

and techniques differ, the relationship between psychotherapy and religion can often be regarded as one of desirable supplementation.

Although different kinds of people, according to the state of their own conscience, sentiments, and present wants, respond variously to different therapeutic opportunities, it is probable that for adequate coverage of the social need, at least three basic forms of service are required.

The first is the type of service offered by psychologists. A young and growing profession, consulting or clinical psychology aims to assist the individual in self-examination, self-assessment, and self-integration. Occasionally mental tests or vocational guidance are beneficial; often more significant is the value that comes from what today is called "nondirective therapy." It has been discovered that under appropriate circumstances the individual, facing a permissive, noncensorious listener, with a will to explore his life situation candidly, can, in the course of comparatively few hours, review and place in order his own values, consult his conscience, estimate his assets and liabilities, size up his conflicts, and often discover a course of conduct and thought that integrates his life far better than he considered possible without this simple therapeutic assistance.<sup>12</sup>

In principle, there is no reason why clergymen, trained in its use, or qualified individuals attached to churches, should not employ this first and simplest grade of therapy. But chiefly the clergy has the ability and obligation to supply the second type of service: offering spiritual advice and rules of life, or opportunities for religious confession when these are sought. Discussion and clarification of theological issues are wanted by some individuals. Others find in the church a needed social anchorage which provides a type of group

<sup>12</sup> Cf. C. R. Rogers. *Counseling and Psychotherapy*, Boston: Houghton Mifflin, 1942.

therapy. Group activities, we know, often stimulate a wholesome integration of thought and conduct, particularly in individuals who previously have felt isolated from their fellows. Even the somewhat disparaged technique of exhortation may have a place, for the wish to change one's behavior is the most potent single factor in one's capacity to change it. Where values are withered, or where the more socially desirable and inclusive values require reinforcement, exhortation at the right moment may prove efficacious.

Finally, there is psychiatric aid which for certain individuals is indispensable. Sedation, shock, depth analysis, may be the critical service to be rendered. It goes without saying that such forms of psychotherapy should not be engaged in excepting by well-trained psychiatrists.

If these three professional roads are pursued in a spirit of rivalry and isolation, the cause of mental health will be hindered. In certain instances separatism may seriously endanger the individual who, needing one type of service, falls only into the hands of a rival specialist. Fortunately in recent years we have witnessed the beginnings of coordination and cooperation in a common cause. These hopeful beginnings, I predict, will be greatly extended in the years that lie immediately ahead.

## The Nature of Doubt

7 style of  
Doubt  
About Religion

THE PRIMARY THEME in the history of the world, Goethe has said, is the conflict between belief and unbelief. In certain epochs faith in some form reigns supreme. In others doubt gains the upper hand. Our own age, we know, is a period of doubt and negation.

This historical generalization can scarcely be questioned. Yet from the psychological point of view such a broad statement may imply too much. It may suggest that most mortals alive today are passively watching the ebbing tide of faith and waiting for some nameless catastrophe to wipe this doubting epoch from the slate of history. The psychological fact of the matter is that the conflict between belief and disbelief is a common enough condition of mind in any epoch. The frequency of the conflict may be greater at one time than another, but at bottom the conflict is individual in its form and in its functioning, as varied in flavor and significance as is personality itself.

The nature of belief will concern us in the next chapter. Here I wish to point out only that belief is the assent or affirmation that we feel respecting the existence of the object of a sentiment. Positive sentiments of any sort inevitably entail some grade of belief, and such belief always has motor

concomitants, for what we believe we tend to act on. Negative sentiments likewise usually involve a belief in the existence of their rejected objects, although there are exceptions to this rule, as in the case of the atheist who both disbelieves in the deity and rejects the concept. "

Besides the belief that is associated with sentiments there is also a kind of primitive credulity about things, most evident in the young child who believes almost anything he is told. Having learned to trust the first words he hears, to him all words that he understands are, for a while at least, as good as facts. Were he to hear that the moon is made of cheese, that God is a bear or a bearded man, he would be temporarily satisfied, and believe what he is told. The child's mind is thus furnished with many special beliefs before he discovers the important truth that words and facts are not identical. Among adults the same tendency to "verbal realism" is met, though in a reduced degree and only in regions where experience is limited, or where the prestige of the speaker arouses almost hypnotic deference. Verbal realism, we may say, is effective whenever interest is attended by only slight experience or by marked suggestibility toward the speaker. These conditions are especially marked in childhood, so much so that we may conclude that belief, based on primitive credulity, is prior to disbelief or doubt.

Disbelief is a negative, rejecting response or attitude. It comes normally after experience has counteracted the initial impulse to believe what has been presented to the senses or in words.

Doubt, like disbelief, is technically a secondary condition of mental life. It is an unstable or hesitant reaction, produced by the collision of evidence with prior belief, or of one belief with another. It is apparent that disbelief is relatively more final and single-minded than is doubt. Yet since doubt represents incipient disbelief, and since it springs from the

same psychological sources, we shall be justified in treating these two states of mind together. For convenience we shall direct our remarks to the topic of *doubt*.

