The Open Court

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea

Founded by Edward C. Hegeler

VOL. XLI (No. 8) AUGUST, 1927 (No. 855)

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BUDDHA OF KAMAKURA

Frontispiece to The Open Court

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THE FORMATION OF THE EARLY BUDDHIST SCRIPTURES

BY HOWARD W. OUTERBRIDGE, M. A.; S. T. D.

TO attempt an outline of the formation of the Buddhist Scriptures is a task of such magnitude, and would require so many years of preparatory study, and the knowledge of so many languages, both living and dead, that is is beyond the range of possibility at this time. The best we can hope to do in this chapter is to note the general characteristics of the problem, with a view to a further study of the underlying facts which form the basis of the traditions concerning the life of Sakyamuni, the great founder of Buddhism.

A most important element in preparing for such a study is to set the limits of our endeavours. If all the works of Buddhist Scholars were to be examined, which contain references to the life of the great Founder, the study of many thousands of volumes would be necessary,—most of which have never been translated into English. In certain sects of Japanese Buddhism, for instance, no less than six or seven thousand volumes are recognized as canonical, besides many thousands of commentaries, etc. A study of all of these is of course impossible. It is also unnecessary, since these works are all of late date, and whatever information they contain in regard to events in the life of Sakyamuni, are based upon other earlier works, many of which are themselves available. Subsequent additions to the stories had better be disregarded, for the most part, as being the product of the pious imaginings of a later generation. We will therefore confine our attention for the present to a survey of the writings which were produced during the first few centuries of Buddhism,—those which seem to have been recognized by primi-

tive Buddhism as canonical, or authentic records of what took place during the formative period of that religion.

The first fact which seems clear is that we have no manuscripts coming down from the time of Sakyamuni, or from anywhere near his time. The Indian climate, unlike that of Egypt, was not such as to make possible the long preservation of manuscripts. They must inevitably decay during the centuries. A well-known authority on the subject,—Mr. A. Burrell, writing in the Indian Antiquarian (1880, p. 233) says: "No manuscripts written one thousand years ago are now extant in India, and it is almost impossible to find one written five hundred years ago, for the manuscripts which claim to be of that date are merely old manuscripts, the dates of which are repeated by the copyists." Even had it been possible to preserve the manuscripts during all the centuries, the facts seem to indicate that there were none belonging to the period of Sakyamuni to preserve. In the first place, there was no suitable material. The use of parchment, while common in other lands was not encouraged in India for religious reasons, and the use of leaves or papyrus had not yet come into vogue. Secondly, there is no reference made in any of the early books of Buddhism to a written record. When a point of dispute arose regarding teaching, it was to the memory of those who knew the teaching that an appeal was made. In a section of the *Cullavagga,* one of the later books of the Pali Canon, where the settlement of disputes by the jury method is taught,[1] it is expressly allowed to reject from the jury those Bikkhus or disciples to whom the particular book of instructions in point had not been "handed down",—a procedure scarcely possible if there had been a written record to which an appeal could have been made. The same book speaks of some who were apparently professional reciters or preachers of certain portions of the Buddhist teachings, the Vinayas, Dhamma or Suttas. As late as the third century B. C., reciters of the Pitakas are mentioned, and when, during the same century, missionaries were sent to the island of Ceylon, it was necessary for them first to spend three years in learning to recite the Buddhist teachings.

It must not be inferred, however, that writing was not known in India at the time of Sakyamuni. Mention is made of the art of

[1]Book IV, 14, *Sacred Books of the East,* XV.

writing, in the Pali canon[2] which indicates that it was well known, though the absence of any common and easily available writing material greatly limited its use. The great stone column erected by Asoka to mark the birthplace of the founder of Buddhism, bears upon it an inscription in the Megadhi language, which without doubt comes down from the time of King Asoka himself. (259-195 B. C.) This inscription, together with some pictures representing scenes from the Jatakas, form the oldest extant records of primitive Buddhism.

The passage in the Mahavagga already referred to (I, 49) suggests that at the time it was composed, the art of writing was largely confined to inscriptions in stone. The section reads,

"Upali's father and mother said to themselves, 'If Upali could learn writing, he would after our death, live a life of ease and without pain'. But then Upali's father and mother thought again, 'If Upali learns writing his fingers will become sore'."

The record then continues that these indulgent parents began to consider arithmetic a safer occupation than the apparently dangerous one of writing. If anything can be taken from the story, it strengthens the supposition that, though writing was well known in this early period of Buddhism. it was of little practical value for the preservaion of lengthy records, but was rather chiefly concerned with stonecutting or carving, which caused "sore fingers",—though otherwise a gainful occupation.

As is well known, the preservation of valuable records by oral tradition was, throughout all the East, and especially in India, the recognized and most efficient way of transmission. The amazing diligence and exactness with which the Hindus have transmitted the Vedas through thousands of years by oral tradition is evidence of the wonderful efficiency of the system. It seems to have been less liable to the production of mistakes and variant readings than the method of transcription.[3] It is probable that, as a consequence of this fact, no great need was felt at first for anything more than an oral tradition. But when Buddhism began to spread, the necessity for a written canon gradually appeared. It is possible that the consciousness of this need, which has been so evident in later Buddhism,

[2]Ex. gr. Mahavagga, 1, 49, *S. B. E.*, XIII, 201. See also *S. B. E.* XI, p. XXII.

[3]Compare the fifty to eighty thousand variant readings in the Bible with the two thousand only in the Rig Veda.

may have been the reason for the fact that a Chinese scholar, Hioun Thsang, who travelled in India during the seventh century A. D., brought back the tradition,—also taught by Asvaghosha,—that the text of the Pali Canon had been committed to writing on leaves, immediately after the death of Sakyamuni. While there is no evidence whatever of this claim, the fact that it is so largely accepted by Buddhists today shows that the need for an authoritative record existed, and continues to exist.

Though there is no probability that written records go back to that time, there are strong traditions, which some European scholars think well founded, that there was an attempt to fix upon certain authentic teachings of Buddha, at the first Council, held at Ragagaha in 477 B. C., a week after his death. Just how large this body of authentic teaching was, it is impossible to discover. That it could not be the same as our present Pali Canon is evident. The traces of a later date are too unmistakable. The stories not only of the first Council, but of the second also,—one hundred years later,—are themselves contained in the Canon.[4] It seems probable however, that certain portions of the Canon in its present form do go back to the time of the great founder, and represent the very words spoken by him. Some portions of the Dhammapada, the Sermon of Benares, and other sections, not so well known, bear traces of such originality.

The question of the language in which these scriptures were written should be mentioned here. The probability seems to have been that the language of Sakya and his followers was Magadhi,[5] a language now dead, but closely akin to the Pali,—so closely resembling it in fact, that tradition has identified them. Whatever differences there were may have been dialectical, such for example as are found between the English of London and Yorkshire.[6] Sakyamuni himself seems to have made no effort to retain one language as the authentic medium of his teaching, but preferred to let each tribe receive it and pass it on in their own tongue. He went so far as to explicitly forbid the adoption of the sacred language of the Vedas, as the uniform language of his teachings.[7] It was not long however before the purer Pali dialect began to supercede the earlier tongue,

[4] *Cullavagga*, Bks. XI and XII.

[5] The supremacy of Megadha in N. E. India was due to the conquest of Kosala and Vesali by Ajatasattu, son of King Bimbisara, one of Sakya's early converts. See below.

[6] See Eliot's *Hinduism and Buddhism*, Vol 1, p. 283.

[7] *Cullavagga*, V, 33.

and though there is evidence that certain Megadhi words were retained for a time, it was through the agency of the Pali, and later the Sanscrit languages that Buddhism made its way. The date when the change from Megadhi to Pali occurred cannot be fixed with certainty, but it was probably soon after the reign of Asoka in the third century B. C. The evidence for this date is to be found, on the one side, in the fact that the inscription mentioned above, and dating from Asoka's reign, is in Megadhi, showing that this was the language used by him at the time, and presumably by the great Council which met during his reign. Asoka gives a list of titles of Buddhist teachings, in the Megadhi language. There is also evidence that this was the language of the monks of Pataliputra, where, as some scholars suppose, the Canon was finally fixed. It was, however, just after this period ,when Buddhism became a missionary religion, that the necessity for a change of language appeared.

The immediate effect of this missionary policy seems to have been the adoption of Pali, and later of Sanscrit as the media of transmission. As a result there have grown up two great bodies of literature, one in Pali and one in Sanscrit, through which the religion of the Buddha has been carried on and promoted. The first has been the sacred language of the Buddhists of Ceylon, Burma, Siam and Cambodia, into whose vernacular languages much of the Pali Canon has been translated. Sanscrit, on the other hand, has been the language of the Buddhism of North India, Nepal, Thibet, China, Japan and East Turkestan. The larger differences which underly these two branches of Buddhism we can discuss later.

The Pali Canon

As already indicated, the task of fixing the date of the Pali Canon is a very difficult one. The Buddhist tradition which places it at the great Council of Ragagaha in 477 B. C. immediately after the death of Sakyamuni, is mistaken, though some portions of our present Canon may have been accepted as authentic at that time. Another date accepted by some is that of the Council of Vesali, one hundred years later, in 377 B. C. Still others think the Council held at the Monastery of Pataliputra in the reign of Asoka to have been the date. It is probably a mistake, however, to consider any one of these dates as the definite time when the Canon in its present form was compiled and accepted. The truth seems to be that the formation of the Canon was a gradual process, beginning soon after

the death of Sakyamuni, and continuing for several centuries. In the Cullavagga (Bks. XI and XII) we are told that, at the Council of Ragagaha, one week after their great master's death, Ananda, Kasyapa, Upali and others met together to recite the Dhamma, (teaching) and Vinaya (discipline) in order that their thinking and conduct might be purified.

"Come let us chant together the Dhamma and the Vinaya, before what is not Dhamma is spread abroad and what is Dhamma is put aside, before what is not Vinaya is spread abroad, and what is Vinaya is put aside, before those who argue against the Dhamma become powerful, and those who hold to the Dhamma become weak, before those who argue against the Vinaya become powerful and those who hold to the Vinaya become weak." (Bk. XI, 1).

This somewhat rambling, but characteristic statement suggests the recognition of a need, even at that early date, of strengthening the influence of the sacred words of the Tathagata, and the fact of their authority. In Bk. XII, which tells of the Council of Vesali a century later, much the same terminology is used, though a larger body of sacred teaching is recognized, including the Agamas or four Nikayas, and the Matikas.[8] It is quite probable that at the Council of Pataliputra in 241 B. C., in the reign of King Asoka, a still larger body of teaching, including most of what we now have in the Pali Canon was adopted as authoritative by the leaders of Buddhism.

The evidence produced thus far seems to make clear that there actually took place just what one might naturally expect under the circumstances. The great leader bequeathed to his followers a body of teaching, repeated many times perhaps, in part at least, as he moved from place to place, and incorporating the fundamental doctrines and disciplines of his system. At the time of his death, the necessity of preserving these most valuable treasures was recognized, and the little inner circle of his followers sought by frequent repetition to fix them upon their memories. As the years passed by, it was found necessary to further add to the original body of doctrinal teachings, explanations and amplifications to meet the new questions which continually arose. On the other hand, the increased complications of life and new requirements for discipline made desirable by the growth of the order, necessitated further additions here also. These additions, given by the recognized leaders of the order, and claimed by them to be based on the teachings of the Blessed One

[8] *Kullavagga* XII, 1, 7, 8, 10 *S. B. E.* XX 394.

himself, were accepted without question by the followers of Buddhism and gradually became so incorporated into the original tradition as to be indistinguishable from it. This process continued until what was a comparatively small body of teaching at the time of the death of Sakyamuni had grown to its present enormous proportions.

It is altogether unlikely that we have coming down to us today any single book of the Pali Canon, or even any large part of any book which we can claim to be in the form in which it was originally given by Sakyamuni. We must rather think of the original teachings as being in the form of collections of sayings or anthologies which no longer exist as separate books, but have been incorporated into others. It may even be possible, as Rhys Davids suggests[9] that this process has been twice repeated in the development of the teachings as we now have them. This older material,—which has been compared to the "Logia" of Jesus incorporated into the Gospels,—would naturally be of the nature of short sermons, parables, doctrinal expositions, and such treatises upon discipline and conduct, as the great teacher found necessary for the development of his work. This quite natural supposition finds ample ratification in the evidence which is available. The material which is the core of the teachings of the Tripitaka is precisely of this fundamental character, and suggests that a nucleus has sometimes been worked over in several different ways, each independent of the other, but each finding its source and inspiration in one and the same body of original teaching.

The most trustworthy attempt which has been made to reconstruct chronologically the order in which the various parts of the Tripitaka were produced is found in Rhys Davids last work,[10] in which he makes the following suggestions in regard to their probable order of composition. He places as earliest those brief statements of Buddhist Doctrine which are found to recur in many or all of the Buddhist books; to be followed by those episodes which are found in identical words in two or more of them. These would correspond to the "Logia" which New Testament scholars presume are the earliest underlying sources of our gospels. Next to these more or less scattered and often brief extracts, he places four portions; the Silas or tracts on morality which are found in each

[9]Preface Vol. IV, *Sacred Books of the Buddhists.*

[10]*Buddhist India,* p. 188.

of the thirteen divisions of the Suttantas of the Dilgha Nikaya,[11] the Parayana and Octades which comprise two Cantos of the Sutta Nipata, and the Patimokka or first portion of the Vinaya Pitaka. Following these are to be found certain sections of the first four Nikayas. Then sections E, H, I, C, and A of the Fifth, the Jatakas and the Dhammapada. The last upon the list are the books of the third or Abbidhamma Pitaka. This last portion is much later than the others, and was probably compiled by the Servastavadin school of Buddhism, in the time of Kanishka, in the second century A. D. It was perhaps written and added to the Canon after Buddhism went to Ceylon, though the time of its first dissemination is still an unsolved problem.[12]

All the books of the Pali Canon were probably in their present shape, with the exception of the Abhidhamma Pitaka just mentioned, at the time of the great Council of Pataliputra (241 B. C.) This does not mean that they were not added to or revised later, but it does mean a substantial agreement between the Canon of Asoka's time and our own. The evidence for this theory, which has gained quite universal acceptance among Buddhist scholars, is to be found *first* in the fact that, while the first two Councils,—those of Ragagaha and Vesali,—are mentioned in the Cullavagga, the third,—that of Pataliputra,—is not. This suggests, as Oldenberg points out, that an authoritative body of teachings was already fixed before that date. and the Council was necessary in order to add to it certain desirable portions. Secondly, there is a well attested story in Sinhalese Buddhism that during the reign of King Asoka, his son,—or nephew,—was sent as the first Buddhist missionary to Ceylon, and took with him the Tripitaka teachings in their present form, or approximately so. This tradition is probably true, as is evidenced by the fact that, whereas the Pali form of the Tripitaka has, from an early date been preserved almost exclusively in Ceylon, the civilization and background there reflected is that of Northern India. There is nothing whatever to suggest the environment of Ceylon as being behind any portion of it. In the North the prestige of this Canon was lost and gradually a new set of books was compiled to supersede that which had been transplanted to Ceylon.

