature when he enters marriage. Marriage is a very fruitful experience, a very wonderful experience. I don't believe anyone can be fully mature without being married. I think that in order to really understand much of our relationship to the Lord, we have to be married. Marriage helps us to understand the deeper things.

The problem is not whether Susie is married to Jim or to Dick, or if Dick is married to Nancy or Mary. The problem is one of *being married,* rather than to whom you are married. I think that no matter whom you marry, you have problems of just being married, of living with someone else. I think frequently we don't face up to this fact and we don't, perhaps, teach our young people that marriage is a matter of long working together, and relating together.

The most obvious product of problems in marriage is tension. There is a psychic tension that builds up within the home. It's like the steam in a boiler, and the child, you remember, is living within this pressurized system. The tension is caused, perhaps, by a conflict of interests or a collection of real and imagined injustices. As the children feel this tension, they become more anxious and more frightened. Many of the problems Dr. Hyde suggested—problems of feeding, of not eating, of sleeping or the inability to sleep, of constant drowsiness, of motility and repetitive physical activities —many of these problems are the result of tensions between the parents.

Much of the ego strength of the child is built up through new experiences, and through love and security in his home. We can look at this ego as having just so much energy; and if the child is using all his energy in coping with the tension he feels in his home, he doesn't have the energy or the necessary ability to go out and make friends, to study, to mature, and to participate in new experience.

Importance of Communication

I believe that there can be a minimum of this tension in the home, and I believe the key to handling it is communication. Dr. Lucius Murray Bowen of the National Institute of Mental Health in Bethesda, while discussing some of the children he has seen and the homes from which they came, stated that the father and mother are miles apart emotionally. They communicate either on a superficial level, unable to communicate about their deep thoughts, or on a conflict level (that is, constant quarreling without saying anything), with nothing but cold-war communication. Such

parents are unable to make decisions, have a low tolerance for anxiety, and operate on a peace-at-any-price principle. "For normal parents," says Dr. Bowen, "a problem is something to be solved."

Maybe you have had people say to you "we never had a quarrel," or "There wasn't any quarreling in our home," or, as our patients tell us, "My mother and father never had a quarrel and we came from a very happy home." Such people equate no quarrels with happiness, but this isn't true. There can be just as much tension, if not more, in a non-quarreling home as in a quarreling one. In fact, this tension may be more threatening, because the child feels the conflict between his parents even though nothing is being said. The unspoken and the unknown, the what's-going-to-happen, is always much more threatening than the known or outward conflict.

Communication and talking are not the same thing. Two people can do a lot of talking and yet do no communicating. You think of the nagging wife—she does a lot of talking, but no communicating. Communication, in the sense of solving problems, is a putting aside of defenses and a listening to and a trying to understand, as well as a willingness to expose one's own thoughts and feelings.

We have found in married couples groups (and we've spent thousands of hours with them) that the first hundred sessions, perhaps the first 150 hours, these couples spend in therapy is spent in learning to communicate, in just learning to listen to one another. Learning to listen is the primary treatment for the marriage. Having taken them through this phase of the therapy, we can then begin to help with their individual problems. The initial step in the therapy and in the treatment of the marriage—you see, we have his problems, her problems, and their problems—is this business of communicating. Such communication can bring about understanding. I think it is seldom that we refuse to give acceptance to someone we understand.

I say *acceptance,* which is different from bearing it through. I think as Christian men and women we feel that when we're married, we're married for keeps, and we have to bear with one another. This is very different from accepting one another. There is a big difference between tolerance and acceptance.

Acceptance doesn't necessarily mean agreement. One can disagree, or not like something, but still accept it—just as we do with our children. I think Dr. Hyde and Dr. Davis have pointed this up, this business of being permissive with the other person. We need to accept our children and their behavior. I think that such processes considerably lessen the tension. At the same time, the child is exposed to a mature pattern for handling his own problems. In other words, not only have we solved our own problems, but we have also set a pattern for the child to solve his problems with us through communication.

Dr. Cox: I appreciate many of the things that have been said. One of the things that impresses me is the way the speakers—I'm sure they didn't get together beforehand and decide—repeated each other, but these are items that are repetitious in any dealing with problems of the family.

Does Christianity Foster Mental Health?

The one thing that I wish would be elaborated on more, and perhaps lead to questions from the group, is how all this applies specifically to a Christian home. Is there a plus factor in a Christian home that is not present in any other "good home"? Do children suffer more or less trauma at the hands of well-meaning Christian parents than they suffer at the hands of good parents who do not have the Christian emphasis? I'd like to hear the panel say something to that point.

Dr. Davis: We have some things working against us in this situation, I believe. For example, in our evangelical tradition we have had high standards set for us, and we have had a great compulsion to reach those high standards, both in personal living and in performance on the part of our children. This compulsion tends to increase the tensions that Mrs. Peterson was speaking about, and tends to create a condition that many times probably negatively affects the good health of the child. It is true particularly in this matter of acceptance. We feel so strongly that children ought to do what is right that we find it very difficult to accept anything less than our standard of what ought to be right. I certainly am not speaking for our accepting just anything or to encourage being satisfied with just anything. I think what Mrs. Peterson referred to helps us to remember that accepting the child or marriage partner is not the same as saying, "I approve of each thing he does." Approval or disapproval may be a matter of further education on the part of the child.

On the other side of the coin, I would say that, in spite of this negative aspect, our religion, if it ought to do anything for us, ought to make us kind. It ought to maximize the expression of love and understanding. It ought to help in making us accept others, though there are some limitations here. Certainly kindness, consideration, understanding, and love are the hallmarks of the Christian. In my book, these are things that will also contribute to the mental health of the child and to success in his development.

Dr. Peterson: Are these things we do because we're Christians, or are these things we ought to do because we are mature—things that have no connection with our being Christian? Being Christian should add to our total personality, our total structure, and should motivate us even more strongly to do these things. This is a point I think we ought to keep in mind. We do these things because they're right, because they're proper, because this is the intelligent thing to do, and because this is the thing that will keep us from feeling guilty for not doing what we ought to do. We *ought* to do these things. Being Christian is incidental. Being Christian does put more pressure on us, and should, I think, put more pressure on us to be more nearly perfect.

Group Effects on Value Change

CLIFFORD V. ANDERSON*

This paper surveys selected research in the field of social psychology. It is directed particularly to the influence which a group exercises over the values of its members. The quality of group life has great potential for influencing learning. Groups influence the values of persons who come into contact with them. These and similar findings of science serve Christianity by advancing explanations and suggesting methods which can assist Christians in the performance of their mission. Christian groups should provide the type of interpersonal environment where Christian growth can take place best.

We are social creatures. As such we wish to associate with other human beings. Some have theorized that we are driven to evaluate ourselves and that we do this, in part, by comparison with others. No doubt there are other reasons for our associations. Many of our individual needs are met in some way through interaction with others.

This article primarily concerns the influence of values upon individuals who are related to other individuals in groups. We are viewing values as deep-rooted dispositions by which an individual operates. We shall not attempt to place values on a continuum with opinions, prejudices, and attitudes. For purposes of restricting ourselves we shall consider values as interrelated with opinions, attitudes, standards, and beliefs; "values" will mean any of these. We will review some research findings on the effects which a group of persons may have on an individual's value system. The insight gained could have relevance to every educational agency, including schools, leisure time activities, the family, and the church.

We may question whether there is such a thing as a "group value": it may simply be an expression of individual values held by persons in the group. We understand individual values better than so-called group values. Membership in groups overlaps and individuals relate to these groups in order to meet their need, recognized or not (5, p. 146). We voluntarily associate with other persons because we are motivated to do so. The degree of our motivation is linked to the relative attractiveness of being identified with a particular group.

When an individual finds himself in conflict with values held by other persons in a group, he may elect several courses of action. He can change his values, change the values of others in the group, lose interest in the group and drop out, or elect to remain in the group and endure the conflict caused by the value discrepancy. There is some evidence that a person can "lose" his individuality in a group, which leads one to suspect that there is such a thing as a group value. An individual seldom departs from his personal value orientation to take part in an activity valued by a group. When he does, he usually finds the activity attractive because it reduces his inner restraints. Festinger calls this de-individuation and states that this occurs when individuals do not pay attention to other individuals as individuals (12, p. 299). An illustration of this might be a mob action in which it appears that a group has a united purpose which overcomes the individual value systems of the participants.

Factors Affecting Conformity in the Group

Pressures operate to achieve uniformity of opinions in groups (4, pp. 85-91). Conformity is the tendency to adopt attitudes corresponding to those held by the majority of the group. Asch speaks of independence and yielding on the part of an individual as a joint function of the character of the stimulus situation, the character of the group forces, and the character of the individual (2, p. 182). We shall consider the situation and group together in discussing the factors affecting conformity under situational and personality considerations.

Situational Considerations

Thibaut and Kelley refer to the social influence of the group as its power to induce conformity to norms. The situational factors that affect conformity are spoken of as norm-sending functions (26, p. 241 f.).