Although primitive credulity is primary and doubt secondary, the former readily gives way to the latter. Even in early childhood, beliefs are barely formed before they are put to test. It makes no difference whether, from the adult's point of view, the initial belief and the reasons for doubting are both unrealistic; to the child a dilemma and conflict exist. One child of three was perplexed by a problem he phrased as follows: "If I had gone upstairs, could God make it that I hadn't?" This child was already commencing to sense a clash between the alleged attributes of God's omnipotence and the hard reality of physical events. Such early stirrings of doubt are present some years before they result in sustained misgivings. It is frequently in the pre-puberty period that fatal collisions occur, when pennies have not fallen from heaven in response to a self-centered prayer, or when miracles are denied at a time when they would prove convenient, or when theological ideas have in some other way been tested to their disadvantage by developing experience. The lurid imagery of old-time theology and some of the more extravagant Bible stories inevitably pave the way for such misgivings. Only a child who is assisted in revising his imagery and his theology to accommodate the day-by-day increase in experience could escape the surge of doubt. Conceivably the parent and the church school might do a better job than they do in assisting the child over the successive collisions of belief and experience, and in helping him identify religion with a positive attitude toward life rather than with immature images and interests. Yet I question whether an outsider can detect the precise time when newly discovered fact is felt to clash with previously accepted belief. One trouble is that the parent cannot tell just what belief the child is harboring, for it

almost certainly will be a juvenile distortion of what the parent has attempted to teach. Hence the integration of experience with sentiment can in only small part be met by the timely intervention of adults. Throughout the whole of life this integration is a personal quest. Even the wisest of persons who may have a well-thought-out, thoroughly mature solution, cannot pass it on like a well-wrapped package to another. Predicaments, experience, and aspirations are too individual in character to be fitted by a second-hand scheme of integration.

Nearly every moment of waking life seems to entail the trying out of various alternative potential beliefs. Is it going to rain this afternoon? Shall I trust this real estate agent or that? It has been rightly said that thinking is largely a matter of "vicarious trial and error," that is to say, of successive doubts and affirmations. Unless the individual doubts he cannot use his full intelligence, and unless he uses his full intelligence he cannot develop a mature sentiment.

Now it is characteristic of doubt that it assails most strongly the higher levels of interpretation. We have a ready enough acceptance of what we call facts, and a high degree of social agreement concerning them, for the simple reason that we define a fact as that which is verifiable by commonly acceptable tests. But facts, thus defined, are specific objects or happenings. When we come to explain them or to evaluate them, or tell their larger significance, our paths of interpretation diverge. Facts never speak for themselves. Every biological fact, for example, can be fitted into at least two broadly inclusive hypotheses—a mechanistic and a vitalistic. In psychology, there are many schools of thought distinguished by their characteristic preference for one or another style of interpreting the facts that are common to all schools. So far as natural science is concerned, the higher levels of interpretation, dealing with issues of probability, causation,

reality, slip into the field of philosophy where plural hypotheses abound. Religion, aiming to deal with the most inclusive of relationships—aiming to bind fact, value, and ultimate reality—is the most controversial, the most doubt-ridden, the most elusive of all the fields of mental activity. It would be so, even if the temper of the times did not at present intensify the situation. Having turned from religion to higher education, great masses of people regard the former as an obscurantism from which they must emerge. They have learned the first lesson taught by higher education which is to avoid being duped. The first lesson is all that many ever learn.

It is not the function of the psychologist to pass on the legitimacy or illegitimacy of any doubt. His duty is merely to elucidate a process which he finds to be a universal and necessary part of mental life. He holds that if each person understood the doubting process, he would be in a better position to determine the cogency of his own grounds for belief or disbelief. Although each individual has his own history, pattern, and degree of misgiving, there are certain modes of doubt that seem especially common. The modes that I shall distinguish are, I think, those most often encountered. It goes without saying that any single individual may entertain several of these styles of doubting.

*Reaction formation*  
1. *Doubts Primarily Reactive and Negativistic*

First, the ardor that lies behind militant atheism needs to be examined. It was said of one zealous apostle of free thought that he believed in No-God and worshiped Him; of another, that he would believe anything, so long as it was not in the Bible. Such acute negativism is "emotionally overdetermined." In some instances we can trace a history of trauma, as in the case of the soldier who in the very act of praying was blinded and crippled by a shell that burst near

by. Other lives, too, have known tragedies too shattering to be incorporated into such a religious sentiment as they may previously have had. A violent shock can change a positive attitude into a negative.

In other cases of reactivity the unconscious mental life seems decisive. If, as Freud has said, the religious sentiment is at bottom an extension of one's attitude toward one's physical father, then we must expect repressed animosity toward this father on occasion to be reflected in a hatred of religion. It seems curious that while Freud insists that belief in God is a projection of dependence and love associated with the earthly father, he overlooks the fact that by the same token atheism may be construed as the projection of ambivalence or hatred associated with the male parent. Probably the truest statement would be that on occasion—probably not often—both belief and doubt may reflect unconsciously one's attitudes toward one's parent.