The evidence goes farther to show that at the time when the Pali Canon was introduced into Ceylon, it was still in oral form, and

[11] *S. B. B.*, II, p. 3-36.

[12] For complete list see Appendix A.

was reduced to writing at a later date. Among the Sinhalese Buddhist works which appeared after the introduction of Buddhism into Ceylon, there are two, the Dipovamsa and the Mahavamsa which tell of a visit of the Blessed One himself to Ceylon, and explain in this way their right to a first hand knowledge of Buddhist Doctrine. While this story cannot be credited, the Mahavamsa has another tradition which is worthy of our credence. It is to the effect that the monks of Mahavihara decided to write the teachings of Buddhism down, "in order that the faith might long endure".[13] If this story is to be accepted,—as it is by most scholars,—the scriptures of the Pali Canon represent the recensions of the monks of the Mahavihara Monastery, belonging to the Vibhajjavadins sect. It therefore contains the canon of only one sect of Ceylonese Buddhism, and differs from that of other sects, more or less.

Tradition goes on to add that it was at the command of King Vattagamin of Ceylon that this final committment to writing took place. The date has been variously fixed as about 80-20 B. C. It is fairly clear that for at least one hundred and fifty or two hundred years after Mahinda took the teachings of Buddhism to Ceylon, they remained in oral form.

To review briefly the ground covered. It seems plain that the Tripitaka as we find it today in the Pali Canon was written during the first century B. C., in Ceylon, but was brought orally from Northern India a century or two before in practically its present form. It was therefore compiled for the most part during the period which elapsed between the death of Sakyamuni,—c. 477 B. C. and the Council of Asoka, c. 242 B. C. and was handed down by oral tradition. With the probable exception of the third or Abhidhamma Pitaka, most of the material was produced within the first two centuries after the death of Sakyamuni. Much of it goes back to his immediate disciples, and can be taken as the authentic teachings of the Blessed One himself. We will have occasion later to examine some of the earlier books of the Pitakas with special reference to the biographical material they contain.

The Sanscrit Canon

To apply the word Canon to the great mass of literature which was produced in Sanscrit Buddhism is really a misnomer. There have been many sects, and no Canon which has been recognized by

[13] Sinhalese Mahavamsa, XXXIII, 100-4.

all. The earliest books are based upon or are expansions of the works already contained in the Tripitaka. To these however there was later added a large body of scriptures which were based upon the later Mahayana or Greater Vehicle Buddhism, rather than the Hinayana. The gradual disappearnce of Hinayana, and the emergence of the Mahayana sects in North India accounts for the fact that the Sanscrit scriptures are very largely Mahayana in doctrine, and therefore very far removed from the doctrines of original Buddhism.

It would be a mistake, however, to suppose that the Mahayana scriptures are of less importance than the Hinayana. Their practical value far outranks that of the Pali Canon, because of the large number of the world's inhabitants who accepts them. The variety of languages into which they have been translated, and the enormous size of the literature which has grown out of them, makes the task of analysis and valuation a herculean one. Until there is a more careful study of these scriptures on the part of European scholars, however, it will be impossible to estimate the real significance of Buddhism throughout the ages.

The outstanding differences between the Himayana and Mahayana might be summarized as follows. In the Mahayana teachings we find an attempt to suit Buddhism to the needs of the masses. The life of the "Arhat" who attempted to follow out Sakya's last injunction, "work out your own salvation" was too strenuous and difficult for the common folk. In other words, the need of redemption is felt. This expresses itself in the attempt to deify and universalize the Buddha into an Eternal Being, Adoration of this Eternal Being then becomes the way of Salvation rather than the unaided efforts of man. Further help is supplied by changing the idea of Arhat into that of "Bodhisattva" who not only achieves salvation for himself, but refuses to enter Nirvana until he has been able to store up merit for the salvation of mankind. A final point of difference is the enlargement of the idea of illusion to include not only "self" as the Pali scriptures teach, but the whole phenomenal world as well. All is "Maya."

The Sanscrit scriptures, representing a later development for the most part, have less of the historic sense than the Pali works. Large bodies of extraneous matter have been included, much of which is clearly irrelevant myth and legend. The task which lies before the student of Buddhism in the future is to attempt to make

a critical evaluation of this enormous field, which certainly contains many hidden gems, but up to the present lies unexplored.

Chapter II

Sources of Biographical Material on the Life of Sakyamuni

It seems strange at first that the earliest Buddhist scriptures, viz. those which make up the Pali Canon, should contain no biography of Sakyamuni, the founder of Buddhism. It is true that they contain a certain amount of biographical material here and there, which can be pieced together to form a partial life history. But when this is done, the results are surprisingly meager and disappointing. Out of a collection of material approximately twice the size of our Old and New Testaments combined, all of which comes from the two or three centuries immediately following the death of the great Founder of Buddhism, and all of which was definitely selected because of its value for the Buddhist religion, we have a much less consistent and satisfactory account of his life than that which is to be found of the life of Jesus in the Gospel of Mark.

Two further statements must be made however, to qualify what has just been said. In the first place, while he was undoubtedly the founder and organizer, the nature of the system which he set up gave him no vital part in its future. His dying word, "Work out your own salvation with diligence" was the keynote of primitive Buddhism. The interest of the early disciple of Buddhism was not in the details of his Master's history, but in the practical way of life which he had taught, and by means of which each might attain his own salvation. It was therefore quite natural that biography as such should hold a very subsidiary place.

Secondly, although the material is so meager and leaves whole periods of his life uncovered, we have nevertheless a picture of a figure which is very clear and striking at times, and which, even when its lines are hazy and indistinct, continues to dominate the whole scene. It leaves one eager for mere detail, but very thoroughly convinced that behind the great system which was founded and the way of life which was taught, there is a personality of exceptional power, and of real charm and beauty.

It is little wonder then, that we find a change taking place soon after the formation of the Pali Canon. In fact the tendency is clearly visible in certain parts of the Canonical books. The person of the founder began to be of increasing interest to the disciples. They

were not only interested in the new Way of Life which he taught, but were more and more inclined to find a Way of Salvation in Him. To the student of Christian theology, a distinct parallel will appear in the tendencies of the early Church to forget the teachings of Jesus, in their loyalty to His person. The parallel may be carried still further. Just as we have in the Apocryphal Gospels a group of pictures in which the miraculous and fantastic has entirely obscured the historical, so in the later non-canonical accounts of the Buddha there is a very large place given to impossible and miraculous stories about the wonders performed by Sakyamuni and his disciples. The task of sifting and evaluating these stories,—eliminating the legendary elements without destroying the precious core of truth upon which they are built,—is a most difficult one.

The most valuable sources of material which are available for study in English are the following.

1. The Pali Canon. As we have already seen, parts of this Canon go back to a very early period in Buddhist History. There are some indications that it was at first divided into five Nikayas, comprising much the same division as is now found in the second Pitaka, but including the first and parts of the third Pitakas among the Nikayas. This decision however was soon changed, and during the most of the history of Buddhism, the Pali Canon consisted of three Pitakas, or Baskets, commonly known by the Sanscrit term "Tripitaka". The idea which underlies the term basket is fairly easy for anyone who has lived in the East, and has witnessed the process of "handing down" taking place in the material realm. This method is used for coal or earth or sand, and the "basket" is the regular instrument of conveyance, as it is easily passed from one person to another. It is quite natural then, that the term should be used in regard to a body of teaching or doctrine, which was handed down from teacher to pupil, and from generation to generation. The inclusion of the Buddhist teaching into three baskets was a natural and convenient process.

The first of these baskets is called the Vinaya Pitaka, or Discipline Basket, and contains, (1) Rules for Monks and Nuns, regulating their conduct and discipline, residence in the rainy season, clothing, housing, medicine, etc. (2) The Kandakas or Chapters further subdivided into the Mahavagga or Greater Course and the Kullavagga or Lesser Course. Here we have one of the best sources of Biographical material, particularly in the Mahavagga, which in-

cidentally gives a considerable amount of valuable data concerning the life of Buddha. (3) The third section, the Parivara is simply an appendix, and is not translated into English.

The second basket is by far the largest and most important. It is called the Sutta Pitaka, or Teaching Basket, and contains two hundred and thirty seven Suttas, or bodies of teaching, divided into five Nikayas. This division is a purely arbitrary one, based upon the length or nature of the Suttas, and has no relation whatever to their teaching. (1) First the Digha Nikaya, or collection of long Suttas, contains thirty four in all, some of which are translated into English. In this collection occurs the most important single source of material for the like of Sakyamuni,—the Mahaparinibbana Sutta, or the Book of the Great Decease, which tells of the death of the Enlightened One, and is in all probability, the earliest and most authentic bit of record which we have of his life. It is the "earliest beginning of a biography". Even here, however, we do not have a single consistent work. There is unmistakable evidence of a piecing together of two or more narratives, based upon two different and opposed views of the nature of the Buddha,—one picturing him as human, the other divine. The Mahapadamana Sutta gives an account of the Miracles of Buddha. It is therefore safe to consider it as quite late. A further evidence is found in the fact that it teaches the existence of seven Buddhas in all, of which Sakyamuni was the last. (2) The Majjhima Nikaya consists of 152 "Middle Length Suttas", dealing with a large variety of subjects. Here too, different strata are clearly visible, some of which are early, taking a purely human view of the great teacher, others looking upon him as divine, and a miracle-worker. (3) The Samyutta Nikaya or Collection of Combined Lectures, contains 56 sections or Suttas, the most important of which is the last one, the famous "Sermon of Benares", which tells how to set in motion the "Wheel of the Law". This sermon has suffered later recensions no doubt, but there is evidence that in its main features it goes back to a very early date, and in all probability represents an actual discourse of Sakyamuni. It is very short, but contains the most fundamental teachings of his system. (4) The Anguttara Nikaya contains a collection of lectures dealing with subjects of which there are one, two, three or four, etc., right up to eleven. These subjects are chosen upon no other basis but their ability to fit into the numerical scheme. It is divided into eleven sections, and contains 2300 Suttas. Both the artificial scheme which

it represents, and the view of the person of Buddha which it reveals argues for its lateness. It is of little biographical value. (5) The Kudda Nikaya or Collection of Small-Piece Lectures, is divided into fifteen parts. The names of these have already been given[14] so will not have to be repeated here. A large number and variety of subjects are dealt with. The Dhammapadda or Way of Virtue, which comes second in the list, is one of the best known and finest pieces of Buddhist literature. There are a large number of Psalms, some of which have been translated into English. The only section which is at all biographical in its nature is the collection of Jatakas, or stories of the career of the Buddha in some of his former rebirths. They are in reality however, Hindu folk-tales, which have been worked over for Buddhist purposes, and are not at all historical in their nature.

The Third Pitaka, Abhidhamma Pitaka or Higher Religion Basket, as we have already seen is of later date than the rest of the Tripitaka. It is more philosophical in its character, and of no value for biographical purposes. The tradition is that this is the teaching which the Buddha gave to the gods in heaven. It is much more profound than most of the other parts of the canonical writings. Some portions only are translated.

2. Non-Canonical sources. It is very evident that the early Buddhists felt the need of a consistent life history of their founder before many centuries had passed. Particularly was this the case in the Mahayana Sects which made his person rather than his teachings central. We accordingly find in later Buddhism a large number of "lives" of the Buddha, practically all of which present us with a picture which has been highly elaborated by the imaginations of the admirers and worshippers of the "Blessed One".

(1) *Buddha Charita.* This life of the Buddha was written in Sanscrit, probably by Asvaghosha. It is a little uncertain just which Asvaghosha it was(as there were at least two and perhaps three men of that name in early Buddhism. It seems probable however, that he lived in the first century A. D. The lateness of its date is evident (1) from the fact that it contains a large number of miraculous details, and (2) from the high degree of reverence paid to the person of the Buddha. The book as we now have it, and which has been translated into English in the *S. B. E.* series contains seventeen chapters, only thirteen of which, we are told, are the work of

[14] See Appendix.

Asvaghosha,—the last four being the work of a modern Nepalese writer, who seeks to supply the missing material relating to the later life of the Buddha. The thirteenth chapter brings us up to the great temptation of Sakyamuni by Mara. The effort to complete the story of his life in four chapters, when the first part has been related in such detail, at once strikes the reader as somewhat incongruous. It is very evidently a makeshift. So far as the original goes however, it is perhaps the most satisfactory, and certainly one of the very earliest,—if not quite the earliest—attempts to give a complete historical sketch of the great founder of Buddhism.