The power which a group has over its members in terms of creating and maintaining group standards has been called cohesiveness (5, p. 212). The closer a group is, the greater the loyalty of individuals to it, the more power will be brought upon its members to conform. Group membership many times determines what an individual learns, does, sees, thinks about, etc. Group members may act like others who are attractive and whom they wish to emulate. We may behave like others because we fear punishment, ridicule, or rejection if we don't. To the extent that a member wishes to remain in the group, the group has power over that member (5, pp. 139, 197).

Situational factors also include communication, clarity of goals, acceptance, extent of agreement in the group, attraction of the group, the nature of norms the group sends, and the degree of value the group places on behavior, as well as what happens in the group and its method of operation. Back reports that in highly cohesive groups members make more effort to reach agreement, are more affected by the situation, and are influenced more through discussion in the group (3, pp. 183-197). We see by this that communication includes the social setting as well as the words spoken. Dittes and Kelley discovered that when the reward of acceptance by the group is viewed as a distant possibility, high public and private conformity on the part of the

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individual results. Where acceptance is low and rejection is possible, there is no private conformity on the part of the individual (8, pp. 100-107). Festinger and Carlsmith point out that there are cognitive consequences from forcing compliance upon an individual Forcing someone to say something contrary to his private opinion results in a tendency to change private opinion and bring it more into line with what was said or done. However, pressure beyond that needed to elicit the behavior weakened this tendency (9, p. 209).

Raven and Rietsema found that individuals in groups where clarity of goals and procedures existed were more interested in personal tasks, less hostile, had greater feelings of group belongingness, and were more willing to accept group influence than those who were unclear about the goals and paths of the group (23, pp. 29-45). Mann and Mann concluded that task-oriented groups produce greater personality changes than free discussion groups because of clearer goals and procedures (17, p. 78).

Groups differ in the amount of power they possess by virtue of the manner in which the individual relates to the group. Cohen found that the effectiveness of each formal group (in this case, nine-member infantry rifle squads) increased as the members came to regard it as a reference group—a group whose standpoint is used as a frame of reference for attitudes, behavior, and standards of values (7, pp. 307-309). Siegal and Siegal, in an experiment conducted over a time span of several years, discovered that changes in authoritarian type attitudes resulted when the formal membership group imposed on people came to be adopted as a reference group. This experiment involved housing choice and imposed housing in which choice of sorority-type housing reflected high-status orientation and accompanying authoritarianism among college women (24, pp. 360-364). Newcomb, in studying Bennington College's influence on values, suggests that the individual's attitude development is a function of the way in which he relates himself both to the total membership group and to one or more reference groups (20, p. 275). Apparently both membership and reference groups exert influence, but the latter enjoys the greater power.

Individual Considerations

Individual factors also must be considered in any discussion of factors affecting conformity in the group. Nelson *et al.* found that the expression of attitudes is an adjustment of the individual representing the pooled effects of stimulus, background, and residual factors. In this study stimulus factors referred to statements of attitudes about war and peace. Background factors referred to the opinions of others (group), and residual factors referred to effects of past experience. The residual factors were measured by the Allport Ascendency-Submission scale. While individual attitudes shifted toward group opinions, they were found to correlate in frequency and amount with the degree of submission of the individual as reported in the A-S scale (19, p. 314). Hardy found that conformity was a joint function of social conditions and the affiliative motivation of the individual. Public agreement (conformity) and private response (attitude change) was measured under conditions of opposition by all in the group or all but one person. Subjects with medium needs for affiliation, interpreted to be ambivalently motivated toward social acceptance, conformed under both conditions but changed in attitude only in the no-support (not in under-support) conditions. The low-need group was least affected; they changed more under conditions of support but were considered to be responding to the content of the situation rather than to the social structure (10, pp. 284-294).

Lawson and Stagner, as a result of their research, predicted that the more anxious subjects would show greater attitudinal shift and palmar sweat fluctuations in an anxiety arousing group discussion where the majority opinion was contrary to their own (14, p. 312). McDavid noted individual differences in tendencies to respond to the source of the communication or to the message or content of the communication. Message-oriented persons are less susceptible to group influence. Source-oriented persons showed greater flexibility in responding to interpersonal communication (18, pp. 241-246). These studies suggest that individuals differ with respect to their response to the efforts of the group to exercise power over them.

Group Methods of Inducing Conformity

The literature contains many references to studies on methods for inducing conformity within groups. Spector reports that an Air Force R.O.T.C. seminar experience ". . . provides evidence that highly 'culture-laden' attitudes can be changed by classroom procedure" (25, p. 156). This conclusion had reference to human relations attitudes in which change was attributed to the seminar experience. However, no attempt was made to isolate the relative worth of the pedagogic technique which included lectures, role-playing related to human relations problems, and integration of ideas through group discussion. Radke and Klisurich report that mothers of new-born infants engaged in discussion under the leadership of a trained dietician reached group decisions coinciding with recommended procedures and practiced them more effectively than did a similar group receiving individual instruction (22, pp. 403-409). Anderson described the effects of discussion in calling off a threatened strike of union workers in which management and union committeemen discussed openly their grievances (1, pp. 93-98). Pennington *et al.* report that group coalescence and change of opinion were best effected by a combination of group discussion and group decision rather than by any one method used alone (21, pp. 404-408). Hoffman and Maier conclude from their experiment on group decision that ". . . acceptance of group decisions is fostered in an atmosphere where each member can participate in the decision if he wishes and where his ideas about the problem will be considered by the group" (13, p. 559).

Group standards are usually enduring, but they can be changed. Group decisions work best in bringing about value changes in the individuals who comprise the group. Coch and French studied production workers in a manufacturing concern with regard to their resistance to change in methods and jobs. They concluded that management can modify group resistance to change or remove it completely by the use of group meetings in which management effectively communicates the need for change and stimulates group participation in planning the changes (6, p. 279). Levine and Butler report that the biased performance-rating patterns of supervisors change when group decision is involved, in contrast to no change when the supervisors are merely lectured to (15, pp. 29-33).

Lewin conducted an experiment in changing food habits. Group decision produced much more change than a formal lecture, even though the lecturer was well versed in the matter. The group-decision persons became highly involved personally and were not coerced into a decision. He concluded that a lecture is not often conducive to decision and that it is usually easier to change individuals formed into a group than to change any of them separately (16).

Hare, in a study of small discussion groups, experimented with supervisory and participatory discussion leaders. He found that participatory leadership was more effective than supervisory leadership as a technique for changing opinion (11, p. 560).

These and other studies indicate that groups can effectively bring pressures on individuals to change their patterns of behavior.

Some Psychological Conclusions

While our survey has been limited, the weight of the evidence presented suggests that the group through social pressures is able to influence beliefs and values. We have discovered that there are many situational factors in group life which, depending upon the degree of their strength or weakness, variously affect the pressures toward conformity. These include the social climate or environment, the value placed on the group by the member, togetherness, clarity of goals and procedures, mutual respect, and acceptance.

Added to this complex web of forces and relationships are the personality factors in the individual that exert pressure toward or away from conformity. Independence and yielding are related to the way in which an individual reacts to the content and source of communications, the level of anxiety he has, and many other individual modes of behavior and adjustment.

It is suggested, in the research reports and other literature surveyed, that a combination of pedagogic approaches utilizing group participation is successful in inducing value change.

Groups are a highly useful but very complex educational media. They are of value in any educative effort which includes individual value changes as a goal. Communication in the group must proceed beyond the informational level if it is to be significant in effecting attitude change.

Change in value orientation does occur. Groups can facilitate an individual's value change by their pressures toward uniformity to achieve and maintain group goals. Group values are usually a composite of individual values. Occasionally the group value or standard of behavior can be stronger than individual values; this is explained on the basis of being psychologically attractive in reducing inner restraints. Change can be facilitated by group decision, and participatory leadership seems more effective than supervisory leadership in bringing about change.

Implications for Learning

1. Educational enterprises should make better use of group experiences. Persons learn together. Groups can facilitate learning.

2. The quality of life in a group is of the utmost importance for individual growth. Acceptance, clarity, love and concern, security, and support are all factors of group life which greatly affect individual learning.

3. Personality factors enter into the complex interaction situation. Individual differences must always be recognized.

4. The individual belongs to more than one group. He is subject to many pressures. Every group functions as a membership group, reference group, or both to some degree for every person who is in contact with it.

5. With the recognition that group life is a useful educational experience for effecting changes in the person must go a belief in the dignity and worth of the individual. Any attempt or technique used to manipulate persons for the advantage of a group or individual can quickly change education into a type of forced compliance which is contrary to the spirit of democracy and of Christianity.

6. Since group life is so significant for learning, the family, the school, friendship groups, and the church will be more effective if they utilize the potential for influence which exists in face-to-face fellowship groups.

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NEWS AND NOTES

WHY THIS SECTION?

This section of the JASA is an innovation introduced at the request of the editor and approved by the editorial staff. It replaces the "columns" on specific fields which have appeared in past volumes, but it is intended to be more than a new name for an old feature. It is my hope that this will provide all that the columns have provided, with the possible exception of some news items that are more appropriate for the News Letter of the ASA, and that it will, in addition, provide much more besides.

To assist in supplying material for this section as well as for other portions of the JASA each columnist has been promoted to the position of contributing editor. Since his task is to encourage others to write for the JASA as well as to send in his own contributions, readers are encouraged to enter into personal conversations and correspondence with the respective contributing editors. They will be glad to receive suggestions about subject areas and topics that ought to be explored by members of the ASA.