The subtle relation between militant atheism and positive religion has sometimes been pointed out. "Atheism, rightly understood," writes Spengler, "is the necessary expression of a spirituality that has exhausted its religious possibilities. . . . It is entirely compatible with a living wistful desire for real religiousness—therein resembling Romanticism, which likewise would recall that which has irrevocably gone."<sup>1</sup> By reacting so violently against religion, an ardent atheist in reality betrays a deep interest in the religious mode of life. "Reaction formation" is the term psychologists apply to people who disguise real interests with violent protests. Even those atheists who are not passionate or querulous sometimes betray themselves as fundamentally, though unconventionally, religious in their orientation toward life. Robert G. Ingersoll, regarded as an atheist in his time, wrote:

<sup>1</sup> Oswald Spengler. *Decline of the West*, New York: Alfred A. Knopf, translated 1926, p. 408. Quoted by permission.

I belong to the Great Church which holds the world within its starlit aisles; that claims the great and good of every race and clime; that finds with joy the grain of gold in every creed, and floods with light and love the germs of good in every soul.<sup>2</sup>

Such discourse, if liberal, is certainly religious. Thus atheism is not always the antithesis of religion, especially if it betrays deep interest in the goings-on of religion. People are often called atheists, and often call themselves so, for no other reason than that they do not believe in a generally approved definition of God.

One of the commonest states of mind at the present time is "religious agnosticism" wherein individuals react against formal religion lest it impede the free exercise of their minds, but at the same time often maintain the highest standards of ethical conduct, and may vaguely relate these standards to the moments of reverence and wonder that they occasionally experience. The point to note is that in reacting against the intellectual slavery of an idea, the resulting negativism often pertains to specific content rather than to basic values.

Reactive doubters are, of course, genuine doubters, and the origins of their misgivings have nothing to do with the legitimacy or illegitimacy of their disbelief. But it is well to bear in mind that not a few so-called atheists, and many agnostics, humanists, and anti-clerics, at bottom show a suspiciously deep concern about the whole subject.

### *Doubts Associated with Violations of Self-interest*

We need not linger on the second mode of doubting which springs from violations of self-interest, for I have called attention to it on several occasions. The initial egocentric phase of

<sup>2</sup> R. G. Ingersoll. Declaration, *North American Review*, 1888, 146, p. 46.

religious development, as we have seen, is marked by a kind of primitive grossness. The child who finds his personal advantage not immediately and satisfactorily served by his prayers may discard his conceptions and terminate once and for all his religious quest. Sometimes the issue comes to a head only later in life, in conjunction with acute personal need. "Prayer does not stop bullets," was the refrain of many veterans; "they perforate both devout and infidel." "Religion has no survival value for me." A faith centered in self-advantage is bound to break up. To endure at all it must envisage a universe that extends beyond personal whim and is anchored in values that transcend the immediate interest of the individual as interpreted by himself.

### 3. *The Shortcomings of Organized Religion*

Common in these days, and especially among younger people, is the doubt engendered by visible hypocrisy and failure in institutional religion. Some select out doctrines or practices that seem repressive to intelligence. They see in religion only a set of scruples designed to limit the free exercise of thought. One soldier found himself revolted during his visit to Jerusalem by the commercialization of the stations of the cross where postcard sellers and souvenir vendors clamored greedily, and by the fees charged for the blessing of rosaries purchased in the Church of the Holy Sepulchre. Vulgarity, exploitation, money-changing, in the Christian church after twenty centuries of existence seemed inexcusable. Tracing backward the history of organized religion, other doubters shudder at the record of cruelty, oppression, deceit, at the burning of heretics, the torture of Jews, the hounding of Mormons, the persecution of Catholics, the massacre of infidels. Have the great world religions, the doubter asks, really progressed beyond the tribal creeds that encouraged groveling superstition, xenophobia, cannibalism, headhunting?

To one who fixes attention upon this history of horror, the excesses committed in the name of religion, perhaps because of the sheer intensity of feeling released, seem to exceed the evil of which disbelievers are capable. Within the fold of organized religion bigots and brutes exist, while outside the fold are many considerate, selfless men.<sup>3</sup> If the adherents of institutional religion and its leaders do not pass the test why should one not doubt the validity of the way of life they profess to follow?

This mode of doubting is widespread especially among youth who today seem supersensitive to the darker spots of religious history. Nor are doubters persuaded by the counter-argument that crimes of persecution and bigotry are to be charged up to secularism and corruption rather than to the religious hypothesis in its purity.

### 4. *God in Man's Image*

Humanists are particularly disturbed at the discovery that the God-concept changes according to the condition of man. Viewing the history of religion in perspective one notes how in the beginning there were a multiplicity of deities. Monotheism came later. Originally the gods were limited in nature and capricious in conduct. Jehovah, by contrast, was supreme and steadfast. The first gods had to do primarily with nature, but then came a God of persons who prized individuality. Earlier deities, indifferent to man, were throned afar, but were displaced by an indwelling God of profound moral concern. As man became increasingly aware of himself, God was seen as coming closer to man.<sup>4</sup> The relation of such relativism to disbelief is plain enough.