2. *The Fo Sho Tsan King.* This work, also translated into English in the *S. B. E.* series is a translation into Chinese of the Buddha Charito of Asvaghosha,—at least that is what it purports to be. In some parts the resemblance is so slight however that it seems scarcely discernable. In other places, while the resemblance of thought is visible, the one is clearly a very loose paraphrase of the other, with no attempt whatever at verbal accuracy, or even identity of thought, so far as one can tell from the translations. It is true however, that up to the fourteenth chapter much the same program is followed, and the same subjects dealt with. Giving due allowance for the translator's license, and the desire to express his own personality and loyalty in his translation, it is quite possible to believe that the Buddha Charita of Asvaghosha was the basis of the Chinese work,—up to the thirteenth chapter. From that point on there is no resemblance in the two works as they now exist. The question at once arises, what is the source of the material which underlies the latter part of the Chinese work. One answer would be that the author left the Buddha Charita and has sought elsewhere for his material. The Mahavagga and in particular the Mahaparinibbana Sutta are sources which at once suggest themselves. It seems more likely however that the original Buddha Charita did actually contain the complete life history of the founder until his death, and the history of the movement for some time after. This latter part, now lost, was perhaps founded upon the original sources just mentioned,—the Mahavagga and the Mahaparinibbana Sutta,—which accounts for the resemblance which the Chinese version bears to them. It seems quite probable then that the Fo Sho Hing Tsan King is throughout a free paraphrase, but otherwise a fairly true translation of the original and complete Buddha Charita.

3. Other Chinese *Lives of Buddha.* While the one just mentioned is the most reliable[15] there are no less than fourteen other Chinese "lives" known to European scholars. Several of them purport to be translations into Chinese of the Abhinishtramana Sutta, otherwise known as the Lalita Vistara. Another of these is translated into English in Beal's Romantic History of Buddha, which he claims is based upon the Fo Pen Hing King, (or Fo Pen Hing Tshi King?) which in turn was perhaps a translation of the Lalita Vistara.

4. *Lalita Vistara.* This work, which has been the basis of many of the later biographies seems to have been originally the Buddha biography of the Saravastavadins, with certain later recensions by Mahayana scholars. The name signifies that it contains a detailed account of the play of Buddha. The date and author are uncertain. It was written originally in Sanscrit prose. There is an English translation by Ragendralala Mitra, and a careful one in French. Sir Edwin Arnold's "Light of Asia" was based upon the account given in this work. This poem, which to my mind is one of the finest in English literature, gives a most interesting and fascinating picture of the great sage. It is very clearly however, a poetical work and not an historical evaluation of the facts of the life of Sakyamuni. The rich imaginative oriental pictures of the Lalita Vistara have been still further enriched or softened by occidental tintings. The result while most delightful from an aesthetic point of view, adds nothing to the store of facts for which we are searching.

5. *The Jina Charita.* This work which comes from Ceylon, has held an important place in the history of Buddhism in that island, but seems to be little known outside. It is supposed to have been written by a King of Ceylon, named Medhankara. There were three kings of that name, it seems, but as their reigns all occurred between the years 1071-1265 A. D. it makes little real difference which it was.[16] It is very clearly of late origin. It is a very short work, partly poetical in its nature, and gives a fairly concise account of the usually accepted events in the life of Sakyamuni. It has been translated into English by Duroiselle.

6. *The Legend of the Burmese Buddha.* This Legend is found in its English translation in a two volume work by Bigandet. The

[15]See Rhys Davids Preface to the "Fo Sho Hing Tsan King" in *S. B. E.*

[16]Saunders gives the date as the 12th century A. D. but the author as Buddadatta. See *Gotama Buddha*, p. 3.

account which it gives covers the same main ground, but is evidently influenced by an alien environment,—quite different from that of the Indian and Sinhalese records. The constant presence of "Nats" or spirits, sometimes malevolent, sometimes benevolent, but always present, is a striking feature of this account. Historically it is of little value, though it has interest for purposes of comparison.

In attempting to evaluate the sources available to us, it will be necessary to follow some standard. We cannot accept all the accounts of the life of Buddha as of equal historical value. Some represent a very early tradition, some a period many centuries later. Other things being equal, the earlier traditions will be of greater value, as representing a time nearer the actual event. It will also be necessary to give a wide margin for the oriental imagination in the picturing of scenes. Historic accuracy in recording what took place is scarcely to be expected. Neither however can a tradition be dismissed summarily because it contains improbable details. Very much of ancient history would have to be given up were this method applied. If we are to try to find the core of fact beneath the overgrowth of fiction, we too must exercise a little imagination, and seek to find, as nearly as we can from the accounts, what actually did happen, in the life of the Buddha.

Such a quest is by no means an unworthy one. Next to Jesus Himself, there has perhaps been no figure in history who has been so great a source of inspiration to countless millions of men right down through the ages, as has this earnest seeker after truth, who left all that most men hold dear, and with nothing but his begging bowl and a few rags, trod the pathway of suffering and shame, that he might find a way of peace for mankind. Any light which helps us to understand how he lived, and the source of his wonderful power, in his own soul and over the minds and affections of men, will well repay our search.

ETHICS—WITH OR WITHOUT RELIGION

BY VICTOR S. YARROS

MANY books and articles have been written by modernists who hold that the way to vindicate or reinvigorate Religion is to prove that, after all, it only inculcates the virtues of love, charity, mercy, sympathy, and that, therefore, religion is merely another name for morality.

In animadverting upon this species of apologetic literature, a British critic said recently with impatience, "Commonplace morality is *not* religion."

No, of course not. Commonplace morality is manifestly based on expediency and utility.[1] A totally irreligious society—using the phrase in a conventional or traditional sense—would need, and enforce, a commonplace morality not different in any respect from that of Christian or Mohammedan or Buddhist societies.

But the question arises: Is the *hi her* morality religion, or, in other words, is the higher morality possible without a religious basis and sanction? By the "higher morality" we mean, as does everybody, certain manifestations of Altruism, such as positive beneficence and self-sacrifice.

[1]It is not to be denied that even certain Agnostics fall into the error of claiming that religion is neither more nor less than ordinary, commonplace morality. They quote James' words, "Pure religion and undefiled before God and the Father is this, To visit the fatherless and widows in their affliction, and to keep himself unspotted from the world". Or they quote Jesus' "The Kingdom of God is within you", and his ethical commandments and sayings. What these interpreters overlook is the emphasis on religion in their quotatons. The first of all the commandments, according to Jesus, is, "Love the Lord thy God with all thy heart." Neither Jesus nor his disciples dreamed of the possibility of divorcing ethics and morality from religion. The fatherhood of God was to them the primary and fundamental doctrine, and without love and worship of God, love or charity for man was to them inconceivable. And certainly between *their* religion and *their* ethics there was no possibility of antagonism, whatever may be the case with corrupt, obsolescent, dogma-ridden and superstitious religious systems.

If we take the position that morals and religion are indissolubly united, no difficulty presents itself, and the highest forms of altruism stand justified and explained. *If* all men are brothers, and this brotherhood is based on the fatherhood of God, an omnipotent and omniscient power; and *if* love, service and sacrifice on earth are rewarded by eternal bliss hereafter, or by the supreme satisfaction of knowing that in losing one's life, one finds it enhanced a thousand fold, then, indeed, no injunction of religion can be considered to be alien to the potentialities and possibilities of human nature.

But what of the Agnostic? Having divorced morals from religion; having affirmed that the phrase "fatherhood of God" is without meaning to him, the Agnostic is compelled to supply new sanctions for morality in all its essential aspects. It is, of course, hardly necessary to say that there is no such thing as Agnosticism (though there is relativity) in regard to morals. Societies cannot live or grow without moral codes adjusted to their realized needs. It is almost inconceivable that society should permit or tolerate murder, arson, theft, forgery, rape, libel, malicious mischief, etc. Criminal codes are primarily moral codes. Even traffic codes are moral codes, and moral codes, as a rule, are rational. The freedom of any individual in any civilized state *must* be bounded by the equal freedom of all other individuals.

In making such affirmations as these we are assuming, of course, that adequate moral codes are possible without religious sanctions. What are they?

The Agnostic or skeptic will point, first of all, to utilitarian considerations. He will argue, and rightly, that no rational person will defend murder, burglary, theft, etc., and, further, that if a society were formed *de novo,* on a desert island, by Agnostics, there would be virtual unanimity in favor of substantially the same moral code as settled societies follow and enforce. No supernatural or mystical elements are required to justify the familiar prohibitions of the criminal code. Expediency and Hedonism supply all the motives and sanctions that are necessary.

Two questions, however, arise at this juncture. First, what of the so-called *absolute* duties, moral and legal—that is, duties the performance of which yields no reciprocal benefit? Why, for example, should we refrain from inflicting cruelty upon animals—creatures not members of our body politic? Or, again, why should we treat criminals and outcasts of normal intelligence—and there

are such, *pace* certain extreme schools of psychiatry—with humanity and mercy? Why should we abolish capital punishment, reform our prisons, extend parole and probation laws to more and more offenders?

The answer of the Hedonist to these queries is likely to be this: In sparing animals, or in progressively humanizing our treatment of criminals, we are really sparing and pleasing *ourselves*. The more civilized we are, the more painful it is to us to contemplate pain suffered by others, even when the pain is deserved. Our higher nature dictates forbearance, mercy and forgiveness. Hedonism, accordingly covers absolute duties and mitigation of merited penalties. The second question is more difficult. It is this: How can *self-sacrifice* be justified on utilitarian or Hedonistic principles? Why should anyone give up his life for the sake of an idea or a cause? By what right does the secular or Agnostic state send men to their death contrary to their own will and their own conception of self-interest?

Herbert Spencer grappled with these difficulties. We know what his solution was. He believed in the transmission by physical or biological inheritance of certain acquired characters, as well as in the operation in societies of the factor of natural selection. He was convinced—though on what we now see was rather inadequate evidence—that man has long been gradually adjusting himself, and being adjusted by unconscious evolution, to the completely social life. He believed that there has been, and that there will continue to be, evolution in human sentiments and emotions. He believed that the apparent, and for a time real, opposition between Egoism and Altruism was slowly disappearing, and that ultimately "due egoism" will be achieved by giving pleasure and service to others. Because of the postulated social and moral evolution, according to Spencer—"What now is occasional and feeble even in men of the highest nature may be expected to become habitual and strong, and what now characterizes the exceptionally high may be expected eventually to characterize all. For that which the best human nature is capable of, is within the reach of human nature at large."

Now, the best human nature is capable of self-sacrifice and of deliberate unselfish assumption of the gravest risks. Indeed, in the best natures self-sacrifice is spontaneous, not the result of cold calculations and balancing of advantages and disadvantages. Therefore, on the theory of indefinite perfectibility and upward develop-

ment, even the average human being will in time achieve the capacity of self-sacrifice. To be sure, Spencer pauses to observe, in a harmonious and full-grown society the occasions for anything like serious self-sacrifice will be infrequent, since extensive demands on the superior, the benevolent and the altruistic members of society presuppose much misery, in justice and unhappiness, and these conditions argue grevious lack of adaptation to a truly social state. Still, he contends, the rare occasions for sacrifice will produce keen competition for the privilege, as the satisfaction of the impulse to sacrifice will be very highly prized.

This reasoning, however, involves some question-begging. Why *does* moral or social evolution tend to produce capacity for self-sacrifice. Because, the answer must be, it is impossible for societies or nations to survive and flourish without that asset. In the struggle for existence the societies whose members lacked that impulse and capacity, the theory is, would decline and perish, while the more fortunate societies, whose members were ready to make all manner of sacrifices for the general good, not excepting the sacrifice of life, would grow strong and possess the earth.

But has there ever been such competition among tribes and states? Has any society permitted men to refuse to make sacrifices for the general good? No nation or state is willing, or ever was willing, to live by voluntary taxation, for example, or to relinquish war-time conscription. No state has ever recognized what Spencer, in his radical days, called " the right of the individual to secede", to refuse to pay taxes or serve in the army or navy, or in the militia, when called upon to do so. We are assured by some sociologists that the state would be stronger if it did respect the scruples of non-resistants and pacifists and exempted them from services they conscientiously disapproved of. We are told that the free state would be so dear and sacred to free men that they would rush chivalrously to its defense whenever it was threatened by less noble or enlightened states. There is some truth in this, but exactly how much? No one can know.

What is certain is this—that the duty of the individual to serve the state at any risk or cost to himself is, and has been for ages, inculcated by the churches, the statesmen, the moralists, the educators, the politicians and the publicists of all schools, as well as by the artists. The pressure of the social atmosphere is all but ir-

resistible. Men *feel* that they have practically no choice. The compulsion of the law is supplemented by that of public opinion.

Only in recent years has the doctrine been promulgated by social radicals that the state must *deserve* service and sacrifice, and that the immoral or despotic state, or the wasteful and inefficient state, has no real claim on the individual citizen. This doctrine of the moral basis of the state is, however, purely academic. In practice every state appeals to force as the last resort, and is almost universally upheld in that course. Men instinctively bow to the state and admit its right to rule and to require of them any sacrifice it may deem necessary. Individuals may question and assail the state's policies; they may regard the sacrifices demanded of them in war time, or in times of internal stress and danger, as unfair and vain. They may charge the state with blunders and crimes, and attribute these to the egotism, vanity, ignorance or malice of men clothed with brief authority. (But who can doubt that "My country right or wrong" is the perfectly spontaneous doctrine of most men, of nearly all men, in fact?

Can reason, logic, expediency, utility account for this attitude, or must the explanation for it be sought in mystical and super-rational or non-rational elements?

Let us see how a great philosopher, Spinoza, dealt with the issues we have raised, and especially with the sanctions of ethics and the relation between the individual citizen and the state. Of course, Spinoza was a profoundly religious thinker and not a Hedonist or utilitarian. Yet how does he fashion or justify his system of Ethics? Does he invoke mystical sanctions? Does he treat the supremacy of the state and of law as corollaries of the Fatherhood of God and of the divine governance of the human world? By no means.

Spinoza, in the fourth section of his Ethics, proceeds almost as the Greek philosophers did or as the English radical utilitarians did. He knows that conceptions of right and wrong, good and bad, in conduct are the foundations of morality. He begins, therefore, with definitions of good and bad, and his definitions are very modern and Hedonistic.