While this section is its own best operational definition, a brief list of materials appropriate for inclusion in it may be appropriate:

—brief statements on current scientific issues, developments, or problems to which Christians ought to give attention.

—information on new developments within the respective scientific disciplines which ought to be called to the attention of all JASA readers.

—comments on articles published elsewhere which are directly or indirectly related to the objectives of the ASA. (See the inside back cover for information about these objectives.)

—evaluations of trends in Christianity which are relevant to ASA objectives.

—announcements of significant meetings relating to Christianity-science encounters. (Details of such meetings normally belong only in the ASA News Letter, but nonmembers who read JASA should be informed about certain of these.)

—significant quotations (always with complete documentation and, whenever advisable, with permission from the source).

—reflections on ASA conventions, projects, and publications.

It is our hope that this section will be so attractive that *all* of our readers will read, or at least skim, all of its contents. The column format which was its historical antecedent may have encouraged the physicist to skip the section entitled "Philosophy" and the anthropologist to omit the reading of "Chemistry." Subheadings describing the specific content of each contribution therefore will be used instead of discipline titles.

Not the least among the purposes of this section is to promote discussion pertinent to the ASA's primary objectives. Comments are therefore invited from readers pertinent to the items included in this issue. In some instances I have given suggestions of the lines along which comments may be made. In others, the lack of a

direct invitation does not imply that readers are not invited to write either a letter to the editor or to submit items publishable in this section.—**D. O. M.**

SIGNIFICANT FUTURE EVENTS

April 20, 1963—Tenth regional meeting of the North Central Section of the American Scientific Affiliation at the University of Minnesota. "Biological, Theological, and Legal Aspects of Race" is the topic of the program. For further details write to Dr. Robert Bohon, 1352 Margaret, St. Paul 6, Minnesota.

June 19-21, 1963—Fifth biennial joint meeting of the American Scientific Affiliation and the Evangelical Theological Society at Asbury College, Wilmore, Kentucky. For details write to Dr. William J. Tinkle, Eaton, Indiana.

August 19-23, 1963—Eighteenth annual convention of the American Scientific Affiliation at Westmont College, Santa Barbara, California. The convention will consist of a dialogue among Christians in scientific disciplines. Planned by the Social Science Commission of the ASA, the theme of the program is "Expanding Horizons in a Shrinking World." Problems of race, international relations, and relationships between Christianity and other world religions will be the focus of major sessions. Specialized meetings representing philosophy and the biological, physical, and social sciences will be included in the program. For program publicity write to the national office of the ASA, 414 South Broad St., Mankato, Minnesota. For local arrangements write to Prof. Harold Miller, Westmont College, Santa Barbara, California.

ON TITHING TRUTH

In the September *Journal,* the editor made a statement which is worthy of further note here. "For the Christian, sharing pertinent ideas with others is one aspect of Christian stewardship." Surely, if we believe in the individual's inability to acquire perfect truth, there should be sharing of that which we have worked to obtain. The word stewardship is most appropriate here.

Perhaps those in secular science would prefer to call it interdisciplinarianism. Though a more formidable word, it addresses itself to the same principle; specialization of endeavor is most useful when communication allows for the possible convergence of ideas.

There are probably few organizations which are more eclectic than ASA. Eclecticism, however, is no longer in vogue in the academic world. This has even been seen in the philosophy of ASA over the past few years. The new policy of the JASA seems to be strengthening eclecticism by emphasizing the "sounding board" function of the publication.

In the social sciences, as in all disciplines, there is a definite tendency for ideas to converge. It is particularly important for the Christian to seek out such convergence and attempt to comprehend the truth of such trends, which are at the root of "ecumenical" viewpoints.

It is hoped, therefore, that in the future, there will be greater sharing of ideas pertinent to sociology and the social sciences in this section. Relevant contributions to the editor or contributing editors in any form are capable of being molded for use. "Truth" may be tithed in many and diverse ways.—**Russell Heddendorf.**

SCIENTIFIC ANALYSIS IN SOCIOLOGY

When a man of "pure" science looks over the membership list of the American Scientific Affiliation, he probably winces a little to see the sociologist listed with the biochemist. "The meaning of science," he might be saying, "has been extended beyond tolerable limits to include this kind of scholar." To balance the ledger, it should be said that the sociologist may feel a little uneasy to be listed, for he knows very well that the methods of science inexactly apply to the social phenomena he studies. Yet although he has no microscope, no Bunsen burner, and no white coat, the sociologist does have a questionnaire, census data, and a calculator. And amid remarks that he is "elaborating the obvious" or "just using common sense," the sociologist is engaged in an intensely serious quest for information by way of the methods of science. Occasionally use of these methods may give him a "hard-headed" appearance, but the intent behind this is rational, intellectual, humanitarian, and perhaps Christian.

Absolve this writer of envy, please, toward the "pure" scientist who can control intervening variables in experimentation so as to study a bivariate relationship. Social phenomena are rarely controllable to such an extent that analysis can be in terms of one independent variable and one dependent variable. The number of intervening variables in social analysis is so large that one seriously questions the direction and strength of the final relationship. The sociologist, loyal to the methods of science, will religiously (yes, "religiously") note these uncontrollable variables in footnotes or appendices —those qualifying parts to social research which are seldom given the attention they deserve. If by "pure" science one means a "pure" bivariate comparison, then few sociologists earn the title of "scientist." If, however, science encompasses a method of multi-variate analysis for the phenomena studied, then the title is legitimate even for men without nitric acid stains on their hands.

Applying a rigorous method of science to social phenomena produces a tension where specific values are integrally a part of the social structure. This tension is increased when these values are religiously legitimized, hence social analysis has not always been kindly toward religious values. In fact, the sociologist has been labelled as a "debunker," a "subversive," and "surely not a Christian." Some of us believe that the relationship between things sociological and things Christian does not have to be manufactured, but merely clarified; the dialogue then possible can be beneficial.

Concerning this relationship, Peter Berger has written:

> The natural inclinations of man lead him to take society for granted, to identify himself fully with the social roles assigned to him, and to develop ideologies which will organize and dispose of any doubts that might possibly arise. There is an instructive affinity between Christian faith and the analytic enterprise of the social sciences in that both serve to disturb this happy state of affairs . . . The debunking effect of social-scientific analysis is far from contradictory to this prophetic mission. Indeed, it might be called its profane auxiliary. The smashing of idols, with whatever hammers, is the underside of prophecy.—*The Precarious Vision* (Garden City, N.Y.: Doubleday, 1961, p. 204.)

Even when one grants Berger some journalistic license, the reader cannot miss certain Christian motivations possible for social scientific analysis.

To individuals whose Christian faith is rooted alone in the social surroundings, scientific analysis is disturbing, if not shattering. To individuals whose faith is in the adequacy of Jesus Christ, scientific analysis of this kind can deepen appreciation for Christ Who is completely sufficient, not only apart from, but also within humanly-created social structures.—**Ivan J. Fahs, Asst. Prof. of Sociology, Bethel College, St. Paul, Minn.**

THE USEFULNESS OF PURE RESEARCH

It is frequently believed that pure science has no use although it has been pointed out repeatedly that all knowledge is potentially useful, much of it being used in practical studies later and all of it satisfying the researcher's curiosity, a use in itself. It is also commonly stated that pure research is basic to applied and that the flow of knowledge goes from left to right. It is not always realized that applied research and technology give back to pure science a rich reward in the forms of new techniques and new instruments. It is also necessary to point out that even the best minds do not always know what use can be made of a discovery. A lady once asked Faraday what use he could foresee for electricity. He is reputed to have replied, "Of what use is a new born baby?" Lord Rutherford, who first understood nuclear transmutations and first induced them experimentally, held the view that no practical use would be found on earth for nuclear energy.—**Irving W. Knobloch**

BELIEF IN CHRIST

Eighty-three German neurologists and psychiatrists are reported in *Psychiatrisch-Neurologische Wochenschrift* No. 49 (as translated in *Practical Christianity* published by the Officers' Christian Union) to have signed a document of protest which includes the following statement: "In the present lamentable struggle of political parties over schools, attempts are being made, in a folly truly irresponsible, to shake the foundations of Christianity. We, the undersigned neurologists and psychiatrists, who have daily opportunity to look into the deep abysses of psychic need and suffering, earnestly warn against allowing the belief in Christ, even in the least degree, to lapse in the hearts of our youth, since this is the real anchor in the storms of our times."—*The Christian Graduate* (Inter-Varsity Christian Fellowship), Sep. 1962, p. 132. (*Submitted by Dr. John R. Howitt, Toronto, Ontario.*

PERSONAL FAITH

Those who have (religious) faith may be on more solid ground in their understanding of reality than those who cannot find a way to believe. What they *feel* in their thinking may refer to a larger reality—mystical and supernatural or not—which speaks of truths beyond the present power of scientific thought. That this may be so should do no more than make the scientist truly humble and deeply respectful of other kinds of knowing; it should in no way influence him to abandon or reduce his efforts to know and understand—**W. Lloyd Warner,** *The Living and the Dead* (New Haven: Yale University Press, 1959), p. 490.