<sup>3</sup> The malfeasances of organized religion are listed with enthusiasm by J. H. Leuba. *God or Man?* New York: Henry Holt, 1933, Chapters 17 and 18.

<sup>4</sup> Cf. Max Schoen. *Thinking about Religion*, New York: Philosophical Library, 1946, p. 42.

To say that there is a God is not to say anything more than that we need to think that there is, and the need is in no sense a guarantee of the existence of that which satisfied it. Thus the great religions of the world are not theology, but psychology; witnesses, not to the attributes of God, but to the inventive faculty of man. God is not a real being; He is the image of man, projected, enlarged, upon the empty canvas of the universe.<sup>5</sup>

That man's inventive faculty enters into his religious ideas is a fact no psychologist can question. Projection is one of our commonest and slyest mental tricks, especially when certainty of knowledge is lacking. Whether the existence of projection in religious thinking invalidates the hypothesis that God exists is a question that will be settled in different ways by different people. The humanist will conclude that the projection of human fantasy upon divine "objects" proves that the latter are illusory. The religious person will say that our halting and fanciful efforts to grasp the nature of the deity do not invalidate His existence. The Gospel of India, the *Bhagavad Gita*, expresses this latter view:

Some see me one with themselves, or separate:  
Some bow to the countless gods that are only  
My million faces.<sup>6</sup>

5. RATIONALIZATION EGOMORPHIC  
*Doubts Associated with the Genesis of the Religious Quest*

We come now to a related mode of doubting that is of special interest to the psychologist. It takes its start from the facts reviewed in our first lecture. Religious strivings, we there learned, often originate in the desires of the body, in the pursuit of meanings beyond the range of our intellectual

<sup>5</sup> C. E. M. Joad. *The Present and Future of Religion*, London: Ernest Benn Ltd., 1930, p. 108. Quoted by permission.

<sup>6</sup> Translated by Swami Prabhavananda and Christopher Isherwood. Hollywood: Marcel Rodd Co., 1944, p. 105.

capacity, and in the longing that values be conserved. Do we not then merely "rationalize" our yearnings with manufactured beliefs that are egomorphous, fashioned to satisfy private desire or inner compulsion? Does not the very prominence of the fear motive indicate that we have invented a God to protect us against anxiety? And if life or society demands many renunciations from us, are we not prone to invent an after-life that will compensate us for present deprivation?

This mode of doubting is especially common in our psychological era. No enlightened person wishes to be duped by his desires, his fantasies, his glands. The presence of transparent self-deceptions in everyday life, and in much self-centered religion, puts one on guard against the perils of wishful thinking and cheap rationalizing. Anyone who has learned about this matter (and who, by now, has not?) grows suspicious of beliefs that owe their origin to frustration, to fear, to temperament, and to cultural suggestion.

Since the psychologist is responsible for introducing the protean concept of rationalization—or rather for changing its meaning from the search for true and adequate reason to the search for specious justificatory reason—it is up to the psychologist to issue certain warnings. In reversing the original meaning of rationalization he has inadvertently suggested that there is no such thing as bona fide reason. He has implied that every belief is a product of irrational forces. "Once one has grasped the meaning of rationalization, its use in controversy is fascinatingly easy. You need not examine your opponent's arguments at all. You need only state what you imagine to be the affective grounds of his opinions, and dismiss all his reasons as rationalizations."<sup>7</sup>

Unless employed with great circumspection, the charge

<sup>7</sup> R. H. Thouless. *An Introduction to the Psychology of Religion*, Cambridge, England: University Press, 1928, p. 84. Quoted by permission.

"you are rationalizing" becomes a boomerang. In our discussion of atheism, for example, we saw that there is often an emotionally determined need to disprove the existence of God. Hence if the atheist says to the believer, "You only believe in God because you find some personal satisfaction in so doing," the believer can retort with equal justification, "And how about yourself?" A reckless young student, who had a smattering of psychology, once attacked Archbishop Temple with the accusation, "You only believe what you believe because of your early upbringing." The Archbishop promptly dispatched him with the reply, "You only believe that I believe what I believe because of my early upbringing, because of *your* early upbringing." Thus the boomerang returns. If one's background may be said to be the reason for belief, it may also be said to be the reason for disbelief. And the argument has progressed not at all.

The plain truth is that origins can tell nothing about the validity of a belief. Neither can origins characterize the mature belief as it now exists, nor explain its part in the present economy of a life. One of the best musicians I know took up his profession originally, in part at least, because he was taunted in childhood for what seemed to be his tone-deafness. In psychological parlance, he "overcompensated" for the defect. But that incident has absolutely nothing to do with the present structure or dynamics of his life-absorbing interest. We spoke in an earlier chapter of the fact that, when well-formed, the mature religious sentiment develops a driving power in its own right, motivating action, transforming character, and ordering sub-systems of belief and conduct. This view, ascribing functional autonomy to the operation of the religious sentiment, is the precise opposite of the view which mistakenly holds that the infantile roots of a sentiment for all time provide the forces for sustaining the sentiment and measuring its worth.