"Good," he says, "is that which we certainly know to be useful to us," and "bad that which we certainly know will prevent us from partaking of any good." By "us", we must assume, Spinoza means those of us who are normal mentally and emotionally, and whose

firm and mature, or certain, judgments commend themselves to the great majority of reasonable and well-balanced human beings.

Again: "The knowledge of good and evil is nothing else than the emotion of pleasure or pain, in so far as we are conscious of it."

"Since," continues Spinoza, "man endeavors to persist in his being and to avoid pain and experience pleasure, what does reason tell him as to the means of realizing the maximum of possible happiness?" His answer is elaborate, but we may condense it as follows:

Reason postulates that each man should love himself and seek what is truly useful to him; that each should desire whatever leads to a state of perfection. The basis of virtue is in action in accordance with the laws of one's nature, or the endeavor to preserve what is one's own. Since, however, we cannot be happpy without possessing many desired things that are without us, virtue and happiness cannot be achieved in isolation and in narrow self-indulgence.

Now, there is nothing more useful to man than man. Nothing, therefore, can be desired by men more excellent for their self-preservation than that all with all should so agree that they compose the minds of all into one mind, and all seek at the same time what is useful to them all as a body. Under the guidance of reason then, men would desire nothing for themselves which they do not also desire for the rest of mankind, and therefore they would be just, faithful and honorable. Even hatred and injustice should be repaid with love and charity, for minds are conquered not by arms, but by love and magnanimity. And, although men are too often governed by evil passions rather than by reason, they cannot fail to recognize that they derive more advantages than disadvantages from society, and therefore it is right and wise to bear injuries with equanimity and to promote only the institutions, customs and ways which tend to produce social harmony and social peace.

It will be seen that Spinoza finds no need for mystical, non-rational, supernatural elements in his ethical system. Utilitarian considerations answer every purpose of the social contract. But so for, it should be noted, *there is no mention of any real self-sacrifice.* Spinoza speaks of bearing certain injuries with equanimity, because the advantages conferred by organized society outweigh any ordinary disadvantages—for exmple, errors of justice, or weakness and negligence in administration, or failure to protect a particular group against sporadic mob violence—and because an individual would lose infinitely more than he could gain by seceding from society,

assuming that he had that alternative. But what of giving one's life for the good of society and at its command? Spinoza avoids this question, perhaps because in his day it hardly presented itself. Yet some of his remarks furnish a clue to his logical answer thereto. He goes on to argue that men, because of their passions, appetites and short-sightedness, can only be made to refrain from inflicting evil by threats of greater evil. Society or the state does this; it prohibits certain courses of conduct and punishes them; it enforces obedience to law by threats, not by appeals to reason. The citizen, then, must feel that such obedience is necessary. In fact, "sin becomes nothing else than disobedience, and is punishable by right of the state alone," says Spinoza.

It may be inferred from this reasoning that it is the duty of the citizen to obey an order of the state *even when it means risking or losing his life.* Without obedience, Spinoza says, the state is insecure and weak. It is, for the State, therefore, to determine when, or whether, perils facing it are of a character and degree to demand self-sacrifice of its members.

Thus it may be contended that, in advocating obedience to the law and the state, and therefore to those who at any given time authoratively speak for the State, Spinoza did contemplate sacrifice as one of the obligations assumed by the tacit social contract, or by membership in organized society.

Spinoza, however, overlooks the fact that obedience to authority is not *always* a sin, but, on the contrary, may be a virtue. There may be a conflict between one's own sense of right, one's own reason and conscience, and the command of authority. History is replete with such instances. From Socrates down to the Abolitionists and the conscientious objectors, men of rectitude, courage and conviction have maintained that morality may be superior to law and in advance of it. They have accepted the consequences of disobedience, but neither they nor their thoughtful fellow-citizens have regarded them as sinners or criminals. Here is a seeming paradox, but the truth is that self-sacrificing devotion to truth, to duty as one conceives it, to an ideal, in short, is nobler and more courageous than self-sacrifice, at the command of authority, for the common good as interpreted by that authority. We may be sure that Spinoza, if he were writing today, would draw a distinction between organic society and the political state, and another distinction between self-sacrifice for the welfare of society *as one conceives it* and self-sac-

rifice at the command of officers and functionaries who happen to wield power for a time. In other words, obedience to one's own still, small voice, to one's own sense of right, is often a higher virtue than obedience to the state.

But obedience, self-subordination, sacrifice, altruism in the highest form, are indispensable to society and to human progress. The philosophic utilitarian concedes this in theory as fully as the evolutionist of mystical proclivities.

It must be admitted that the mystic and theologian are entitled to argue that the Agnostic Hedonist is interpreting history to suit his preconceived theory, and that it is impossible to *prove* that altruism in its highest forms or degrees would have evolved in a society totally untouched by mysticism and religion. On the other hand, it is equally open to the Agnostic and Hedonist to assert that, at bottom, not faith in any supernatural factors, nor fear of divine wrath, not yearning for divine love, not religion, in a word, but human needs and conditions, human emotions and sentiments born of struggle and competition, satisfactorily account for altruism and sacrifice. One may doubt whether this controversy will ever be terminated by agreement.

What the Agnostic and the philosophic Hedonist will never concede, however, is the claim that without a religious sanction or explanation social and individual morality are of necessity reduced to the lowest and simplest forms. It is sufficient to refer to Spinoza's line of argument for a refutation of that contention. And to say, as some did of the English Utilitarians, that they were finer than their creeds, was merely to indulge in shallow, cheap sneers and patent fallacies. Men of all creeds, and no creeds, have been fine and noble. Men build creeds, in the first place, although good and fine creeds play a part in making and improving men. In the making and remaking of creeds reason plays the controlling part, though it gives full weight to sentiments and emotions. It is an egregious error to treat reason and calculation as synonymous terms. It is a graver mistake to belittle reason.

In a recent book, Prof. Maurice Hutton, of Toronto University, discusses the relative importance of reason and conscious Hedonism, on the one hand, and religious mysticism or intuition, on the other. To quote a few typical sentences:

"If a man must be governed by understanding, it will be by the understanding of the lower things of life, for the highest things

pass understanding; of peace (true peace), of righteousness, of wisdom a man has a suspicion, a vision, a gleam, a divination, as Plato says, but not yet comprehension: 'through a glass darkly' he sees, if at all. And therefore the demand that life be based upon logic, reason and comprehension inevitably sinks into a basing of life on that common sense 'which is intolerable without metaphysics', on that horse sense which is only one degree, I apprehend, removed from jackass sense, and on materialism."

Prof. Hutton asserts that in the great and important actions men are governed, not by reason, but by the indwelling sense of duty, and that, *pace* the Greek thinkers, knowledge is not and cannot beget virtue. The virtuous man does his duty because of a categorical and intuitive imperative, not because he discerns any personal advantage to himself in performance of duty.

These assertions contain a small element of truth, but only a small element. Psychologists and scientific ethicists do not admit that reason supplies no warrant or sanction for acts of justice, of beneficence, of altruism. There is joy and personal satisfaction in service; there is, as Spencer contended, pleasure in sharing pleasure. There is self-realization and self-expression in what may appear unselfish service. And even when real sacrifice *is* demanded, reason—not "horse sense," to be sure, but reflective reason—has no difficulty in accounting for the readiness to make such sacrifice and for the spontaneous impulse to sacrifice.

To affirm that reason cannot justify great actions, nobility of conduct, and that the attempt to follow it leads one straight to crude egotism and crass materialism, is to deny, by implication, that civilization enriches the individual and makes him freer, better and worthier than he could possibly be in a "state of nature", with its risks, perils and sufferings.

Our conclusion is two-fold. In the first place, service, altruism, sacrifice are *facts*, not mere possibilties. Being facts, reason and science must account for them. In the second place, the theory of social evolution *does* furnish a satisfactory explanation of those facts. Social evolution, obviously, might and should produce justice, beneficence and altruism, even if mysticism had never dominated the minds of men. And the evolutionary theory of social morality is strengthened by the abstract argument from utility properly understood, as Spinoza, for example, understood it.

We do not know what the religion of the future will be. We

know that science is modifying religion and purging it of childish superstitions and of verbal, meaningless terms. But we know also that science *fortifies social morality instead of undermining it;* that science urges sobriety, temperence, tolerance, humility, industry, co-operation, solidarity, sympathy, respect for personality, release and development of human faculties.

And these are of the essence of social morality. They can dispense with the prop of mysticism and dogma, as can science.

SOME SEVENTEENTH CENTURY COSMIC SPECULATIONS

BY J. V. NASH

NO more fascinating subject of speculation can engage the human imagination than the problem of the existence of life on other planets besides our earth, and the sort of forms that this life may take. Here is a field for the play of fancy, the extent of which is boundless and the romantic possibilities of which far exceed anything to be found in the *Arabian Nights.*

The recent approach of the planet Mars to a distance several millions of miles nearer the earth than it has been for many years or will be again for a long period, has brought the subject of life on other planets again to the fore. So far at least as Mars is concerned, the observations of its surface which have been made recently do not seem to have yielded any particularly significant additions to our knowledge regarding Martian geography and the nature of the life, if any, on that interesting neighbor of the earth.

The verdict of modern science with reference to the possibility of organic life on other planets than the earth, with the exception of Mars, and perchance Venus, is far from favorable. The four larger planets seem quite certainly inhospitable to life, as they are not sufficiently condensed; and even if they were, their immense distance from the sun would not permit sufficient light and heat to reach their surface for the support of life.

Mercury and Venus, on the other hand, are too close to the sun for comfort. Worse still, Mercury is supposed to turn on its axis in exactly the same period as it revolves round the sun, so that the Mercurial day and year are equal; hence the same side is always turned to the sun and the temperature of this side is probably always above the boiling point, while the other side is plunged in

eternal night at a temperature of from 200 to 300 degrees below freezing.

Venus is interesting as being of nearly the same size as the earth, but it is 25,000,000 miles nearer the sun. Its mean temperature is, therefore, much higher than that of the earth. It is a bright planet, long familiar in the heavens as the morning and evening star. Its surface, however, is covered by dense masses of cloud and dust, so that no permanent markings can be discerned through our telescopes, and its period of rotat[illegible]fore unknown. Some astronomers believe that, like Mercury, one side may be constantly turned toward the sun. Interesting experiments are just now being made at Yerkes Observatory of the University of Chicago, in the use of infra-red rays, by means of which it is hoped to pierce the cloud masses which envelope Venus and secure photographs of its surface.

Until comparatively recent years, when the progress of astronomy made available more accurate information as to the conditions prevailing on the various planets, it was easy to jump to the conclusion that they were in a state somewhat similar to that of the earth, and, as a consequence, that they were inhabited by an amazing profusion and variety of life.

One of the earliest and quaintest books devoted to speculations upon the nature of life on other planets was published in London, in the year 1698, under the title *The Celestial Worlds Discover'd Or, Conjectures Concerning the Inhabitants, Planets and Productions of the Worlds in the Planets.* Its author was Christian Huygens, a celebrated Dutchman, who was a brother of the Secretary to King William III of England.

Christian Huygens was born at The Hague in 1629. He was a mathematician, physician, and astronomer. The new International Encyclopaedia gives him a biographical notice of over a column. At the invitation of the French government, Huygens settled in Paris, was made a member of the Academy, and lived in France for a number of years. He was the author of a large number of scientific and philosophical works in Latin. He was the first to apply the pendulum to clocks and his researches in gravity paved the way for the great work of Newton. Huygens also was the first to construct powerful telescopes, and in 1655 he discovered the ring of Saturn.

Another of his notable inventions was the micrometer, which

made possible the accurate measurement of small angles viewed through a telescope. He was likewise the originator of the wave theory of light, and of the theory of polarization. In 1660 he visited England and became a member of the Royal Society. He died in 1695.

Because of Huygens' solid achievements in science, his fantastic speculations in this forgotten little volume are of curious interest. As we are told in the preface, the author did not live to publish the manuscript personally. He left instructions for its publication by his brother, the royal secretary, to whom it was dedicated. But the brother, likewise, was taken by death before he could see the work through the press. It was originally written in Latin, the language of the learned world at that time. By whom it was translated into English and edited for publication is not revealed. The publisher's foreword indicates that there was also an edition in the original Latin.

It is interesting to note that as late as 1698 it was so unusual for a scientific work to be published in the vernacular that the publisher of our little book wrote in justification:

"I doubt not but I shall incur the Censures of learned Men for putting this Book into English, because, they'l say, it renders philosophy cheap and vulgar, and, which is worse, furnishes a sort of injudicious people with a smattering of Notions, which being not able to make a proper use of, they pervert to the Injury of Religion and Science. I confess the Allegation is too true: but after Bishop Wilkins, Dr. Burnet, Mr. Whiston, and others, to say nothing of the antient Philosophers, who wrote in their own Tongues; I say after these great Authors have treated on as learned and abstruse Subjects in the same Language, I hope their Example will be allowed a sufficient excuse for printing this Book in English."

It should be remembered that when this quaint book was published, the Copernican system was still comparatively novel; the rotundity and motion of the earth were ideas which were as yet by no means universally understood and accepted. The author's opening words, in which the Copernican theory is referred to with some diffidence, are in this light particularly significant. He says:

"A Man that is of Copernicus's Opinion, that this Earth of ours is a planet, carry'd round and enlighten'd by the Sun, like the rest of them, cannot but sometimes have a fancy, that it's not improbable that the rest of the Planets have their Dress and Furniture,

nay and their inhabitants too as well as this Earth of ours; Especially if he considers the later Discoveries made since Copernicus's time of the Attendants of Jupiter and Saturn, and the Champain and hilly Countrys in the Moon, which are an Argument of a relation and kin between our Earth and them, as well as a proof of the Truth of that System."