EVANGELICAL SNOBBERY

We are a bad lot, we sons of Adam.

One convincing proof of our inherent badness is the way we manage to turn good into evil and make our very blessings a curse to us . . . Sin is at bottom the abuse of things in themselves innocent, an illegitimate use of legitimate gifts.

We Christians are cut from the same bolt as the rest of mankind, and while we have been made partakers of a new nature we have not yet been entirely divested of the old. For this reason we are under constant temptation to lapse into the flesh and manifest the old nature rather than the new . . .

Among the purest gifts we have received from God is truth. Another gift almost as precious and without which the first would be meaningless is our ability to grasp truth and appreciate it. For these priceless treasures we should be profoundly grateful . . . And because these and all other blessings flow to us by grace without merit or worth on our part we should be very humble and watch with care lest such undeserved favors, if unappreciated, be taken from us . . . The very truth that makes men free may be and often is fashioned into chains to keep them in bondage. And never forget it, there is no pride so insidious and yet so powerful as the pride of orthodoxy.

Snobbery is the child of pride. Pride at first may be eager and ambitious as it tries to make a place for itself or to prove that it has already attained that place; later it loses its eager quality and becomes defensive; finally it ceases to struggle or defend and accepts its own image of itself as something too well established for discussion and too beautiful to improve. When it reaches that stage it has produced a snob; and no snob is ever aware that he is one . . .

A new school of evangelical Christianity has come up of late which appears to me to be in grave danger of producing a prime crop of intellectual snobs. The disciples of this school are orthodox in creed, if by that we mean that they hold the fundamental tenets of the historic faith; but . . . their spirit is quite other than the spirit of the Early Church.

This new breed of Christian may be identified by certain field marks . . . Rarely does one of them manage to give forth an original note, but each one waits to hear what Barth or Brunner or Bultmann or Tillich has

to say and then imitates it as nearly as possible, only transposing it into the orthodox key. Their mating call is a shrill "Me too! Me too!" which may be heard any time between September and June ringing through the halls of various institutions of evangelical higher learning.

What is overlooked by this new school is that truth is not mental only but moral. The Apostles' Creed quoted in pride, though true, is not true for the one who thus quotes it; one indispensable quality is missing—humility. A theological fact becomes a spiritual truth only when it is received by a humble mind. The proud mind, however orthodox, can never know spiritual truth. Light means nothing to a blind man.

In the Christian life we know most when we know that we do not know, and we understand best when we know that we understand little and that there is much that we will never understand. In the Scriptures knowledge is a kind of experience and wisdom has a moral content. Knowledge without humility is vanity. The religious snob is devoid of truth. Snobbery and truth are irreconcilable.—**A. W. Tozer,** *The Alliance Witness,* vol. 97, no. 24, p. 2, Nov. 28, 1962. (Reprinted by permission.)

ORIGINAL SIN

"One wonders if Pauline theologians realize that the doctrine of original sin involves the inheritance of an acquired characteristic, for only genes can be inherited and, by nature of the case, neither Adam or Eve when they first appeared on the scene possessed the character they are alleged to have transmitted to all their descendants."—**Sir Gavin de Beer** in his review of *Mankind Evolving* by Theodosius Dobzhansky, *Scientific American,* Sep. 1962, p. 268. (*Submitted by Dr. John R. Howitt, Toronto, Ontario.*)

Attention to matters of crime causation in America began . . . with the first colonizations . . . Much of it is contained in the theological concepts of man's original depravity and sin, and while conceivably it could be dealt with in terms of hereditary endowment, it might also be included as social history. However . . . a starting point both logical and practical was the beginning of that period when scientific concepts were displacing the metaphysical and theological in the description of the world of natural phenomena . . .

. . . the theological doctrine of man's original sin constitutes a separate body of thought that is beyond the province of this work. Were the premise of man's original sin granted, there would be no need for this or any other treatise on criminal behavior; there would be no need for calling in the aid of the sciences of anthropology and biology; no need to study man's criminal behavior in relation to his functioning organism and his anatomical structure; no need to study him in relation to other men . . .

There were other considerations which account for our borrowings from Europe and our failure to originate theories of crime causation here. A common base united Europe and America . . . Implicit and explicit in their common culture was a conviction that man was a free-will agent, that he knew the difference between right and wrong, that he was morally responsible for his actions. Furthermore, according to a common Calvinistic theology, man was born in sin; no theory of crime causation could be simpler than that.

. . . The implications, once the work of Mendel was revived and confirmed by later biologists, of such a doctrine (of biological inheritance) were revolutionary in a world that heretofore had navely accepted the Garden of Eden and man's original sin, and had based a philosophy of behavior upon it.

When, for example, the facts supporting the theory of the continuity of the germ plasm were established, the doctrine of man's original sin was scientifically invalidated. A biology and a psychology (even a sociology) which accepted the differential nature of the germ plasm and the somatoplasm questioned seriously any claims for the inheritance of separate moral faculties, evil dispositions, or criminal characters.—**Arthur E. Fink,** *Causes of Crime: Biological Theories in the United States, 1800-1915* (Philadelphia: University of Pennsylvania Press, 1938), pp. vii-viii, 151, 246, 249.

As soon as our young people have been convinced through their textbooks dealing with the history of civilization that there never was such a thing as original sin, they must conclude that the human race does not need a Saviour and that the sacraments of baptism and communion are superfluous, for there is no such thing as present sin. If true, the Mass then loses its value for the Roman Catholic Church. The whole hierarchy of that communion would, in time, find itself without clientele. And Protestants would have to abolish the Sunday school.—**Albert Hyma,** "Darwinism or Christianity?" *Christianity Today,* 6:1156, Sep. 14, 1962.

Editorial comment: To my knowledge the above challenge to Christianity, which is implicit in much contemporary as well as past scientific literature, has not been refuted adequately by evangelical Christians. Do the biological and behavioral sciences indeed disprove the theological concept of original sin? If so, what are the implications of this for Christian faith and doctrine? If not, why not? Does it matter at all?

It is likely that Fink, together with others who take up the same cry, misinterprets the theological concept of original sin. Yet if human behavior is a product of heredity and environment, as the sciences usually imply, the inevitable question that confronts us is this: Can man be a morally responsible, free-will agent?

Does Protestant theology clash with science on these issues? Must we reinterpret one position or the other in order to reconcile them while maintaining our intellectual equilibrium? Do we live in and move between two discrete social systems, one as scientists and the other as Christians, keeping the two compartments neatly separated? Is the apparent conflict about this subject an instance of true contradiction or of mere shadow boxing?

Contributions pertinent to these problems are invited. —**D. O. M.**

LEPROSY OR PSORIASIS?

In August 1962 a UPI news release reported on the disagreement of medical and biblical scholars about references to leprosy in the Old Testament. Dr. G. R. Driver, professor of Semitic philosophy at Oxford University, said that "leprosy" is being replaced by "disease of the skin" in a new translation of such passages as the account of the leprosy (King James Version!) of Miriam's hand (Numbers 12).

Dr. Fred Levit of Northwestern University Medical School, an associate of the American Academy of Dermatology, said that writers of the Bible "were trying to detect leprosy in its earliest stages. It's perfectly understandable they might have confused early cases of leprosy because of insufficient knowledge of the disease. But if you substitute the word 'psoriasis' for 'leprosy' in the Scriptures, you're not much better off." Dr. Levit also indicated that leprosy and psoriasis are two distinct diseases which cannot be accurately diagnosed from reading Biblical accounts, but both of which can be treated and arrested with modern drugs. (Wesley G. Pipert, "Was It Leprosy or Psoriasis? Bible Scholars, Skin Specialists Can't Agree," St. Paul *Dispatch,* Aug. 22, 1962, p. 35). In response to this news release, dermatologist ASA-member Spinka has the following to say:

"The recent Leprosy-Psoriasis controversy in the newspapers between my friend and colleague, Dr. Fred Levit, and British biblical scholars recalls that this was extensively reviewed by me with accompanying clinical Kodachromes at the August 1958 meeting of the ASA in Ames, Iowa, and is published in the March 1959 issue of the JASA ("Leprosy in Ancient Hebraic Times," vol. 11, no. 1, pp. 17-20).

"It was my opinion at that time, and at the present time, that Biblical leprosy really means 'diseases of the skin'; including today's terms of psoriasis vulgaris, leprosy, syphilis, pemphigus, dermatitis herpetiformis, small pox, and fungus infections as well as the bacterial diseases of the skin.

"Therefore, both men are correct: Dr. Levit objecting to the replacement of leprosy by psoriasis, and Dr. Driver holding that Miriam's hand had a disease of the skin."—**Dr. Harold M. Spinka, Chicago, Illinois.**

THE BIBLE AND SCIENCE

The boast that the Bible is the world's best seller sounds a little hollow when the character and purpose of the Bible are understood . . . In recent years the Bible has been recommended for many other purposes than the one for which it was written . . .

A few years ago it was fairly popular practice for Bible teachers to claim to find in the Scriptures confirmation of almost every new discovery made by science. Apparently no one noticed that the scientist had to find it before the Bible teacher could, and it never seemed to occur to anyone to wonder why, if it was there in the Bible in such plain sight, it took several thousand years and the help of science before anyone saw it.