Were we to gauge our evaluations by origin we would disparage the eloquence of Demosthenes because his oratory served as a compensation for his tendency to stammer. We would depreciate Schumann's music because it may have been touched by his psychosis. The rationalism of Kant's philosophy would be invalid because it represented at the outset his protest against the hypochondria induced by his sunken chest. Longfellow's benignant outlook on life would be discredited since it served to rationalize his comfortable Victorian existence. Quakerism with its inner voice of guidance would be worthless because the founder of Quakerism, George Fox, suffered severe hallucinations. St. Paul's vision on the road to Damascus would have no significance because it may have been epileptoid in character. And the fact that many psychologists take up their science because of personal maladjustments would make psychology worthless.

The mistaken view that higher mental operations, originating in personal motivation, are therefore rationalizations and untrustworthy is called by logicians the "genetic fallacy." Unlike other modes of doubting it is basically illegitimate, and cannot be permitted a part in any discussion of religion.

### Scientific Doubting

We come now to a more impressive mode of doubting, one that arises out of the scientist's professional habits of thought. Doubting is one of his specialties, and as likely as not it affects his outlook on religion. Nowadays if you ask concerning a person, "What is his religion?" the reply may well be, "Why, he hasn't any religion; he's an intellectual." Although the majority of people are not scientists or intellectuals, so great is the prestige of science and so rapidly is its influence spreading through universal education, that scientific habits

of thought are gradually extending themselves throughout the population as a whole.

To debate the issue of science and religion is not within our scope; but to clarify the psychological reasons for their characteristic differences in modes of thinking is part of our task. Scientific doubters, no less than religious believers, are simply human individuals who have evolved in their course of living certain guiding sentiments for their thinking, what Fromm calls "frames of orientation and devotion."

// The scientific mode of thought is marked by deeply ingrained habits, congruent with deeply ingrained sentiments. Foremost among these is the limitation of interest imposed by the scientist's routine. Hour after hour, day after day, his attention is held to limited and accessible segments of nature—perhaps the tensile strength of steel, the learning ability of the child, or the properties of the carbon ring. His rewards come from his detailed discoveries, from riveting himself to the microcosm, and by excluding the macrocosm. Accustomed, within his microcosm, to say, "I don't know," he finds it easy to confront the macrocosm with doubt. So exacting are the demands of his day that in leisure hours he is unlikely to turn to the intellectual puzzles of the macrocosm, but prefers to turn to fishing, to art, to friends, to family.

Not only is the scientist's curiosity limited by his professional habits, but he has come to rely upon a small range of acceptable techniques for discovering truth. One of his technical requirements is that any working hypothesis he uses must be closely relevant to the task in hand. So remote an hypothesis as the existence of God is not particularly helpful in tracing the properties of carbon rings or of learning curves. In the past a limiting conception of the deity has been a hindrance to free scientific inquiry. Another technical requirement is that the investigator keep himself out of his

work. Should he care too much for his hypothesis his objectivity will fail. The intrusion of personal interest into science is felt to spell disaster. Recognizing that religion minus the personal factor is nothing at all, the scientist sees it as a violation of ingrained habit and finds it distasteful.

Yet another habit asserts itself. The scientist does not accept statements unless they can be verified by individuals employing acceptable operations. Although St. Theresa was certain she had seen the Trinity, her testimony is inadmissible regarding the existence of the Trinity. Not all of the mystics of all the ages taken together can prove that their sense of God is a guarantee of God's existence. It is easily understandable from the naturalistic point of view why human beings should have faith, for the religious urge reflects "a primitive tendency, possessing biological survival value, to unify our environment so that we can cope with it." The religious sentiment is thus merely the "culmination of a basic tendency of organisms to react in a configurational way to situations."<sup>8</sup> But in itself the configurational urge is a guarantee of nothing objective.

As a disciplined, intelligent, hardworking individual, the scientist is likely to be an ethical person. Seeing morality in himself, he concludes that religion is not indispensable to good living in the social sense. He has his own social creed, believing that peace and prosperity will stem from education, higher living standards, full employment, and rational social organization. With such improvements man can scarcely ask for more salvation. If the scientist is reminded that his ethical aims are derived from the Hebrew-Christian tradition,

<sup>8</sup> H. Hoagland. Some comments on science and faith, in *Science, Philosophy and Religion: a Symposium*, New York: Conference on Science, Philosophy, Religion, 1941, Chapter 3, p. 36. This chapter, from which I have drawn several of my points, is an excellent statement of the case for religious agnosticism.