The author goes on to speak of the speculation of philosophers and astronomers with reference to life on other heavenly bodies:

"This has often been our talk, I remember, good Brother, over a large Telescope, when we have been viewing those Bodies, a study that your continual business and absence have interrupted for this many years. But we were always apt to conclude, that 'twas in vain to enquire after what Nature had been pleased to do there, seeing there was no likelihood of ever coming to an end of the Enquiry. Nor could I ever find that any Philosophers, those bold Heroes, either antient or modern, ventur'd so far. At the very birth of Astronomy, when the Earth was first asserted to be Spherical, and to be surrounded with Air, even then there were some men so bold as to affirm, there were an innumerable company of World's in the Stars. But later Authors, such as Cardinal Cusanus, Brunus, Kepler, (and if we may believe him, Tycho was of that opinion too) have furnish'd the Planets with Inhabitants. Nay, Cusanus and Brunus have allow'd the Sun and fixed Stars theirs too. But this was the utmost of their boldness; nor has the ingenious French Author of the Dialogues about *the Plurality of Worlds* carry'd the business any farther.. Only some of them have coined some pretty Fairy Stories of the Men in the Moon, just as probable as Lucian's true History; among which I must count Kepler's, which he has diverted us with in his Astronomical Dream."

He proceeds to tell how the book came to be written:

"But a while ago thinking somewhat seriously of this matter (not that I count myself quicker sighted than those great Men, but that I had the happiness to live after most of them) methoughts the enquiry was not so impracticable, nor the way so stopt up with Difficulties, but that there was very good room left for probable Conjectures. As they came into my head, I clapt them down into common places [note-books], and shall now try to digest them into some tolerable Method for your better conception of them, and add somewhat of the Sun and Fixt Stars, and the Extent of that Universe of which our Earth is but an inconsiderable point. I know

you have such an esteem and reverence for any thing that belongs to Heaven, that I perswade my self you will read what I have written without pain: I'm sure I writ it with a great deal of pleasure; but as so often before, so now, I find the saying of Archytas true, even to the Letter, That tho a Man were admitted into Heaven to view the wonderful Fabrick of the World, and the Beauty of the Stars, yet what would otherwise be Rapture and Exstasie, would be but a melancholy Amazement if he had not a Friend to communicate it to. I could wish indeed that all the World might not be my Judges, but that I might chuse my Readers, Men like you, not ignorant in Astronomy and true Philosophy; for with such I might promise my self a favourable hearing, and not need to make an Apology for daring to vent any thing new to the World. But because I am aware what other hands it's likely to fall into, and what a dreadful Sentence I may expect from those whose Ignorance or Zeal is too great, it may be worth while to guard my self beforehand against the Assaults of those sort of People."

The author is anxious to defend himself against possible critics, and to show that his ideas are not repugnant to the teachings of the Bible:

"There's one sort who knowing nothing of Geometry or Mathematics will laugh at it as a whimsical and ridiculous undertaking. It's mere conjuration to them to talk of measuring the Distance or Magnitude of the Stars; And for the Motion of the Earth, they count it, if not a false, at least a precarious Opinion; and no wonder then if they take what's built upon such a slippery Foundation for the Dreams of a fanciful Head and a distemper'd Brain. What should we answer to these Men, but that their Ignorance is the cause of their Dislike, and that if they had more Sense they would have fewer Scruples? But few people having had an opportunity of prosecuting these Studies, either for want of Parts, Learning or Leisure, we cannot blame their Ignorance; and if they resolve to find fault with us for spending time in such matters, because they do not understand the use of them, we must appeal to properer Judges.

"The other sort, when they hear us talk of new Lands, and Animals endued with as much Reason as themselves, will be ready to fly out into religious Exclamations, that we set up our Conjectures against the Word of God, and broach Opinions directly opposite the Holy Writ. For we do not there read one word of the Pro-

duction of such Creatures, no not so much as of their Existence; nay rather we read the quite contrary. For, That only mentions this Earth with its Animals and Plants, and Man the Lord of them: but as for Worlds in the Sky, 'tis wholly silent.

"Either these Men resolve not to understand, or they are very ignorant; For they have been answer'd so often, that I am almost asham'd to repeat it: That it's evident God had no design to make a particular Enumeration in the Holy Scriptures, of all the Works of his Creation. When therefore it is plain that under the general name of Stars or Earth are comprehended all the Heavenly Bodies, even the little Gentlemen round Jupiter and Saturn, why must all the multitude of Beings which the Almighty Creator has been pleased to place upon them, be excluded the Privilege, and not suffer'd to have a share in the Expression?

"And these Men themselves can't but know in what sense it is that all things are said to be made for the use of Man, not certainly for us to stare or peep through a Telescope at; for that's little better than nonsense. Since then the greatest part of God's Creation, that innumerable multitude of Stars, is plac'd out of reach of any man's Eye; and many of them, it's likely, of the best Glasses, so that they don't seem to belong to us; is it such an unreasonable Opinion, that there are some reasonable Creatures who see and admire those glorious Bodies at a nearer distance?"

Our author next seeks to show that the study of the stars is not only a worthy and useful occupation, in that it increases our store of knowledge, but that it also leads to a feeling of greater reverence for the Creator:

"But perhaps they'll say, it does not become us to be so curious and inquisitive in these things which the Supreme Creator seems to have kept for his own knowledge: For since he has not been pleased to make any farther Discovery or Revelation of them, it seems little better than presumption to make an inquiry into that which he thought fit to hide. But these Gentlemen must be told, that they take too much upon themselves when they pretend to appoint how far and no farther Men shall go in their Searches, and to set bounds to other Men's Industry; just as if they had been of the Privy Council of Heaven; as if they knew the Marks that God had plac'd to Knowledge or as if Men were able to pass those Marks.

"If our Forefathers had been at this rate scrupulous, we might

have been ignorant still of the Magnitude and Figure of the Earth, or of such a place as America. The Moon might have shone with her own Light for all us, and we might have stood up to the ears in Water, like the Indians at every Eclipse: and a hundred other things brought to light by the late Discoveries in Astronomy had still been unknown to us. For what can a Man imagine more abstruse, or less likely to be known, than what is now clear as the Sun? That vigorous Industry, and that piercing Wit were given Men to make advances in the search of Nature, and there's no reason to put any stop to such Enquiries.

"I must acknowledge still that what I here intended to treat of is not of that nature as to admit of a certain knowledge; I can't pretend to assert any thing as positively true (for that would be madness) but only to advance a probable guess, the truth of which every one is at his own liberty to examine. If any one therefore shall gravely tell me, that I have spent my time idly in a vain and fruitless enquiry after what by my own acknowledgement I can never come to be sure of; the answer is, that at this rate he would put down all Natural Philosophy as far as it concerns it self in searching into the Nature of things: In such noble and sublime Studies as these, 'tis a Glory to arrive at Probability, and the search it self rewards the pains. But there are many degrees of Probable, some nearer Truth than others, in the determining of which lies the chief exercise of our Judgment.

"But besides the Nobleness and Pleasure of the Studies, may not we be so bold as to say, they are no small help to the advancement of Wisdom and Morality? so far are they from being of no use at all. For here we may mount from this dull Earth, and viewing it from on high, consider whether Nature has laid out all her cost and finery upon this small speck of Dirt. So, like Travellers into other distant Countrys, we shall be better able to judg of what's done at home, know how to make a true estimate of, and set its own value upon every thing.

"We shall be less apt to admire what this World calls great, shall nobly despise those Trifles the generality of Men set their Affections on, when we know that there are a multitude of such Earths inhabited and adorned as well as our own. And we shall worship and reverence that God the Maker of all these things; we shall admire and adore this Providence and wonderful Wisdom which is displayed and manifested all over the Universe, to the

confusion of those who would have the Earth and all things formed by the shuffling Concourse of Atoms, or to be without beginning."

The reader is then treated to a lengthy description of the solar system, so far as the facts were known in the seventeenth century. An engraving, one of several in the book, shows only six planets, including the earth. Uranus and Neptune were undiscovered at that time. The discovery of Neptune, in the nineteenth century, was one of the greatest triumphs of the human mind. Long before it was actually perceived, nearly three billions of miles from the sun, its existence was mathematically proved by reason of certain peculiarities in the orbit of Uranus. When powerful telescopes were focused on the spot indicated by the delicate calculations, the planet was found.

Having shown that the earth is governed by the same natural laws as are the other planets our author proceeds:

"Now since in so many things they thus agree, what can be more probable than that in others they agree too; and that the other Planets are as beautiful and as well stock'd with Inhabitants as the Earth? or what shadow of Reason can there be why they should not?

"If any one should be at the dissection of a Dog, and be there shown the Intrails, the Heart, Stomach, Liver, Lungs and Guts, all the Veins, Arteries and Nerves; could such a Man reasonably doubt whether there were the same Contexture and Variety of Parts in a Bullock, Hog, or any other Beast, tho he had never chanc'd to see the like opening of them? I don't believe he would. Or were we thorowly satisfy'd in the Nature of one of the Moons round Jupiter, should not we straight conclude the same of the rest of them? So if we could be assur'd in but one Comet, what it was that is the cause of that strange appearance, should we not make that a Standard to judg of all others by? 'Tis therefore an Argument of no small weight that is fetch'd from Relation and Likeness; and to reason from what we see and are secure of, to what we cannot, is no false Logick. This must be our Method in this Treatise, wherein from the Nature and Circumstances of that Planet which we see before our eyes, we may guess at those that are farther distant from us."

Modern Science, I fear, cannot make much use of this worthy seventeenth century Dutchman's "Logick," since it has now been proved that the planets are in very dissimilar stages of evolution, to

say nothing of the immense differences in the amount of light and heat which they receive from the sun.

But our author with kindling enthusiasm goes on:

"And, First, 'tis more than probable that the Bodies of the Planets are solid like that of our Earth, and that they don't want [i. e., lack] what we call Gravity, that Virtue, which like a Loadstone attracts whatsoever is near the Body to its Center. And that they have such a Quality, their very Figure is a proof; for their Roundness proceeds only from an equal pressure of all their Parts tending to the same Center. Nay more, we are so skilful now adays, as to be able to tell how much more or less the Gravitation in Jupiter or Saturn is than here; of which Discovery and its Author you may read in my *Essay of the Causes of Gravitation*."

Through several pages our Author demonstrates, as he thinks, to the reader's as well as his own satisfaction, the suitability of conditions on the other planets for the propagation of plants and animals, and their probable resemblance in many respects to the fauna and flora of earth. He continues:

"Here then we have found in these new Worlds Fields warm'd by the kindly Heat of the Sun, and water'd with fruitful Dews and Showers· That there must be Plants in them as well for Ornament as Use, we have shown just now. And what Nourishment, what manner of Growth shall we allow them? Why, I think there can be no better, nay no other, than what we here experience; by having their Roots fastned into the Earth, and imbibing its nourishing Juices by their tender Fibres. And lest they should be only like so many bare Heaths with nothing but creeping Shrubs and Bushes, we'll e'en send them some nobler and loftier Plants, Trees, or somewhat like them: These being the greatest, and, except Waters, the only Ornament that Nature has bestow'd upon the Earth. For not to speak of those many uses that are made of their Wood there's no one that is ignorant either of their Beauty or Pleasantness."

The plants and trees, it seems, are propagated by seed, as on the earth. He then indulges his fancies concerning the planetary animals:

"'Tis much the same in Animals as 'tis in Plants, as to their manner of Nourishment, and Propagation of their kind. For since all the living Creatures of this Earth, whether Beasts, Birds, Fishes, Worms, or Insects, universally and inviolably follow the same constant and fixt Institution of Nature; all feed on Herbs, or Fruits,

or the Flesh of other Animals that Fed on them: since all Generation is perform'd by the impregnating of the Eggs, and the Copulation of Male and Female: Why may not the same rule be observ'd in the Planetary Worlds? For 'tis certain that the Herbs and Animals that are there would be lost, their whole Species destroy'd without some daily new Productions: except there be no such thing there as Misfortune or Accident: except the Plants are not like other humid Bodies, but can bear Heat, Frost and Age, without being dry'd up, kill'd, or decay'd: except the Animals have Bodies as hard and durable as Marble: which I think are gross Absurdities.

"If we should invent some new way for their coming into the World, and make them drop like Soland Geese from Trees, how ridiculous would this be to any one that considers the vast difference between Wood and Flesh? Or suppose we should have new ones made every day out of some such fruitful Mud as that of Nile, who does not see how contrary this is to all that's reasonable? And that 'tis much more agreeable to the Wisdom of God, once for all to create all sorts of Animals, and distribute them all over the Earth in such a wonderful and inconceivable way as he has, than to be continually obliged to new Productions out of the Earth? And what miserable, what helpless Creatures must these be, when there's no one that by his duty will be obliged, or by that strange natural fondness, which God has wisely made a necessary argument for all Animals to take care of their own, will be moved to assist, nurse, or educate them?"

We next come to the rational inhabitants of the planets, concerning whom our Author indulges in a wealth of imagination. He begins:

"But still the main and most diverting Point of the Enquiry is behind, which is the placing some Spectators in these new Discoveries, to enjoy these Creatures we have planted them with, and to admire their Beauty and Variety. And among all, that have never so slightly meddled with these matters, I don't find any that have scrupled to allow them their Inhabitants; not Men perhaps like ours but some Creatures or other endued with Reason. For all this Furniture and Beauty the Planets are stock'd with seem to have been made in vain, without any design or end, unless there were some in them that might at the same time enjoy the Fruits, and adore the wise Creator of them.

"But this alone would be no prevailing Argument with me to

allow them such Creatures. For what if we should say, that God made them for no other design, but that he himself might see (not as we do 'tis true; but that he that made the Eye sees, who can doubt?) and delight himself in the contemplation of them? For was not Man himself, and all that the whole World contains, made upon this very account? That which makes me of this opinion, that those Worlds are not without such a Creature endued with Reason, is, that otherwise our Earth would have too much the advantage of them, in being the only part of the Universe that could boast of such a Creature so far above, not only Plants and Trees, but all Animals whatsoever: a Creature that has a Divine somewhat within him, that knows, and understands, and remembers such an innumerable number of things; that deliberates, weighs and judges of the Truth: a Creature upon whose account, and for whose use, whatsoever the Earth brings forth seems to be provided. For every thing here he converts to his own ends."