Now, I believe that everything in the Bible is true, but to attempt to make it a textbook for science is to misunderstand it completely and tragically. The purpose of the Bible is to bring men to Christ, to make them holy and prepare them for heaven. In this it is unique among books, and it always fulfills its purpose when it is read in faith and obedience.—**A. W. Tozer,** *The Alliance Witness,* vol. 97, no. 14, p. 2, July 11, 1962. (Reprinted by permission.)

THE SCIENTIFIC APPROACH TO CHRIST

"If a man approaches the Word of God, the Bible, with the open mind of a true scientist, seeking to prove or disprove as if this were a scientific thesis, he will, almost without exception, find a personal positive faith in Jesus Christ. It therefore appears to me that in order to reach men for Christ we should realize the extreme importance and validity of science as a method . . .

"The more intellectual of our confreres are not against believing, they are not atheistic, they merely claim forcibly not to know how or what to believe. To them God invites, 'Taste and see that the Lord is good.' (Psalm 34:8) What could be more scientific than this! . . . Throughout the length and breadth of Holy Writ God asks us to approach with the attitude: Take a good hard look, try this in your own experimental laboratory of life itself, and if it doesn't work, cast the theory aside . . . God has clearly given man the free will and power of choice to test His Truth in the laboratory of human experience . . .

"There are certain irrefutable evidences that men of science, whether Christian or not, are opening a door of invitation to those of us who hold faith in Jesus Christ to invade their domain and come to grips with them on the problems of this world . . . We who have been born again in Jesus Christ know the worth of the Christian life. We need enthusiastic effective communication of this life to others. I believe that we should present a scientifically oriented Gospel for scientific minded men and women . . .

"Does the regenerated life in Christ solve all man's problems? An all-inclusive panacea has not been promised. But what is promised has been fulfilled in the greatest laboratory man has ever known—the human life. In Jesus Christ the believer has new life, new direction, new purpose, new peace, new power to combat problems, and a new destination."—from **C. James Krafft, M.D.,** "Let's Encourage the Scientific Approach to Christ," *Christian Medical Society Journal,* vol. 14, no. 4, pp. 2-5, 25-26, Autumn 1962. (Used by permission.)

BOOK REVIEWS

Having discovered how verbose social scientists tend to be (see the December reviews and Letters to the Editor in this issue!), the Editorial Staff has now established a policy of limiting book reviews to no more than 500 words in most cases. This policy will make it possible to include reviews of many more books, but it means that reviewers in the future should generally limit themselves to one or two double-spaced typewritten pages. If a particular book cannot be discussed adequately in such a restricted format, it is always possible to use the *ideas* of the author and your reaction to them as the basis for a major article to be submitted to the Editor on its own merits.

We are still experimenting with the format and content of the JASA. The Book Review Editor will try to abide by the spirit (if not always the letter) of the law. Meanwhile, he is somewhat embarrassed by the drastic editing he has done on the reviews appearing in this issue, all of which were submitted *before* the new rule was established. Rather than send them back to the reviewers with a request for a shorter version, he took the liberty of cutting them down himself without their permission. Sincere apologies if he happened to hit a raw nerve with his clumsy surgery!—**W. R. H.**

It Began in Babel: The Story of the Birth and Development of Races and Peoples, by Herbert Wendt. Transl. from the German by James Kirkup. Baden, 1958; Houghton Mifflin Co., Boston, 1962. Illus. with 72 photographs, 444 pp. $6.50.

This popular history of selected peoples, periods, and places can be read either as an anthropological history of the world or as an informal world history of anthropology. Historical sequences traced by the author are oriented not only to consideration of aboriginal peoples, but also to their discoverers and to the methods and theories espoused by their investigators. The author touches on the history of races and cultures in all continents, including such peoples as Gypsies, Canary Islanders, ancient Babylonians, Eskimos, and Tasmanians. He also delves into such mysteries as the lost trails of early Negroid migrations, the stone statues of Easter Island, and the strange mixture of Madagascan racial and cultural origins.

A work such as this is bound to be found wanting by regional or historical specialists because of its breadth of scope. Attention is frequently paid to the exotic and striking rather than to the comprehensive balance found in writings of more formal scholarly intent. Thus Wendt's discussion of the American Indians is sketchy and slightly distorted. The treatment of the Polynesians is largely romantic, whereas the discussion of Pacific migration theories is much more thorough, perhaps reflecting a deeper scholarly interest on the part of the author. Also, despite the inclusion of an excellent fourteen-page bibliography, Wendt frequently uses long quotations from unusual and valuable sources with no bibliographical clue in parentheses, footnote, or bibliography to their published source. A reader wanting to dig deeper into the fabulous accounts of the early field approach of the Russian Miklucho-Maklai among natives of New Guinea (pp. 362-3) will thus find himself frustrated.

The title of the book is hardly brought into any accurate focus as far as actual origins are concerned. Wendt discusses Babel chiefly in terms of certain possible ziggurat ruins, or, more importantly, in terms of Babylonian civilization as a whole. Of course, much of the content of the volume concerns far earlier periods.

Regarding Christian missions, Wendt generally reveals a typical anti-missionary bias, not without provocation, but certainly out of proportion to the facts in most cases. He recognizes with appreciation, however, the positive contributions made by many missionaries to ethnology.

Regarding the possibility of missionary success, the author seems at one point to imply that it has been possible to achieve it with some races but not with others. Concerning the latter he points out, "To these races belong the Pygmies, the Bushmen, Negritos, and Australians. It has never been possible to make such children of nature really useful members of western civilization without both uprooting and demoralizing them" (p. 367). We have here the typical unbeliever's misconception of what constitutes missionary success—but by no means secondary to this is the fact that missionary method has generally given cause for this misconception by operating under the same set of presuppositions! Does missionary success mean creating "really useful members of western civilization"? If so, then Wendt's list could be considerably expanded by enumerating other peoples, including the American Indian. (I do not mean to imply that American Indians are not useful members of western civilization. I am only concerned with the traditional missionary presupposition that they must be in order to be "Christian.")

The real explanation for such an observation, and I am sure that Wendt would agree, lies not in the nature of the races themselves but in the nature of the missionary approach. To what extent has any sustained missionary endeavor ever attempted to communicate Christianity to the Pygmies, or to the Indians for that matter, in their own cultural sphere, in a truly indigenous form? Wendt puts his finger on the precise trouble spot in referring to "the very dangerous spiritual vacuum" resulting from an early, typical "civilizing" missionary approach among certain Papuans. Sufficient teaching was provided to successfully undermine the indigenous beliefs, but Christianity was not made

culturally meaningful; therefore it was hindered from becoming *spiritually* meaningful.

Despite the above criticisms, many of which are to be expected in any semi-popular work attempting to cover so much ground, *It Began in Babel* is a valuable book. It is sure to leave a vivid and memorable impression of peoples, places, and times long passed upon the general reader, and also to create in him interest in more serious anthropology and its application to the development of modern man.—*Reviewed by James O. Buswell, III, Assistant Professor of Anthropology, Wheaton College, Wheaton, Illinois.*

The Church and the Older Person, by Robert M. Gray and David O. Moberg. Wm. B. Eerdmans Publishing Co., Grand Rapids, Mich., 1962. 162 pp., $3.50.

This is a thought-provoking book that merits a wide reading. Social scientists will be stimulated by it to make further studies in this relatively untouched field, and pastors, social workers, and others who deal with practical problems will be helped by it. Dr. Gray is a sociologist at the University of Utah; Dave Moberg, of Bethel College, is well-known to readers of this Journal.

The increase of the aged in the population is a social problem of significant implications which have not been grasped as yet by many. In 1900 one in every twenty-five persons in our total population was sixty-five or over; in 1950 the ratio was one in twelve and the rate was accelerating. The authors chose a chronological definition of "old age," recognizing that age is frequently a relative matter—President Kennedy is a "young" president, but a baseball player of the same age would be due for retirement. Far from being ideal "golden years" to be anticipated, old age for many proves to be filled with many problems—physical, economic, social, mental, emotional, and spiritual. Although these problems may be acute, the aged have been widely neglected both by church and society. The authors give a number of reasons for this neglect, pointing out that the values held in America tend to glorify youth above all other periods of life.

Moberg's doctoral dissertation, *Religion and Personal Adjustment in Old Age,* based on a study of 219 aged persons in seven institutions, indicates either that those who are well-adjusted engage in many religious activities or that engaging in such activities contributes to good personal adjustment in old age. Interview data from Gray's doctoral dissertation are cited to indicate seven contributions made by the church to adjustment of the aged: the church may alleviate anxiety concerning death; provide meaningful friendships and opportunities to participate in a social environment cordial to the aged; help the survivor adjust to the death of a spouse; give comfort in times of discouragement and crisis; and satisfy other basic socio-psychological needs. However, the authors also describe some of the real problems older people may face in the church: the feeling of being pushed aside by younger members; feelings of inferiority because of inability to give financial support or to dress well; difficulties with transportation, loss of hearing, increasing illness, etc., which make public worship less feasible or less joyful.