he replies that in the future, he thinks, empirical sanctions, drawn somehow from science, will be sufficient to dictate the good life without further recourse to supernatural sanctions. Reminded that up to now scientific techniques have yielded nothing that would enable men to distinguish between values and disvalues, he may shrug and reply, "I never expect to understand most of the things that I value most highly—the thrill of a sunset, of a symphony, or the love I have for certain persons. But I prefer to admit my failure to understand rather than to accept explanations based on a type of evidence I cannot accept as valid."<sup>9</sup>

The scientist's habits of thought have proven to be brilliantly productive; so much so that any system of faith that does not maintain complete adaptability toward the discoveries of science, finds itself now, and will find itself henceforth, on the defensive. Yet to the mature religious thinker the scientific frame of thought, though thoroughly honest, seems limited. Every person, he points out, is compelled to build his life on probabilities that are far less certain than those of science. Moral and political commitments, the affirmation of this purpose or that, the superiority of love over hate, rest ultimately on no scientific ground. From the point of view of the religious frame, the scientist seems to be living a sparse existence, unable to coordinate his professional thoughts with the rest of his life. His limiting habits, exercised through long use, have cramped his sensitivities. Darwin, at the age of sixty, complained that he could no more enjoy Shakespeare, for he had too long disciplined his mind to conceive reality as limited, verifiable, one-faceted. Integration of personality, thinks the religionist, is hindered if scientific discipline dominates the life. This accusation is interesting, for to the scientist the shoe seems to be on the other foot. To him those who maintain religious beliefs are said to do

<sup>9</sup> *Ibid.*, p. 38.

so only by virtue of keeping their faith in one compartment and their science in another. It is *their* mental integrity that suffers. But the religionist is still insistent, arguing that his search is far more comprehensive in its scope than is the scientist's, and that the scientific agnostic cannot but lack a sense of the continuity of the universe. Is it always true, as the scientist insists, that observation and understanding are necessarily more accurate when they are unemotional and impersonal? Is one not better able to perceive congruence in the universe as a whole when one is reverently receptive? Emotion may be an aid and not merely a hindrance to discovery. To stand wholly outside the phenomenon is to understand it less well than by entering in.

The fact that values are not included within the scientific frame of thought is at the present moment causing widespread consternation. The productions of natural science, notably the release of atomic energy, have made everyone, including scientists, aware that the utilization of these productions, without the application of prior moral principles, can lead to disaster. The fact that the truths of science are devalued turns out to be a peril. Scientists themselves, as has been pointed out, are ordinarily well-intentioned men, but their good intentions seem closeted from their technical activity. Were they to bring together into an embracing system the facts they discover and the values they hold, would they not be forced to construct a single, more comprehensive frame of reference, one that would verge toward the religious?

Finally, to many religious minds it seems their own habits of thought and those of the scientist, in spite of their differences, have one similarity. Each type of mind engenders hypotheses which must be tested by living. If not adequately verified, the hypothesis should be discarded. The difference here lies in the fact that any system of religious faith has

much more to test. The hypotheses of science are ordinarily confirmed by the successful predicting of limited happenings, while faith must locate the whole gamut of concrete happenings within a moral, aesthetic, and cosmological order. It must assign a prominent place to the personal factor which science seeks to exclude, and top it all with a congruent theology. The pyramid is higher; the strain is greater; the tests applied will inevitably be less rigorous and markedly different in type. By comparison, the verifications of the scientist are clean and easy. He chooses certainty in preference to adequacy. Religion can never pretend to rest its case on certainty, but only on the legitimacy of its effort to find reasonable certitude within the domain of adequacy.

Not only do the habits of thought, the expectations and demands, appropriate to the scientific and to the religious frame differ markedly, but at any given moment of time, they seem irreconcilable. The axioms on which a scientist proceeds while he is acting scientifically are at odds with axioms on which a person proceeds when he is acting religiously. By axiom we mean some fundamental proposition that is admitted without debate in order to give form and fluency to a course of thought that is under way. Although no human mind can entertain contrary axioms at one and the same moment of time, alternation between axioms is very common. On a winter evening we take out the checkerboard. Shall we play checkers or give-away? The axioms in the two games are different. Or we take out the playing cards. Shall we have our poker straight or with deuces wild? One set of axioms or the other must be accepted. We travel from the United States to England, and shift our monetary and traffic axioms accordingly. Clearly we are accustomed to keeping our axioms in logic-tight compartments.<sup>10</sup>

<sup>10</sup> The case for this dualism is well presented by H. M. Johnson, Can religion blend with modern science? *The Virginia Quarterly Review*, 1930, 6, 321-334.

In playing the game of science, a definite set of axioms must be adopted. They include, first and foremost, the principle of determinism. Identical happenings, with identical histories, will have identical futures. There can be no intervention of Providence. Although laws may be beyond our present capacity to unravel, still the axiom of determinism must always be held; otherwise the game of science, as now conceived, cannot be played.