After some reflections upon man's moral nature, he goes on by analogy to postulate humanlike senses and intellectual characteristics in the Planetarians. Our author is quite liberal in allowing these beings to possess various articles of convenience and comfort. They know how to read and write, and they use a variety of instruments. But he hesitates to admit that they wear spectacles. He explains:

"But for all our large and liberal allowances to these Gentlemen, they will still be behind-hand with us. For we have so certain a knowledge of the true System and Frame of the Universe; we have so admirable an invention of Telescopes to help our failing Eyesight in the view of the bigness and different forms of the Planetary Bodies, in the discovery of the Mountains, and the Shadows of them on the Surface of the Moon, in the bringing to light an innumerable multitude of Stars otherwise invisible, that we must necessarily be far their Masters in that Knowledge.

"What must I do here? I could find in my heart (and I can see no reason why I may not, except it be to flatter and complement ourselves in being the only People that have the advantage of such excellent Inventions) either to alow these Planetary Inhabitants such sharp Eyes as not to need them, or else the use of Glasses to help the deficiency of their Sight. And yet I dare not, for fear People should be so disturbed at the ridiculous Extravagancy of such an

Opinion, as to take the measure of my other Conjectures by it, and hiss them all off, upon the account of this alone."

He grants that there is no logical reason why the Planetarians' bodies should not be widely different from those of human beings; yet he avows that it would be a shock to think of them in this way. "I cannot without horror and impatience," he owns, "suffer any other figure for the habitation of a reasonable soul. For when I do but represent to my Imagination or Eyes a Creature like a Man in everything else, but that has a Neck four times as long, and great round sawcer Eyes five or six times as big, and farther distant, I cannot look upon't without the utmost aversion, altho at the same time I can give no account of my Dislike."

As to the size of the Planetarians, they are presumably of generous proportions. "For," he reflects, "if we should make them little Fellows about the bigness of Rats or Mice, they could neither make such observations as are requisite; nor such Instruments as are necessary to those Observations. Therefore we must suppose them larger than or at least equal to our selves, especially in Jupiter and Saturn, which are so vastly bigger than the Planet which we inhabit."

Our author's fancy is still far from exhausted. He throws out interesting conjectures as to the forms of industry and recreation that exist among the Planetarians. On the subject of music he is especially eloquent. We find, too, a great deal of serious astronomical data concerning the several planets jumbled with his extravagant fancies. There is a mine of interesting and entertaining matter in this unique old book, but space limitations preclude further quotation. Here we must take leave of Christian Huygens, astronomer, mathematician, and precursor of Jules Verne and H. G. Wells.

THE SCIENTISM OF GOETHE

BY BIRGER R. HEADSTROM

IN his creation and portrayal of Werther, there had gradually taken place within Goethe a transformation that was to give definition to his entire life. Werther's enthusiasm for nature, his imaginative absorption in the phenomena around him, in the character of the landscape, in the changes of the seasons and the weather, had assumed in the mind of the great Poet the character of a deep scientific interest. From being merely a lover of nature, who clung with passion to reality and sought to fix it in his drawings and poetry, he had become a naturalist; and affected by the emotions which the sublimity of nature inspired within him, he aspired to a more profound conception of the world and the processes which govern it.

Life at Weimar, in country, wood and garden, brought natural objects more clearly before his eyes, and afforded him the opportunity of making a closer acquaintance with the realities of nature and the processes by which they are developed. Forestry led to botany, and the Ilmenau mining works, of which he had the official superintendence, led to mineralogy and geology; and of the pleasure he found in the latter science he once wrote: "Since I have had to do with the mines of Ilmenau, I give myself and my soul to mineralogy." This profound enthusiasm was bound to find expression in some form. In an eloquent essay on granite, he not only gave indication of the trend his thoughts were taking but justified the transition from "the contemplation and description of the human heart—that youngest, most manifold, varying, and changeable of creations—to the observation of the oldest, firmest, deepest, most imperturbable son of Nature." The disciple of Spinoza revelled in the contemplation of the universe, eternally changing, but changing according to unchangeable laws. The poet needed to conceive of Nature as an active and living organism, carrying out its life as a

whole into its parts, and believing that she is slow and steady in her action; that the earth is subject to gradual processes of transformation for which enormous periods of time must be allowed. This view he also extended to the organic world believing that gradual changes are continually taking place, but that the transformations of vegetable and animal species are not the results of leaps and bounds but gradual developments extending over infinite periods of time. The close intimacy between plants and animals he associated with the idea of a blood relationship of all organic beings to one another, by means of which man had developed from animals and animals from plants. There can be no doubt but that Goethe, and his contemporary Herder, both, more or less, grasped the point of view which we associate with the name of Darwin. Nature makes no leaps, he said with Leibniz, but rather functions as a consecutive development from a beginning to an end, proving his faith by the discovery of the intermaxillary bone in man and thereby disproving the asserted difference between the skeleton of man and that of the ape. This discovery afforded him infinite happiness and attested the love with which he sought to explain the inexplicable mysteries of Nature. "In accordance with the teaching of the Gospel," he wrote to Herder from Jena, "I must inform you with all my haste of a piece of good luck which has befallen me. I have found neither gold nor silver, but which gives me inexpressible delight—the os intermaxillare in man!" And to Frau von Stein, he wrote: "I have had a most delightful experience; I have made an anatomical discovery that it is important and beautiful. You shall share it too. But no word of it to anyone. A letter has also announced it to Herder under veil of secrecy. My joy is such that all my bowels are stirred within me."

It was the tendency of modern natural science, since Copernicus, to escape illusions which the mere sensuous perception of things so often provoked, by considering things instead by the sense of direct perception. The fancy and imagination of the poet's mind rebelled at the methods of study followed by his contemporaries, and he cherished against the Newtonian doctrines somewhat the same hatred which Hamann felt for analysis. An opposition, similar between that of Herder and Kant, separated him from the enlightened school of the eightenth century. "Distinguishing and counting," he himself says, "did not lie in my nature." It was rather by the mere sensuous perception, to which he combined an associated

imagination and practical examination, of the realities of nature that enabled him to promote his research so successfully in the realm of science, differing in this respect from the mathematical procedure which characterized the school from Newton to Kant. It was inconceivable to him how the application of mathematical procedure could explain the phenomena of plant types to which he had devoted his energies, and which finally led to his noteworthy discovery of which he wrote to Frau von Stein: "If I could only share my vision and my joy with any one, but it is impossible. And it is no dream, no phantasy; it is a discovery of the essential form with which nature, as it were, is forever but playing, and, in playing, brings forth life in all its variety. Had I time in our brief space of life, I make bold to say that I would spread myself over all nature's kingdom—over her whole kingdom!"

It was not, however, the mere acquisition of knowledge that impelled his assiduous activity, but rather the enthusiastic desire to extend existing knowledge. "The time will soon come," he wrote in 1782, "when fossils will not be arranged pell-mell, but relatively to the epochs of the world." And two years later he feels he is on the road to an intelligible conception of the earth's formation, when he wrote, "The ideas I have conceived on the formation of the globe have been well confirmed and justified, and I can say that I have seen objects which, while confirming my system, surprise me by their novelty and grandeur."

Goethe's attitude was vastly different from that of the ordinary scientist. His interest in his discoveries was not for themselves, but rather for the light they shed upon the processes of nature as a whole. He had constantly persisted in attaining a conception of the Kosmos which would satisfy both his intellect and his heart, and all his endeavors had been instituted towards the realization of certain conceptions to which he had arrived, and which he felt explained the purpose of creation and gave harmony to the progress of things. In a letter to Knebel relative to his paper on the intermaxillary bone we have this passage: "The harmony of the whole makes every creature what it is, and the human being is a human being as much by the form and nature of his upper jaw as by the form and nature of the last joint on his little toe. And so, again, every creature is but a tone, a shade of a great harmony, which must be studied in its entirety, otherwise no individual has any meaning." As a result he was profoundly struck by the contrast

between the action of men and the processes of inanimate things. "The strangest feature in the way things are connected is that the most important events that can happen to a man have no connection with each other, "but he nevertheless felt himself comforted in the inconsistency of this view by the fact that "the consequences of nature made abundant amends for the inconsequences of man." In *Die Natur*, he has summarized his conception of the processes of nature in its totality. It is a rhapsody on the relation in which man stands to "the unsearchable, unconditional, self-contradictory being," that animates the universe. Later he thought it the expression of "a kind of pantheism," although defective because it fails to recognize what he calls "the two mainsprings of all nature,"—polarity and ascent.

Goethe everywhere sought in the order of nature for verification of the ideas which he had developed à priori. He conceived that it is in the right conception of the processes of nature that man's true attitude to the universe depends, and that in these processes of nature the simplest means are invariably employed to effect Nature's ends. He was a positive thinker on the à priori Method,—a method vicious when the seeker rests contented with his own assumptions, or seeks only a partial or hasty confirmation with facts—what Bacon calles *notiones temerè à rebus abstractas* but a method eminently philosophic when it merely goes before the facts (anticipating what will be the tardy conclusions of experience. He reserved all inquiry into final causes,—by Bacon admirably styled, "barren virgins," —and attempted to find what IS.

It was the synthetic against the analytic mode of regarding nature. And for the Poet, the controversy between Cuvier and St. Hilaire was of paramount importance for upon the outcome depended the future of humanity. The question whether truth or error, and therefore whether good or evil, was eventually to triumph was of profound and permanent interest to him, and affected him deeply, for it was the animating principle of all his thinking on art, philosophy and religion, it was his conception of nature, for which St. Hilaire contended. "From the present time," he said, "mind will rule over matter in the physical investigations of the French. There will be glimpses of the great maxims of creation, of the mysterious workshop of God! Besides, what is all intercourse with nature, if, by the analytical method, we merely occupy ourselves with individual material parts, and do not feel the breath of the spirit

which prescribes to every part its direction, and orders, or sanctions, every deviation by means of an inherent law?" His heart, as well as his intellect, was in all his nature study, and seeing her with a poet's as well as with a student's eye, he communicates, as only a poet can, the sense of her being, "a living garment," in endless and ceaseless change.

THE FUTURE POSSIBILITIES OF BUDDHISM

BY DALJIT SINGH SADHARIA

THERE are many reasons for thinking that Buddhism may become a religion of the future and be the most potent single influence in serving the religious and spiritual needs of mankind. It is, as we all know, not a new thing, but a long, well and firmly established, and still an advancing religion. It is the faith of the majority of the world's population, and one third of the human race lives and dies in the tenets of Gautama. It has moulded the religious and social institutions, sentiments, and usages of the people of Asia and has leavened their literature and laws. Nor is its influence confined within the borders of its former conquests, but it extends to all parts of the civilized world. During the last sixty years it has come to exercise an increasingly powerful influence and has become a strong rival of Christianity. Poets and philosophers alike have been attracted by the doctrines of the Buddha. The words Sar, Samsar and Nirvana have become current expressions of many a modern poet, not only in their descriptions of scenes relating to the world in which we live, but also in their pictures of salvation from this world of error, guilt, suffering, and death. The soul-stirring poetry of Richard Wagner is largely influenced by the ground thoughts of Buddhism, and the philosophical system of the great German thinker, Schopenhauer, is based and rests on the pessimistic side of Buddhistic thought. Atheistic and agnostic philosophers of all countries and climes who are united by their common philosophical ties, have found in Buddhism a source of consolation and their ally to oppose the revealed or supernatural religion. Huxley, Hartmann, Feuerbach, Emerson, Paul Carus, and a host of others have imbibed more or less of its sublime doctrines and have interpreted them in the light of their own philosophies. It has captivated the minds of Fausboll, Max Muller, Lilly,

Lillie, Annie Besant, Edwin Arnold and others, and has found in them their strongest sympathizers. The Religion of Humanity of Auguste Comte with its exclusion of overruling and creating deity is philosophical Buddhism, pure and simple, adapted to modern civilization. The rise of modern Buddhism is one of the most remarkable phenomena in the religious evolution of humanity, and its present renaissance is fraught with serious consequences.

The first and the most important reason which promises to make Buddhism the religion of the future is the personality of its noble Founder. The purity of life, the nobility of character, truthfulness, and gentleness of the Buddha, have left an indelible impress on the ages and have made him an immortal of history. His winning nature, burning love for humanity, sacrifice of princely leisure and comfort to find out a way of salvation, have carried his feeble voice echoing through the long halls of time and have endeared him to the hearts of millions. It is even more striking when one contrasts his character with the other religious teachers of mankind. The Buddha, unlike the founders of other religions, does not claim to have received any divine inspiration or to be a messenger from God. He does not look upon himself as in any way divine or invested with miraculous and supernatural powers. He does not pretend to stand on a higher religious pedestal than the rest of his fellow-beings and does not arrogate to himself superiority over others. He does not enjoin upon his followers to regard him as in any way a superior being and to worship his name. He does not fetter mankind with miracles, revelations, or any decrees of his own. He breathes no revenge for the disobedient and no forgiveness for the pentinent. He is above all jealousy and demands no allegiance. He is not a creator governing his rebellious subjects but a physician who diagnoses the disease of humanity and prescribes the cure. Those who do not follow his regime have nothing more to suffer in addition but only from the effect of disease itself. He is a teacher who shows us how to extricate ourselves from the evils of this world and how to attain an everlasting peace and bliss.