After presenting such data from sociological studies, the authors point out ten practical ways in which a church can better meet the needs of the aged, with emphasis on the role of the church in education—old people *are* able to grow mentally and to adjust to new circumstances, contrary to the opinions of many. In turn, the final chapter of the book contains practical suggestions on what the older person can do for the church. While the authors believe that it would not be costly to put their suggestions into operation (except in terms of sacrificial love), they also believe that in terms of humanitarian and spiritual values, *not* to do so is tremendously expensive.

One appendix in the book cites the basic policy statement of the 1961 White House Conference on Aging and the recommendations of its section on religion; another contains suggestions for further study, several of which are particularly pertinent to the alert minister. It would be interesting to this reviewer to know whether liberal, conservative, or fundamentalistic churches tend to do the best job of showing intelligent love to the older persons in their midst.—*Reviewed by Douglas A. Clark, Assistant Professor of Sociology, Wayland Baptist College, Plainview, Texas.*

Evolution After Darwin: Vol. I. The Evolution of Life, ed. by Sol Tax. University of Chicago Press, Chicago, 1960. 629 pp. $10.

This is the first book in a three-volume series resulting from the Darwin Centennial Celebration held at the University of Chicago in 1959. The conference brought together leading scientists from eight nations for a comprehensive and intensive examination of the impact of Darwin's ideas on all aspects of man and his known universe. Forty of the scientists who participated in panel discussions also prepared papers which were circulated in advance among the other participants; these authoritative papers comprise the first two volumes of this series, tracing the growth of evolutionary ideas over the past century and forecasting trends of research and thought in the century to come.

Contributors include such stalwarts as Julian Huxley, Harlow Shapley, Hans Gaffron, Earl Evans, Bernhard Rensch, George Simpson, E. B. Ford, C. L. Stebbins, A. E. Emerson, Ernst Mayr, C. H. Waddington, Th. Dobzhansky, Sewall Wright, A. J. Nicholson, Everett C. Olson, Marston Bates, C. L. Prosser, N. Tinbergen, and C. F. Gause. The content ranges from the origin of life itself to the alleviation of human suffering by genetical studies. This volume fairly portrays modern thinking on evolution exclusive of human evolution; it is certain to be the source book for a whole generation of biology textbook writers. It is written so well that most of it can be read by an intelligent layman, although some of it is "over the head" of many highly specialized scientists. Since it is impossible here to re-

view each chapter, a few remarks will have to suffice.

E. C. Olson dwells upon a facet of evolution scarcely touched upon in textbooks when he says that modern theory projects its generalizations from observations of very small changes over short periods of time to account for all evolutionary change. This kind of extrapolation of the widest order is not bad in itself unless someone becomes dogmatic in making the jump. Simpson makes the point that when the fossil species are compared to modern species quantitatively, we have a 0.03 per cent representation of possible forms in the fossil record. It is perfectly legitimate to make deductions from the data we have, but of course, here too, dogmatism is unseemly. Simpson also says that all sufficiently-known phyla and an absolute majority of classes first appeared in the Cambrian and Ordovician. To this reviewer it would seem therefore, that if organic evolution from simple to complex occurred, it must largely have occurred prior to the beginning of the record in the Cambrian—disregarding the supposed organic remains of the pre-Cambrian.

Finally, a quotation from Bergson presented by Gaffron is well worth pondering, typifying as it does the evolutionary trends: " . . . a shell bursting into fragments which in turn burst and so on. All we see today are really the last bursts."—*Reviewed by Irving W. Knobloch, Professor of Botany, Michigan State University, East Lansing, Michigan.*

OBITUARY

MAURICE T. BRACKBILL

Maurice T. Brackbill, professor emeritus of mathematics at Eastern Mennonite College, died Sep. 18, 1962. Professor Brackbill was born May 11, 1891, near Lancaster, Pa., the son of Aldus and Lizzie Brackbill. He received a BA at Hesston College and a BS and MA in astronomy at the University of Virginia. He also took graduate work in astronomy at the Universities of Kansas and Michigan.

He was married to Ruth Mininger in 1932 and she preceded him in death on April 30, 1962. They had no children.

Professor Brackbill joined the faculty of Eastern Mennonite College in 1919. He taught a wide variety of courses ranging from agriculture to zoology in the fledgling institution. He was appointed head of the department which he designated Physastromath and was chairman of the Division of Natural Sciences until he suffered a stroke in Jan. 1956 which ended his teaching career. He joined the ASA in 1949 and later was elected to the grade of fellow. He served as host to the 9th convention which met on the EMC campus in 1954.

Although most of his education was in mathematics and astronomy, his special interest in literature and ability in speech was demonstrated in many ways. His reading of Dickens' "A Christmas Carol" became an annual treat to the student body. He cherished the idea that the Bible, being the word of God, possesses supreme literary quality; however his ultimate concern in the scriptures was spiritual and not merely literary. He saw beauty in mathematics, particularly geometry, and was deeply interested in the integration of scientific knowledge and the scriptures. A classroom discussion of a neat mathematical concept was often the cue for the interpretative reading of a corresponding scriptural gem.

His laboratory was a maze of intriguing wires and hand-made gadgets which aroused students' curiosity. He delighted in collecting simple toys with a lot of physics in them, such as dunking ducks, topsy-turvy tops, etc. He had little faith in ordinary toggle switches, and being endowed with dry skin, he was unable to understand or appreciate the apprehension of many of his students at the use of open knife switches on 110 volts A. C. Because of a perennially small budget, he made much of the demonstration apparatus. The only recompense for these hundreds of hours in the shop was a sort of fierce satisfaction in having made something better and for less cost then from Cenco.

M. T. Brackbill's greatest interest in life began in 1910 when he saw Halley's comet. Of this experience he wrote in characteristic fashion, "Saw Halley's comet in the early morning beyond the barn in the southeast.. Not having read the newspaper I missed the privilege of being badly frightened by the alarming news that the earth would collide with the comet. Years later I learned that the earth went through its tail but I never heard of anyone being bumped out of bed." His fascination by astronomy increased with the purchase of a 2-inch telescope in 1929. In 1930 he founded the Astral Society, a student extracurricular club with six charter members. In 1934 he published the Astra-Guide, a 13-inch adjustable planisphere.

Through his persistence and charm he was able to develop astronomical facilities at the college second in the state only to those at the University of Virginia. The existence of Vesper Heights Observatory, the Astral Hall, and associated instruments valued at over $25,000 in the frugal economy of the eastern Mennonite constituency is an amazing tribute to his ability to communicate his love of the stars to laymen.

M. T. Brackbill was an imaginative writer, particularly in the area of popular astronomy. Among his publications are the following:

Heaven and the Glory of the Sunset (Mennonite Publishing House, Scottdale, Pa., 1924), 45 pp.

"To The Stars," *Youth's Christian Companion* (*YCC*), a series of articles in 1937-38. (Mennonite Publ. House).
"Evenings with the Stars," YCC, 1943-44; reprinted as a booklet, 1945 (Mennonite Publ. House).
"Stars from Starrywood," YCC Series in 1948-50.
"Modern Physical Science in the Bible," JASA, Vol. 3, no. 1, pp. 22-27, March 1951.
"If the Stars Appeared Only One Night in a Thousand Years," *The Sky,* Vol. 1, no. 10, p. 15, Oct. 1937
"The Astral Society," *Sky and Telescope,* Vol. 2, no. 11, p. 15, Sep. 1943.
The Heavens Declare (Moody Press, Chicago, 1959), 128 pp.

Professor Brackbill was a poetic and imaginative soul. Scientific facts could not remain cold fish to him but were manifestations of the glory of God and fit subjects to be rhapsodized upon in verse. A sample of his whimsical verse is given below. He was truly a celestial citizen and his ability to transcend one's thoughts from the mundane materialistic to the glories of the heavenly will be missed by those who knew him.—*Robert C. Lehman, Associate Professor of Physics, Eastern Mennonite College.*

There was a little atom once,
    It's name was Hydrogen.
Elusive little chap it was
    For none knew if nor when

Nor what it was till Cav'ndish came
    And proved that it existed,
And in the theory Dalton wrote
    Its pedigree was listed.

The atom was a tiny mite
    In metal, milk or lumber;
But billions, billions of them
    When Avogadro got their number.

Some said it is a sort of brick
    Or tiny little ball;
But Bohr said it was onion-like
    And not a brick at all.

The onion shells were little tracks
    Whereon electrons sped,
"Sometimes close to the nucleus,
    And sometimes not," he said.

But Hydrogen was very poor:
    Electrons it had one;
But it could jump from shell to shell
    And have a lot of fun,—

Unless a quantum big came 'long,—
    So Bohr theorized,—
And bunted little 'lectron off
    And atom onionized.
Then Uhlenbeck and Goudsmit
    The atom looked within,
And claimed they saw electrons
    Indulging in a spin.

The nucleus all the while reposed
    And long in safety trusted,
'Till Lawrence came with protons swift
    And right into it busted.

And little 'lectron soon was doomed
    For trouble, sad to tell,—
Why now Professor Barker takes
    And puts it in a "well,"—

        Ding dong bell,
        'Lectron in a well;
        Who'll pull it out?
        Och my! It's not about!