Yet the axiom of determinism, indispensable to the maintenance of the scientific frame of thought, has never been proved in any absolute sense. While in the laboratory the axiom is fruitful, outside, the scientist customarily rejects it. He proceeds, for example, on the assumption that he and his fellow men have freedom of choice respecting their conduct. He praises and blames, admonishes and exhorts, judges and punishes, consults his conscience and puts forth effort—none of these activities consistent with the axiom of determinism.

How is it with the axiom that private worlds of experience are inadmissible as scientific evidence? A necessary axiom for the scientist in the laboratory, it is a bad axiom for him outside. For it turns out that the acceptable tests of love and beauty, happiness and pain, of every single value by which he lives, are the revelation of direct experience alone.

And so we see that no single set of axioms, not even the scientific set, can be maintained consistently at all levels of existence. What then happens in the clash between scientific and religious axioms? Each person handles the clash in his own way, usually as a version of one of three logical possibilities.

First, scientific disbelief may emerge triumphant, because the axioms of science are on the whole preferred. Owing to sentiment and habit they constitute what William James would call a "livelier option." If their insufficiency for present living is recognized, they are nonetheless declared to be in

principle on the right track, and contrary considerations can for the time being be disregarded.

Secondly, the individual with a more flexible sentiment structure may decide that while religious axioms and scientific axioms cannot blend, there is something to be said for each. At one time he gladly accepts the axiom of determinism, at another the axiom of freedom. He admits the validity of direct knowledge on some occasions, not on others. Thus a frank dualism, perhaps even two master-sentiments, mark the life, which he justifies on the indisputable basis that every person does inevitably in the course of living accept contradictory axioms according to circumstance.<sup>11</sup>

The third possibility is a ceaseless struggle to assimilate the scientific frame of thought within an expanded religious frame. A person with a mature religious sentiment characteristically attempts this course, and though he seldom succeeds perfectly, he continues to affirm the ultimate possibility of so doing. Under no circumstances will he side-step or disparage the scientific mode of doubting, but under no circumstances will he allow it to curtail the range of his curiosity or aspiration.

Before leaving our comparison of the two frames of thought, I venture a final observation. In one important respect the conflict between science and religion is less acute today than in former decades. Modern society emerged from a state of complete theological domination. Progress almost inevitably meant that scientific discoveries contradicted earlier religious lore. But nowadays, to put the matter baldly, youth learns science first. Instead of perceiving evolution, nuclear physics, and psychoanalysis against the grounds of the older theology, he learns first that man is part of the organic universe, within the biological realm a member of the animal

<sup>11</sup> Cf. H. M. Johnson, *loc. cit.*

species, and socialized through learning processes. Then he wonders whether this account is adequate. How about man's imagination, purpose, idealism, values? How about a first cause? In this course of development, religion may take a more favored position than formerly. Instead of serving as the stale ground from which scientific insights dazzlingly emerge, religion may be perceived as the fresh and sparkling insight needed to supplement and correct the lifeless and de-valued ground of science.

### Referential Doubting

I have left until last the commonest mode of doubting, one that derives from science but today is widely linked to common sense. It is the recurrent conflict between acceptable standards of evidence and this or that specific content of religious teaching. How, with twentieth-century enlightenment, can one believe in traditional statements regarding the feriness of Hell, the golden pavements of Heaven, the pillar of salt that was Lot's wife, the resurrection of the body, miracles, and all the rest of it? This mode of doubting, it will be noted, does not challenge the religious way of life nor the religious treatment of values, but only those statements which, if taken literally, would offend the ordinary canons of comprehension. To a modern mind, searching for explicit referents, the sacred literature of all religions fares badly. Scriptures written one, two, or three thousand years ago are archaic and equivocal; their explanations of natural phenomena have long been in full retreat. I venture to say that there is no adherent of any religion, and perhaps never has been, who has failed to find certain statements within his accepted system of faith incomprehensible or dubious. Contemporary semantics, which is in part a psychological

discipline, has something to say regarding this mode of doubting. Only a very small fraction of discourse, it tells us, is designative in its significance, pointing unequivocally to specific and tangible referents. When you and I pass on the street, our conversation may consist entirely of the exchange of phrases, "Nice day!" "Yes, isn't it?" Now we don't mean that it is a nice day, at least we don't mean only that. We are saying, "Well, here we are, crossing paths; I know who you are; you know who I am. I am not hostile to you; I assume you are not hostile to me. Let's get along now and be about our respective businesses." Such discourse is purely rhetorical, what is sometimes called "phatic." When Goethe wrote, "Green is life's golden tree," he did not mean that life's tree, whatever that may be, is either green or gold, certainly not both green and gold. He meant something, and something important, but his mode of discourse, instead of being designative, was appraisive and poetic. When Christ said, "Ye must be born again," the literal-minded Nicodemus was puzzled and asked, "Can a man enter a second time into his mother's womb and be born?" A statement intended to be prescriptive and incitive was mistaken for something informative and designative. Of sixteen modes of discourse listed by Morris, one only is informative-designative, that is to say *scientific* in its referential character. "Around every religion," says Morris, "there grows in time a body of critical discourse (a theology) which aims to defend systematically the way of life approved by the religion." Now its adequacy depends entirely upon whether this discourse succeeds in representing somehow the total orientation of the personality, providing a satisfactory focus and direction to the life as a whole.<sup>12</sup> Under no circumstances can the signification of religious discourse be judged by applying tests of literal meaning.