The second great reason which will guarantee the future of Buddhism is undoubtedly its relation and attitude towards science. Its teachings are not in conflict with modern science. The great truths of modern investigations that man has no knowledge of the Absolute and Supreme Being, that soul is a bundle of sensations and ideas; and that the universe is ruled by an irrefragable and

immutable law of causation, were long ago taught by the Buddha. Buddhism is above all a cosmocentric religion. It does not conceive the universe as the theatre or scene of human drama, but the great drama itself, outside of which there is no action, no life, no being. Here is striking resemblance between Buddhism and modern science. For science is atheistic in exactly the same sense as is Buddhism. Neither of them postulate the existence of a personal Divine Creator and Providence and do not concern themselves with problems which cannot be brought within the domain of demonstrable philosophy. Both centre their attention, in positivist fashion, on the phenomenal world, the world that is verifiable in human experience and has an obvious and direct bearing on human actions and human weal and woe. Twenty-five centuries ago the Buddha rejected and despised the theory which ascribed to God the attributes of mercy, justice, goodness and the like. He could not persuade himself to believe that a merciful and well-intentioned divine Providence tolerates the prevalence of sin, misery, poverty, and numerous other evils. Nor could he indulge in the monstrous absurdity that an all-powerful Deity has not enough power to counteract the evil tendencies of the evil-doer. Like science, he dispensed with all such transcendental problems and justly contended that it is utterly futile to speak of the nature of the "absolute" since our mind is limited and seriously circumscribed by its operations. It cannot even know the real constitution of a particle of dust floating in space before our eyes, and it is a sheer act of irrationality on our part to found our principles of conduct on an unknown God. This positive atheism of Buddhism which has long been regarded by theologians as its chief defect is its greatest glory and a strong recommendation in the eyes of many a scientific thinker.

The third great reason which will make Buddhism the religion of the future is its doctrine of reason. The follower of the Buddha is not fettered by any infallible authority, any inspired book which cannot err or the decrees of church councils, to accept the findings of modern science and philosophy. He is asked to follow only one guide, the guide of his reason, no matter where it may lead. The fundamental principle is, which it first inculcates regarding all higher intellectual problems, that nothing should be accepted as truth unless put to the crucial test of investigation and unrelenting scrutiny. Reason is exalted over faith, traditions, authority and the like, and it is this modern note which will make it acceptable to the majority

of the race. In all the great religions of the world reason is relegated to the background, if not actually despised, and faith is made the cornerstone of religion. Buddhism on the other hand gives prominence to reason and grapples with the problems of life, not by the aid of blind faith and mere speculative reasoning, but on the strength of objective experience and inductive processes of investigation.

The fourth great reason which will make Buddhism the religion of the future is its spirit of tolerance. In this it stands alone among all the great religions of the world. Never and no where, where established has it persecuted or maltreated the followers of other religions whose beliefs were fundamentally opposed to its own. Its history has never been marred by bloodshed, and the followers of the Buddha have never fallen into the dismal abyss of intolerance. No wars have been waged for its propagation, and no inquisition has been founded to secure uniformity in faith or to stamp out heresy. Intellectual conviction is the cornerstone of Buddhism as faith is the foundation of other religions. Freedom of thought has prevailed and prevails in all the Buddhist countries, and no savage persecution of human intellect and knowledge has ever been recorded. Those who criticize or reject the authority and teachings of the Tirpitkas are not branded as heretics and their writings are not consigned to the flames, but are respected and well listened to. The follower of the Buddha is absolutely free to reject what he cannot reconcile with his reason, and in so doing he is proving a good Buddhist. The Tirpitkas do not occupy the same position in Buddhism as the Bible in Christianity, the Koran in Islam, and the Vedas in Hinduism. They are good books containing profound moral and spiritual truths and serve as guides through the dark waters of life. But they are by no means repositories of revealed knowledge, and it is not binding on the Buddhist to follow them blindly at the expense of reason. If they happen to come in conflict with the findings of modern scholarship and contain historical inaccuracies, the Buddhist is free to relegate them to the realm of myths and legends. They are simply symbols expressing some profound religious truths and their rejection or elimination would not affect the teachings of the Buddha a jot or tittle.

Buddhism is a system of vast magnitude. It embraces so many philosophical conceptions and touches so many problems of life, that it would not be the least exaggeration to describe it as the store-

house of many philosophies and religions. It embodies in its giant structure grand and peculiar views of physical science, a highly developed abstract metaphysics, a fanciful mysticism, and sublime idealism, and the most advanced system of rational ethics. It is equally fitted to meet the demands of the most ignorant and the most cultured and can satisfy the longings of human intellect as well as of the heart. This is one of the secrets of its remarkable power of adaptation to the changing conditions of the times and its ability to conform to the intellectual standards of the present age.

The whole Buddhist system, moreover, is combined and worked up in such a manner, that the essentials of Buddha's teaching can be reduced to a simple and intelligible formula that makes it easy for the simple-minded layman to grasp and understand. Its doctrine of Four Noble Truths and the Eightfold Path can be intelligently followed even by the most ignorant, and yet it is full of such philosophic depth and metaphysical complications as to provide food for years of meditation to the metaphysician, the poet, and the mystic. The Buddhist doctrines of Karma, of knowledge, are of such as only the trained metaphysician can ever hope to grasp in their entirety, and volumes might be written to clarify their meaning. Buddhism is the only religion that can satisfy spiritual and intellectual cravings of mankind and can withstand the merciless logic of modern science.

The fifth great reason which will make Buddhism the religion of the future is its sublime optimism. This comes something like a shock to those who are taught to believe by some superficial scholars that Buddhism regards this life as a necessary evil and is a system of dire pessimism. This is a mistake, and those who regard it a gospel of passivity and identify it with pessimism, betray a colossal ignorance of Gautama's ethics and philosophy. It is true that it recognizes the preponderance of evil, but it does not say that there is no hope for redemption from care and suffering and that evil is invincible. It shows us the way how to grapple manfully against the contending forces and enables us to extricate ourselves from vulgar error and to share the serene peace of impersonal vision. The goal of Nirvana is not a negative but a positive ideal. It is life itself made glorious by self-conquest and exalted by boundless love and wisdom. Onwards, and ever onwards, and subject to his dominion an ever increasing moral and spiritual energy, is the fundamental fact of the life of the Buddhist. He does not resign himself, like the followers of other religions, to the quiescent fatalism of inex-

plicable predestination but believes in the rational exploitation of the universe. He has unbounded confidence in his own abilities and does not depend for his salvation on priests, sacrifices, ceremonies, divine grace and the like. "It is nothing", the Buddhist says, "but the attainment of 'Budhi', that ideal state of moral and spiritual perfection which lies entirely within human reach and which can be reached by human means. The gospel of inaction and pessimism bears the same relation to Buddhism as fire does to water. It is a religion of action, dynamic energy, and the highest type of optimism that has ever been revealed to mankind. It is one of the most distinguishing features which wholly separates it from all other religions and is its great glory in our profoundly self-assertive age.

These are some of the most important reasons which embolden one to prophesy a glorious future for Buddhism. Religions based on blind faith are perishing before the inexorable advance of scientific knowledge and are slowly losing their hold on the popular mind. A brand of superstition is being placed upon beliefs which a hundred years ago had exacted the absolute and unquestioned assent of their votaries. They were good when men needed to be taught as children and are anachronisms in this age of enlightenment and progress. But the excellent Law of the Buddha is confined to no age and is not subject to space and time. His doctrine of Four Noble Truths and the Eightfold Path is as true today as when he first taught it, and ever will be true. That religion only which has overcome the primitive notions of revelations, personal eternality of the soul, of atonement by blood, of punishments and rewards, creation out of nothing or dust by a God magician, deserves or is likely to become the religion of mankind.

A LETTER TO A FRIEND

Postscript

DURING the next few years I was recovering my nervous equilibrium, avoiding serious feminine entanglements, and eschewing religious and philosophical speculation. For occupation I taught history and commercial subjects. I was almost afraid to think, although I wrote several superficial newspaper and magazine articles.

It was a period of dissatisfaction, depression, and the emptiness of negation. I had convinced myself that Coincidence and overstrain were the only factors in my experience—that the breakdown had been merely pathological, though due to no inherited mental weakness or congenital abnormality. Our family stock was sound and sane, though zealously religious on the maternal side. Overwork had caused a nervous collapse, or mental fever, of no more permanence than an acute physical disease like typhoid or pneumonia. But the horror and the shame of what is popularly termed "insanity" had cut deep and undermined my confidence. For a while I feared recurrence.

I tried to put the experience out of my mind by varied activities—athletic coaching and social diversions out of school hours. Work, sports and amusement alike left me exhausted and depressed. I realized that I was getting nowhere. A futile protest against graft in handling our city school supplies decided me. I had saved some money and returned to College, after five years, to finish.

Again I developed intellectually in the academic atmosphere and was saved from introspection by the congenial group at the Club. My life was not so intense. I was out of training for intercollegiate athletics. Interclub baseball, football and tennis were merely healthful pastimes.

But, toward the end of my Senior year, as the inevitable result

of my renewed contact with ideas, there came a supplementary adjustment. One definite factor, in this second experience, was the resumption of friendly relations with my former "divinity". This dangerous lady, still unmarried, was now a teacher of biology and an ardent feminist, scornful of what she considered "the superstitions of religion". Her very skepticism was both a challenge and a check to my hereditary mysticism.

My second "awakening" occurred in the Spring of 1913, this time in a small preceptorial group in McCosh Hall. The subject was politics. Seven years had brought big changes in democracy. The radical liberalism of Lloyd George and the democratic idealism of Woodrow Wilson were now moving both England and America. The slogan "Votes for Women", almost unheard of in 1906, was in the air. The sane leadership of Anna Howard Shaw and the dramatic militancy of the Pankhursts crowded the newspapers with front page stories and propaganda, pro and anti.

Some reference in the preceptorial discussion started a train of thought in which Feminism emerged very definitely as a moral and spiritual force, despite extremists. We were sitting around the table. The back of my chair was tilted against the wall. The recollection of my former experience returned—similar emotions, but much less intense. This time I was more discriminating. . . . The idea was symbolism . . . not deification . . . I may have been right after all . . . yet terribly wrong. . . Hadn't known where to draw the line. . . It wasn't a personal apotheosis. . . The new name was just a symbol . . . Social salvation . . . Perhaps Feminism . . No silly false idealization . . . But potential regeneration (God knows, lots of women needed it!) . . . Personal responsibility . . . Duties as well as rights . . . Women realizing their true power . . Democratic self-reliance . . . Emancipation from superstition . . . No pagan goddess stuff . . . Individuals didn't matter . . . Still, the idea had come to *me* . . . Like Kipling's "Explorer" that Axson had recently read to us!

"Anybody might have found it, but His Whisper came to me". . .

I tilted forward and the legs of the chair dropped to the floor. The realization was terrifying. I was afraid of myself. Was this the return of insanity? —another atavism? For a moment I felt faint and giddy with the weight of oppression, and the whirl of mystic forces hovering and battling in the room. I think a dog barked outside—or was it a hell-hound in my imagination? That

strange sense of experience duplicated—memories repeated! The tension was almost unbearable,—the air stifling. As before, a Force seemed to urge me up and out. Yet professor Ford's expository voice droned on and on. I vaguely remember something about Wilson's "Constitutional Government"—probably his pet theory of the representative nature of the Presidency. . . . I gripped the arms of the chair, hard. And instead of rushing out of the room, I pulled my wits together and resisted the urge. Quietly I took part in the discussion. and when we left at the end of the hour, no one present knew that I had passed a crisis.

Never again did I lose control, or even feel that terrible gripping fear, described by Stevenson, that is more agonizing than madness itself after all restraint has been thrown off. Never again did I "tune in" on an unseen world. One experience of that kind was sufficient.

For a long time I discussed my ideas with no one. Not even with my new roommate who prodded me with his agnosticism. One experience had convinced me that new and vital ideas were unsafe for an undergraduate, either in college or life.

"Only dead men can tell the truth in this world," said Mark Twain when he held back his "War Prayer".

I wanted no further paternalistic complications. I wanted to graduate without well-meaning interference. So I kept quiet, determined to live my beliefs insteal of talking about them. That, after all, was the pragmatic test. And it worked. All doubts vanished. I veiled my reaffirmation of faith in the Class Ode, which was to prove strangely prophetic:

> "Spirit of Princeton, hovering o'er us
> Dreaming inscrutable, brooding at rest,
> Show us the Future that widens before us—
> Grant us the Vision—the end of our Quest.
>
> Founded by princes, your wisdom has taught us
> Transient the power of prelates and kings:
> Our of their symbols the Present has wrought us
> Freedom for men, with the Faith that it brings.
>
> Seeking a part in America's story—
> Goal of the prophets and bards of the Past;
> Joining the sons who would share in her glory,
> Equals with equals, the first with the last.

> Spirit of Princeton, hovering o'er us,
> Mighty in battle, enduring till death,
> Guide in the Future that widens before us:
> Strengthen our courage with quickening breath."

I had no conscious premonition of war, but a year later came Armageddon. And as you know the names of nine of those fine, high-spirited American boys—our own clubmates alone—are now inscribed on the memorial tablet over the fireplace because the death of a mere Austrian Archduke made a causal sequence in the world of the Mysterious Stranger.

One other incident may deserve mention. The summer after my graduation I visited Carl Adams in Atlantic City. His family were devout Methodists and there was a bible on the bureau in the guest room. Up to this time I had left the Apocalypse alone, but was no longer afraid of it. I had accepted its social symbolism, applying to the Many through any names that might fit. That was settled. The occasion being propitious I began to reread the texts that had formerly been so devastating. I read on past the "white stone" and the "new name" of Rev. ii. 17. In iii. 7 my attention was caught by the words:

"And to the angel of the Church in Philadelphia write . . . I know thy works, behold I have set before thee an open door and no man can shut it, for thou hast a little strength, and hast kept my word, and hast not denied my name."

I reflected. By this time I knew something of the Praeterist, Historical and Futurist interpretations of prophecy. By the Praeterist theory, of course, Philadelphia was one of the cities of the Decapolis, but the Historical and Futurist chronology both suggested that with a "new name" there might be a "new Philadelphia"—and new churches or denominations, under the symbols of the old congregations in Syria and Asia Minor. To me the "open door" symbolized a new way of faith. But I also realized that no one took prophecies seriously excepting those who awaited literally the wildest extravagances of oriental imagery.