But where it is seems no one knows
    Unless it's Mr. Shrady
Since his equation says it's here
    Probably or maybe.

But now at latest count we see
    We've come on quite a jog;
For 'lectron circles round no more
    But simply makes a fog!

—*Maurice T. Brackbill.*

LETTERS TO THE EDITOR

CAPITAL PUNISHMENT

Dwight Ericsson . . . expressed my own feelings beautifully. I have never been able to picture the Lord Jesus Christ in the execution room or at the gallows giving his approval. As Mr. Ericsson so vividly points out, our entire prison system, with very few exceptions, is completely foreign to the spirit and teachings of Jesus Christ. A dead man can never be saved but a living sinner (aren't we all?) under restraint is always a potential child of God.

Floyd Rawlings
Monmouth, Illinois

Ericsson's paper in the *Journal* (Sep. 1962), is extremely interesting. He begins by a wonderful *ad hominem* device which attempts to equate what all Christians believe, namely, that our Lord and the writers of Scripture intended that they be taken seriously and that their writings mark a radical break with the past, with the particular view that he espouses, namely, that Jesus abolished the Old Testament law code. Has Ericsson never read: "Think not that I am come to destroy the law, or the prophets: I am not come to destroy, but to fulfill" (Mat. 5:17) and the succeeding verses? How this supports his view that Jesus came to abolish the law I do not see.

Again, Ericsson says that love can do no wrong, referring us to Mark 3:1-6. Unfortunately, it takes eisegesis to bring love into the picture, for the only emotions mentioned in the passage are anger and grief. As for the violation of a statute, the only statute which our Lord violated was one of the many devised by man, one of the type that Christ condemned for making the Law of God void. See Mark 7:13. Further, God *is* love, not has become love; yet He has repeatedly condemned men without opportunity for repentance, from Abiram's family and associates (Numbers 16:31-35) to Ananias and his wife (Acts 5:1-10).

Ericsson continues by trying to prove that man has no restraints in his relationship to God except his own conscience. But how can he overlook such passages as " . . . I command, yet not I, but the Lord . . ." (I Corinthians 7:10; see also I Thessalonians 4:11; II Thessalonians 3:4, 6, 10, 12; I Timothy 4:11)? It is not especially useful to continue a point by point consideration of the Scriptural "evidence" collected to back up his views. It should already be obvious that Ericsson has taken a position and has made Scripture conform to his position, rather than the reverse. But a human procrusteanizing is always at fault.

Besides the faulty exegesis, Ericsson has failed to prove his point by being unaware of a difference between the act of an individual Christian, who is to forgive, to suffer wrong silently, to return good for evil; and the judicial act which is necessary for the welfare of society and the state. Let us imagine that the individual's rules were applied in dealing with criminals. The arresting officers could be expected to greet a robbery suspect with, "You got $40 in that holdup: here is another forty," for this applies Matthew 5:40-41 to the situation. And to the murderer, the officer should say: "This is only your 437th corpse. We must forgive you 490 times," for this applies Matthew 18:21-22.

No, neither Ericsson's exegesis nor his logical analysis will stand up to critical scrutiny.

David F. Siemens, Jr.
Los Angeles, California

I have been reading with interest the discussion on capital punishment by Richard Bube, Dwight Ericsson, and others in recent issues of this *Journal*. As an avid reader of JASA, I am pleased to see controversial issues being thrashed out in its pages in such a stimulating manner; no doubt many of us are tempted to join in the controversy merely because it *is* stimulating, in spite of the fact that we have done little reading or careful thinking in this field. This is a case in which the most helpful contribution *I* can make is to refrain from comment.

However, as Book Review Editor, I have recently received a pamphlet by John Howard Yoder entitled **The Christian and Capital Punishment** (Institute of Mennonite Studies, Series No. 1; Faith and Life Press, Newton, Kansas, 1961. 24 pp., paper, 50c) to which I would like to refer others interested in this problem. Yoder believes that Christians should work to abolish the death penalty and therefore sides with Ericsson. His arguments include those already brought into the discussion, such as the failure of the death penalty to serve as a real deterrent to serious crime and the fallibility of penal institutions, but I feel that his discussion of Christian morality within society introduces some new ideas and that his discussion of the significance of the Old Testament passages in question goes to greater depth.

Yoder points out that one of the indirect influences of Christianity on modern society has been progressive limitation of killing by the state (apart from the problem of war). Thus, "distinctions are now made between the insane and the legally responsible; between accidental manslaughter, self-defense, and premeditated murder. It has come to be recognized that all of society bears some of the blame for the situations of conflict, the temptations, and the weaknesses of personality which result in killing. Faced with this development, the friends of the 'moral order' theory of capital punishment must, it would seem, choose one of two answers: either they may stand by the claim that 'a life is a life,' rejecting all such considerations; or they must

claim that there is one clear and sure way of calculating the exact degree of blameworthiness, so that what the moral order calls for by way of punishment is always definite and easy to agree upon. But in the latter case it must be admitted that today capital punishment in law and practice cannot be any nearer to this ideal moral order than its abolition would be, for no two states or nations are alike in the use and severity of punishment."

With reference to such Old Testament passages as Gen. 9:5-6, Yoder points out that the death penalty as stated there is not so much a *requirement* as a *limitation*. It is spoken against a background of a story of corruption in which vengeance was the general pattern. In Gen. 4:23 we read Lamech's vicious boast, "I have slain a man for wounding me, a young man for striking me. If Cain is avenged sevenfold, truly Lamech seventy-seven fold." The Bible is realistic—vengeance does not have to be commanded; it happens. The hostility of man tends to make vengeance rise out of proportion to the offense. "Thus the significance of civil order is that it *limits* vengeance to a level equivalent to the offense. In this sense it is one way in which God's grace works against sin. The first murder recorded in Genesis was followed by an act of God protecting the murderer's life against those who could be expected to threaten him (Gen. 4:15)." The life-for-a-life rule is given for limitation of punishment and, furthermore, the authorization of killing in the Old Testament is always more from a sacrificial than a legal or moral point of view since, after all, the death penalty for oxen guilty of murder was also called for in Gen. 9:5. "Since then the death penalty in the Old Testament is expiation, rather than penalty, its antitype in the New Testament is not the sword of the magistrate, but the cross." Yoder's discussion of the pertinent New Testament passages, such as Romans 13, carries this idea further.

While this controversy has been going on in our *Journal,* I was approached by a colleague requesting my signature on a petition to the governor of Iowa to commute the death sentence of a convicted murderer, circulated by "Iowans Against the Death Penalty." After thinking about both sides of the controversy and praying about my own convictions in the matter, I signed the petition.

Walter R. Hearn
Ames, Iowa

I was happy to see Richard Bube's further remarks on capital punishment in the last issue of the JASA. Truth is not the sole possession of any of us (even though we often write as though it were) and it is usually only after a thorough discussion of all sides of a question that we are able to approach the truth. I would like to make a few comments on the points he raised, hoping they will shed a little more light on a complex problem.

1. I agree fully that the New Testament is "solidly rooted in Old Testament Judaism." Indeed, the New Testament is incomprehensible apart from the Old. Nevertheless, I am a Christian, not a Jew, and when the New Testament seems to take a different position than does the Old, then I must abandon the Old Covenant for the New. As is quite evident from Bube's article (JASA, 13:114-116, Dec. 1961), he who would defend capital punishment will find scant support for it in the New Testament and must base his argument almost exclusively on the negative proposition that a law given in the Old Testament has not been revoked by the New.

2. I can only place Mat. 5:38-39 and Lev. 24:19-20 side by side and ask the reader whether or not he can honestly find any other interpretation than that Jesus intended to repudiate the *lex talionis*:

Ye have heard that it hath been said, An eye for an eye, and a tooth for a tooth: But I say unto you, That ye resist not evil; but whosoever shall smite thee on thy right cheek, turn to him the other also.	And if a man cause a blemish in his neighbor; as he hath done, so shall it be done to him; breach for breach, eye for eye, tooth for tooth; as he hath caused a blemish in a man, so shall it be done to him again. (Cf. Ex. 21:22-25; Deut. 19:21.)

3. It seems to me that we are quite often unable to account for every piece of data when we put forward a thesis. The physical scientist would publish very little if he were required to account for every last detail of the phenomena with which he deals. If the data are abstract, the problem is all the greater. When one deals with abstract concepts which have originated in the mind of God, he must expect that harmonization will sometimes be impossible. Numerous illustrations might be cited: What of the "binding" and "loosing" of Mat. 16:19, or the baptismal regeneration implicit in the "repent and be baptized" of Acts 2:37? The many explanations I have heard of these and other problem passages really serve only to show how deeply embarrassed the expositor is to find such passages in Scripture. I readily admit that the "revenger" of Rom. 13:4 and the "punishment" of I Pet. 2:14 present problems for my scheme, but I feel that the "forgive" of Mat. 6:14-15 and the "love" of Rom. 13:8 offer at least as much difficulty to Bube's scheme.