<sup>12</sup> Charles Morris. *Signs, Language and Behavior*, New York: Prentice-Hall, 1946, pp. 125, 147.

Yet in pondering the specific content of religious teaching most minds do hesitate between literal and figurative interpretations. The positivism of our times has made us particularly critical of statements that sound designative but are not. It urges us to relegate to the category of superstition all views of reality that do not square with verifiable sensory impression. In its contemporary form of operationism, positivism denies the possibility of speaking intelligibly at all about metaphysical ideas, moral assumptions, or supernatural concepts. Therefore, the entire realm of religion, being inaccessible to operational exploration, is meaningless. Such extremism in methodology, of course, condemns nearly all poetic, artistic, legal discourse along with the religious, and most other forms for human communication as well.

The difficulty arises from the fact that religion has to use many of the same signs as science does. Images based upon space and time seem about all that are available. The ascension is a literal rising up to heaven; the end of the world is a definite event in time; hell is downward; heaven a glittering corridor on high. It was William James who said that in religious thinking we make use of such poor symbols as our life affords. It is unfortunate that they must be the same symbols that do duty for common sense and for scientific discourse. Confusion, with consequent doubts, is bound to arise.

What shall we say about the Fundamentalist who prides himself on believing every word in the Bible? Can he mean what he says? The Bible affirms, "There is no God," but adds, "says the fool in his heart." Even the Fundamentalist must take the context into account. How about the parables? Christ himself meant them not to be taken literally but metaphorically. Relative to the Modernist, the Fundamentalist does cling so far as he can to concrete images, and takes Biblical discourse so far as he can as designative; but even he is far less literal-minded than he thinks.

The immense storehouse of religious symbols, in words, in paintings, in music, in ritualistic acts, is an accretion to which countless aspiring mortals have contributed. It is not to be expected that any one individual here and now will find all this symbolic accumulation congenial or intelligible. Inevitably there are statements in sacred writing and in tradition that seem meaningless, even repulsive. Yet what chills one seeker may warm another. Personalities are infinitely varied. It is for this reason that doubters who cavil at the unclarity or unacceptability of any particular symbol are speaking only for themselves. A re-forming of religious symbols to give greater designative fidelity for one person would merely throw others into a new state of doubt. A clergyman of my acquaintance takes pains to confess to his congregation that he does not believe in the resurrection of the body. One may admire his candor, yet caution him regarding the consequences of shifting religious discourse into the realm of scientific and designative discourse. Creeds, like rituals, mean much more than they seem to say.

I do not mean to imply that religious language has no representative function at all. Some statements regarding historical and theological fact are too definite to be circumvented by declaring them to mean whatever the individual wants them to mean. Various religious sects are in fact defined by a common set of symbols having approximately common significance for all members. Yet, the essential psychological situation remains: of all the modes of human discourse, the religious is inevitably the one that is used with the greatest latitude, and the one to which the demand for specifically agreed upon referents least applies. The reason is that the cosmic conditions pointed to in religious language are not demonstrable, not knowable (in their entirety), and therefore not accurately signifiable. Words, as Whitehead has said, were apparently invented for the purpose of making

discriminations within the microcosm. As soon as they are applied to macroscopic conceptions they grow elusive. The more abstract a term the more various is the individual's definition of its meanings, and we have no terms more abstract than those employed by religion.

What religious language signifies primarily are aspiration, self-imposed ideals, approval of one way of life and disapproval of others. It signifies the hoped-for completion of knowledge and the intended perfection of one's own nature. Most people, accustomed to worship, know this fact well, and generally report that, as time goes on, the specific content of a religious service means less to them, while the service as a whole means more. A recent empirical study demonstrates this tendency in reference to prayer. It was found that with increase in religious practice there often goes increased preference for prayers containing beauty and dignity of expression and a corresponding loss of preference for prayers which contain approved single ideas or subject-matter. What grows is the *intent* of the whole act of worship, while the importance of specific *content* recedes.<sup>18</sup>

Many religious systems recognize this fact. Hindu worship enjoins the thousand-fold repetition of the believer's own private name for God, with a special intention to confer meaning upon what would otherwise be a repetitive and routine act. The Catholic Mass is said over and over with the intention to glorify God, and usually with some added special intention for each occasion. When religious intention is steadfast enough it may overlay, and in time overcome, misgivings associated with this or that troublesome item of content.

We conclude, therefore, that doubt less often arises from a consideration of the long-range intent of the religious sentiment than from preoccupation with the constituent images

<sup>18</sup> A. T. Welford. An attempt at an experimental approach to the psychology of religion, *British Journal of Psychology*, 1946, 36, 55-73.