4. The warning concerning the "predestinating influence of God" is well taken. I would inject the caution, however, that no man knows for certain what it is to which any given individual has been predestined by God. The man who ventures to apply an absolute punishment to one of his fellow men is under obligation to be absolutely certain that the punishment he applies is the one God intended, a condition, I would suggest, which it is impossible to fulfill.

5. I approach Bube's final point somewhat cautiously due to my own lack of background in this area, but perhaps I can offer some ideas which someone else might be able to develop more adequately than I can. What is the character of the difference between the functions of the individual and of the state? The New

Testament often speaks of a judgment to come upon individuals, but never of a judgment to come upon states. The reason for this must be that the state is only the corporate expression of individual wills. When a state does good or evil, reward or punishment is measured out to the individuals who guided the state into good or evil, not to the state. The state does not even exist apart from the people who make it up, or at least apart from the people who guide its course.

I doubt if a state has any function which is not, at least in theory, the possession of every franchised citizen of that state. Note, for instance, that in a moment of extreme danger to life, our laws allow the individual the right to execute "capital punishment" upon an armed intruder in his house, although normally the state reserves such functions to itself. I cannot believe that the state is granted the privilege of doing things which are absolutely wrong for the individual, for the franchised individual *is* the state. The state only exercises certain of the individual's rights on his behalf. If capital punishment is absolutely wrong for the individual, then it cannot be right for the state just because the state is an impersonal body.

Dwight E. Ericsson
Frederick College
Portsmouth, Virginia

Editorial Comment: With these letters, the first two of which were written prior to distribution of the December issue, we close off our discussions of capital punishment—at least until such time as totally new types of evidence (such as a summary of pertinent criminological, philological, semantic, or other studies) are brought to bear upon the subject of Christian norms. Readers will discover that the quotations on "original sin" in the NEWS AND NOTES section of this issue are pertinent to certain phases of this discussion.—D. O. M.

"OLE MISS"

A reader who prefers to remain anonymous has pointed out an error in Russell Maatman's letter which stated that in Mississippi "there is an unbelievably large number of intermarriages generation after generation." Mississippi laws prohibit racial intermarriage, so this is legally impossible. What Mr. Maatman undoubtedly meant was miscegenation, most of which takes place through illicit sexual relationships of white men with Negro women.

In addition, this reader indicates, eyewitnesses of the desegregation conflicts at the University of Mississippi who have different values from those of Professor Maatman report greatly divergent details as to certain of the events referred to in the letter.

As Walter Lippmann stated in his classic, *Public Opinion,* "We do not see and then define, but we define and then see."—D. O. M.

SOCIOLOGY AND THE CHURCH

The Book Review Editor invited authors who feel their book is "dealt with unfairly" to submit a criticism of the review. While the term "unfairly" is too strong, I believe Heddendorf's review of **The Church as a Social Institution** includes several errors and gives misleading impressions which are only partly corrected by Burkholder's review (JASA, 14:120-122, Dec. 1962).

1. Heddendorf states, "the book gives the impression that the church is religion, leaving little room for an individual relationship with God." Compare these quotations as examples of what the book says: "Personal religious beliefs and actions . . . are significantly influenced by past social experiences. This fact, of course, does not demand a belief that all religious phenomena are solely social in nature" (p. 4). "Religion is voluntaristic, emphasizing man's free will to choose among alternatives of action . . . religion is basically a system of faith and worship" (p. 335). "The greatest unique opportunity before organized religion today lies in man's desire to have an adequate philosophy . . . to achieve a satisfying personal relationship with the great First Cause of that universe, his Creator, and to find associated values which can guide his daily conduct" (p. 518). One of the latent themes implicit in numerous passages is the need for the church to facilitate personal relationships with God rather than to hinder them by over-institutionalization.

2. The reviewer does not agree that the church is an institution. On the basis of dozens of sociological definitions, I insist that it is. Theologians who wish to reserve the term "church" for that heavenly body of saints, "the universal church" (p. 16), would agree with Heddendorf. If their position is accepted, no religious organization, local, denominational, or ecumenical, has the right to use the word "church" in its name, and the church cannot be the subject of any scientific investigation. Seeing the local church as a human institution "is not a denial of the theological position that the church is a divine institution established by God's command and developed under His guidance. The church as a 'spiritual institution' is outside the realm of purely sociological analysis and is only indirectly included in our study" (p. 22).

3. The review indicates that "all roles, values, goals, and activities . . . are made subsidiary to the organization" because the church is made the frame of reference. Is it not proper in a work on the church to see these from such a perspective? I insist, however, that these are not made subsidiary in a value-laden sense of the term. The book repeatedly indicates the dangers of institutionalism which tends to idolize the organization: "Religious symbolism encroaches and persists beyond its usefulness . . . in striking contrast to internal, personal devotion. The institution has become the master of its members instead of their servant . . . " (p. 121).

4. Particularly painful is the insinuation that I am a

disciple of Durkheim. "By taking the Durkheimian approach that religion has an integrative function and an origin in religious action and unity, one must then doubt . . . the existence of a personal relationship with God." To accept *some* of a theorist's contributions is not the same as being his follower. I do not accept Durkheim's theories about the origin of religion, although some of his insights may correctly apply to the origin of *organized* religious action. Durkheim explains God as primarily an extension of group solidarity; in worshiping God, the group in effect worships itself. Such is contrary to the postulate of my book that God exists as an ontic Being. Durkheim's position that religion is purely social also is in strong contrast to my own position. The two passages in the book referring to Durkheim stress the theoretical (implying interpretative) nature of his contributions. The three index citations to his name contrast with 29 for two others; 22 scholars have eight or more.

5. It is implied that I have overlooked "a model based upon a disintegrative or at least a non-integrative function of religion which stresses the needs of the individual rather than society." Did the reviewer himself overlook the criticism of functionalism on p. 138 ("there are times when the church becomes a source of social instability"), the section on dysfunctions (pp. 178-183), or the complex interrelated patterns of functions and dysfunctions woven into discussions of cooperation, conflict, and other topics? Individual needs are not neglected in the book but they are not emphasized because it is a sociological and not a psychological treatise. The reviewer seems also to have overlooked the word "merely" in his quotation from p. 425, "Repentence and faith . . . are not merely philosophical or theological concepts." In other words, they *are* philosophical and theological, but they *also* are sociological."

6. It is not true that I "attempt to redefine the church." It is conventional sociological usage to make "church" a synonym of "organized religion," but this is NOT the same as defining *religion* per se as an institution. *Organized* religion is but a portion of that broader phenomenon.

In conclusion, it appears to me that the reviewer slipped by overlooking qualifications that necessarily accompany rigorous definitions of concepts. In his defense, however, it must be admitted that any book which rests upon a wide variety of materials cannot be too rigorous in its selection of sources. Were only those studies reported which have used definitions completely consistent with each other, there might be no textbooks in any of the social sciences. Concepts such as social functions, cooperation, values, integration, religion, and institution cannot be defined as rigorously as H_2O. Their referents are far too complex and their connotations too diffused.

David O. Moberg

Perhaps the best sociological stereotype for the role of book reviewer is that of "marginal man"; he stands as an intermediary between the author and the reading public. As such, it is necessary that he provide an image of the volume under consideration which accurately portrays the intended communication of thought. In this reviewer's opinion, the starting point is a classification of the book. It is for this reason that the context for criticism was based on the opinion that the volume does not constitute a text on "The Sociology of American Religion."

The significant problem here deals with the concept of institution and its use. Since the traditional criticism of sociology by the layman is that there is a minimum of communication to him from the field, it must be with a sense of comfort that he realizes there are also short circuits within the brotherhood. Once again, the villain in the piece is "semantics."

It would seem best to understand the concept under observation as an ongoing process (institutionalization) rather than a completed state (institution). The process is in a changing condition of relative "hardness" or organization. In his rebuttal, Moberg reflects this condition when he states, "Organized religion is but a portion of that broader phenomenon." I agree; this statement indicates that the institution is *more* than a church. This, however, is not the implication of the title.

To show the insistence with which the villain stays on stage, we need only note that in Part Three of the book there are references to "types of churches" and "church types." These are conceptually different and are also on an entirely different plane from the "type of church" referred to in Moberg's letter; a "heavenly body of saints."

Since the uninstitutionalized or "soft" forms of religion are virtually unexplored, there is very little about the origins of organized American religion. It is from such uninstitutionalized forms that organization develops. For this reason, Moberg is justified in stating that I err in my assumption that he is Durkheimian in his approach to the origins of religion. There is insufficient material to warrant such a judgment.

Perhaps a prime function of a review is to stimulate interest in the book. It is hoped that this interchange of comments will further this purpose for, as was indicated in the review, "It is a book from which much may be learned" and is deserving of widespread interest.

Russell Heddendorf

Editorial comment: In the interest of encouraging interchange of ideas in this section of the *Journal,* the Book Review Editor agreed to referee the foregoing dispute. He has attempted to abridge both letters somewhat without deleting any significant points, which put him in the embarrassing position of editing the Editor's

review of a review. Although these sociologists here may seem to the rest of us to be quibbling over terminology, the discussion does raise important questions about the scientific study of religion and the church which is of interest to all thoughtful Christians. To what extent, and in what sense, can the sociologist (or the chemist, for that matter!) study the works of God among men (or among matter!)?—W. R. H.

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