I came to iii. 12—"Him that overcometh will I make a pillar in the temple of my God, and he shall go no more out: AND I WILL WRITE UPON HIM THE NAME OF MY GOD, AND THE NAME OF THE CITY OF MY GOD . . . AND I WILL WRITE UPON HIM MY NEW NAME."

As before, with the "new name" and "Christine," ideas flashed together. But this time I took them as calmly as the rolls I had eaten for breakfast.

Further evidence? Mere coincidence or mystic confirmation? It was a fact, as definite and demonstrable as breakfast rolls, that my given name meant "King", and my middle name (a place-name traced back in my mother's family from times immemorial) was traditionally derived from the Rock City of Arabia—the Biblical Sela,—that strange, most mystically beautiful "rose-red city half as old as Time"—doomed to desolation by the Old Testament prophets—Ezekiel, Isaiah, Daniel, Obadiah—and subsequently abandoned and lost to the world for more than fifteen hundred years. Men have called that place the "strangest city in the world." . . . I knew all this, and my acceptance of what I considered a symbolic interpretation of the Divine Cryptogram, left me unshaken. What of it? A book couldn't hurt me! . . . I felt no excitement, but rather the solemnity of a deep and abiding consecration. . . Any oracle must mean *me* (or you) individually or it means nothing *to* me (and you) collectively.

There it was—a matter of fact, or record: . . . God—a King! The mystic city, keeping "the watch that God hath set," of which a glorious future was also prophesied.[1] "The Rock in El Ghor"—the Stone! . . . and the "new name" to be added to the others. . . .

Like a vision of Time and Space, the cosmic sweep of the ages carried me through what I knew of our ancestral history and traditions. Ancient Arabia and Rome, mediaeval Italy, the German-Bohemia of the Renaissance; and in modern times, French Alsace-Lorraine, Germany, Scotland, Ireland, Sweden and England—the lines of heredity gradually converging to a new Philadelphia. An array of names and dates that covered the entire Christian era. I had come by my mysticism honestly. Our roots were deep-down to the ultimate Rock—a refuge for men before the dawn of History. But how improbable that two should meet! . . .

So I thought, realizing that the superficial rational odds were tremendous against such inferences from Coincidence. But I found myself arguing that there are always exceptions in cases of so-called "megalomania" or "monomania", or there would be few new inventions, no revolutionary discoveries, no cosmic consciousness, no

[1]See E. A. Poe's "Review of Stephens 'Arabia Petraea' "; also Whittier's "Rock in El Ghor".

Walt Whitmans, no representative idealists. Later I found that the encyclopedias of rival religions used just such terms as megalomania and neurasthenia in explaining away exemplars of reform or revelation. Even the mystic, George Fox, and the good William Blake, had not escaped the rational label of pathological self-deception . . . I would have to test myself further in the ordinary affairs of life.

And I found myself pretty much an average sort of fellow. This was the pragmatic test, for my personal beliefs.

> In dealing with others, however, I realized the truth of James' warning: "Faith, says Tolstoi, is that by which men live, and faith-state and mystic-state are practically convertible terms. But I now proceed to add that mystics have no right to claim that we ought to accept the deliverance of their peculiar experiences, if we ourselves are outsiders and feel no private call thereto. The utmost they can ever ask of us in this life is to admit that they establish a presumption. They form a consensus and have an unequivocal outcome; and it would be odd, mystics might say, if such a unanimous type of experience should prove altogether wrong." (*Varieties of Religious Experience*, Chapter on "Mysticism".)

Does this suggest the Inductive Method for Mysticism as Locke applied it in Psychology? At anw rate, Reason must check the data —test the evidence. . . .

Let me relate a curious dream interlude. You'll have to take my word for its authenticity.

The devil met me in a dream. Although the familiar horns, tail and cloven hoofs were presumably hidden under hat, shoes and conventional tailored garb. I recognized him by unerring dream-perception. In his hand he held a knife—apparently a common or garden variety of clasp knife. With one tapering nail he opened the large shining steel blade. Quite an ordinary jack-knife! But by sudden deft manipulation he stretched the blade to fearful length. It was elastic as rubber or ductile as soft metal. He pushed it back and kneaded it like putty. It was malleable as modeling clay. His quick fingers stretched, twisted and moulded the blade into incredibly indecent and abhorrent forms. Yet it shone bright as quicksilver and the molecules slid over one another like the stuffing of a modern atom.

Then suddenly he frisked it back into its original shape and rigidity. And he cut—(I've forgotten what)—things like wood, paper, hair; I think, even metal and glass. The blade was now

sharp as a razor, hard as diamond-point, finely tempered as Damascus steel.

He held the Super-knife out to me. "There", he said temptingly, "Can your Master" (he uttered, of course, no Ineffable Name) make a thing like that?"

I was as much amazed as anyone can ever be by the preposterously logical impossibilities of a dream. In waking crises, as we all know, apt repartee often comes as an afterthought—too late. But I've always cherished the reply of my dreaming sub-conscious ego. I waved the miracle away. "No", I said. "And what's more, He wouldn't want to. Where in *Hell* did you get it?" . . . .

I awoke chuckling at the devil's discomfiture. There's a moral to this, George, but I don't want to spoil a perfect dream by tacking it on. Read it aright and you'll get at the heart of my own problem—perhaps the modern religious conflict. I would merely point out that this dream episode seemer to indicate a new stability and self-possession in my sub-conscious processes.

For social symbolism had satisfied me—given me as Romain Rolland calls it, "the internal peace that endures amid the endless agitation of the soul".

> Josiah Royce (or Lombroso) gave me further support: "We cannot dispose of man's intellectual rank, or of his doctrine, by merely observing that he was weighted with morbid tendencies of mind. Genius has often, though by no means always, a back-ground of a pathological sort; while on the other hand, the nervously burdened, whether geniuses or not, actually do a great part of the world's work and the world's thinking, and may be all the wiser by reason of the depth of their nervous experiences." (*Spirit of Modern Philosophy*, pp. 242 f.)

But if, like Walt Whitman, I seem to "celebrate myself and sing myself" I mean also that

"What I assume you shall assume
For every atom belonging to me, as good belongs to you".

So, before reading this "Letter", you all know me as a "normal" human being, perhaps above the average intelligence of the army tests, living a prosiac life, carrying on the work of my profession with a fair degree of efficiency (a much over-rated quality), and providing for a family that is the American statistical norm. I share with other human beings the usual democratic distinction that my name and the name of the woman I married are rather different

from other names. The John and Mary Smiths may be the exceptions that prove the rule).

For I forgot to mention, George, as you have guessed, that I married my elusive "divinity" twelve years after her apotheosis, and, as our children will testify, she has proved to be very human. The story of those years of separation, the gradual adjustment of apparently irreconcilable differences, the bigotry of her biology—of her strictly "scientific" training, the conscientious scruples that almost wrecked our lives, and the unusually dramatic circumstances of our marriage are to me more interesting than any psychological novel I have ever read. But, as Kipling might have said for Galsworthy, *that* is another part of the story.

Yours, as ever,

———————

THEISM DISTINGUISHED FROM OTHER THEORIES OF GOD

BY CURTIS W. REESE

PROFESSOR JAMES taught that for the mind to function effectively it must not only say, I mean this, but also, I do not mean the other. The ability to recognize distinctions, and so to distinguish between things that are otherwise alike, is among the first requisites of sound thinking. It would be difficult to overestimate the spiritual value of rigorous thinking.

In the following effort to isolate Theism from other theories of God, a definition of Theism is implicit, but in order that this definition shall be kept clearly in mind I want first to make it explicit. *Theism is the hypothesis that the ultimate ground of the universe is intelligent will working out a moral purpose, in the course of which he consciously and specifically influences human fortunes.* Keeping in mind this definition, which I believe to be true to the main current of historic Theism, let us isolate Theism from certain other non-Theistic hypotheses.

1. The hypothesis of Deism is not Theism. Deism is a theory of God as the First Cause, who created the universe, wound it up, set it going, and then left it to itself. Deism is concerned primarily with getting things started. It is a sort of cosmic "kick-off". But it flattens out under the impact of the stock question of childhood, "Who made God?" Its self caused cause is seen to be merely a device for removing the problem of beginnings one step farther into the eternities.

Deism was once a rather popular theory among heretical thinkers. It was held by Voltaire, Spencer, Thomas Payne, Thomas Jefferson, George Washington and Benjamin Franklin. But later heretics have developed a better method of doing away with the apparently insoluable problem of beginnings. They frankly rule

it out of court as "incompetent, irrelevent, and immaterial". Deism never aimed to provide the kind of God that Theism demands. The God of Deism restfully surveys the centuries in philosophical detachment. The God of Theism "worketh hitherto".

2. The hypothesis of Pantheism is not Theism. Pantheism is the theory that God is the ultimate organism in whom all else exists; like cells in a living body, like atoms in molecules, like electrons in an atom, like kinks in the ether. He slumbers in the rock, blooms in the flower, and thinks in man. Stones, vegetables, beasts and men are parts and parcels of God. Hence man's will, purpose, and doings are of the very essence of God, and consequently cannot be the object of the conscious and specific influence of God. The God of Pantheism is the All; the God of Theism is in and through all but not constituted of all.

3. The hypothesis of the Absolute is not Theism. The Absolute is a philosophical God, not a theological God. In many pulpits of the more liberal sort this philosophical God is preached by and to persons who think they have the practical God of religion. But already competent thinkers, both theologians and philosophers. are reminding the less critical to beware of this Houdini-like substitution of one thing for another. Of the Absolutist philosophers Bradley and Bosanquet have stated positively that the Absolute is not the equivalent of the God of religion. Of the theologians Macintosh and Beckwith have rejected the Absolute as a substitute for the God of religion. The Absolute is static; Theism is dynamic.

4. The hypothesis of the logico-mathematical entity is not Theism. This entity is found at the end of a syllogism, when certain premises are accepted. It is a necessity of some types of mind. It is the ultimate frame work of the old logic. It is the ground of order; the scheme of system; the major premise of mathematics. But it is not the God of Theism. It is cold; Theism is warm, it is austere; Theism is friendly. It is implacable; Theism is forgiving.

Those who have what they want in the God of Theism could not possibly be satisfied with the entity of logio-mathematical necessity.

5. The hypothesis of the cosmic tendency toward harmony is not Theism. That there is a unifying principle in reality, that all things work together for one grand goal, that team-work is of the very nature of being is a theory widely held and ably defended. The idea is that however different and conflicting things seem to us in the short run, in the long run the inherent trend toward universal

harmony will win out; that good is the final goal of ill. It is not my purpose to marshal the evidence in behalf of this or any of the hypotheses here stated. Suffice it to say that many keen minds and good hearts have found this hypothesis both intellectually and emotionally satisfactory. But there is a world of difference between an inherent trend and the God who speaks worlds into existence.

6. The hypothesis of subsistential values is not Theism. In his *The New Rationalism,* Spaulding states at great length and in much detail, with extravagant underlining, the distinction between subsistential values and existential facts. The absolute good which never was on land or sea, is subsistential. The goodly man is existential. It is the old distinction between the absolute circle and the round thing. There is a hierarchy of values which never existed, but which forever dwell in a factual void. To Spaulding, "God is Value, the active, 'living' principle of the conservation of values and of their efficiency." But this is hardly the God of Abraham, Isaac and Jacob,—not to mention the God of both modernists and fundamentalists.

7. The hypothesis of the principle of concretion is not Theism. This theory is set forth by Whitehead in *Science and the Modern World*, and is meant to serve a metaphysical purpose,—as was Aristotle's "Prime Mover." Somehow the hierarchic patterns must give form to actual occasions. The principle of this process is God. But God as the principle of concretion is hardly suitable for religious purposes. He is manifestly the handiwork of metaphysicians; not the God who creates and guides metaphysicians. Informed Theists will not accept the principle of concretion in exchange for the God who created patterns of being and who wove principles into the fabric of existence.

8. The hypothesis of the spirit of Humanity is not Theism. This theory has intrigued many otherwise competent persons. It has a certain fascination for spiritually inclined radicals. It personifies collective humanity, or humanity as it should be, or humanity as it is exemplified in its greatest souls. The God of this movement is a sort of Uncle Sam of Humanity, or a planetary John Bull, or a living flag. He is a symbol with power to stir multitudes. He sails the seven seas with the ship of Humanity. But if the good ship goes down, he goes with it. Hence is may be easily seen that the spirit of Humanity is not the equivalent of the God of Theism, for

the God of Theism will sail the seas of eternity after suns and moons and worlds have sunk into oblivion.

9. The hypothesis of the *elan vital* is not Theism. While the *elan vital* theory was originally the private property of Henri Bergson, it has been espoused by innumerable worthies of the cloth, and has had temporary flirtations with men of letters. The whole theory of evolution lends itself beautifully to this cosmic romance. And the terminology of the theory stirs one to the depths. "Urge", "struggle", "fight", to mention only a few, are dynamic words. I have known ministers to preach this gospel with all the fervor of a saint defending his Lord and Master. Nevertheless the *elan vital* is experimental. He does not know where he is going. He often turns around and goes back and starts again. He is constantly looking about for new and hitherto unthought of experiences. But the God of Theism knows from all eternity what he wants and how to get it.

So much for distinctions.

Clearly there are sharp lines of demarcation between Theism and the other cosmological theories; and while Theism has much to commend it, it still seems to me to be inadequate as a cosmology,—but that is another story.

GOD

The orthodox have held afar
Beyond man's ken the throne of God,
And timed approach thro' sundered sod
Alone, in faith's named Avatar.

In agonized travail of soul
To meet his Maker face to face
Man't trial, found in fear, must trace
His trammelled way to spirit's goal.

Such brief of error to maintain
Discharges life of half its joy,
And tricks of love's divine employ
The sweets of heaven's earthly reign.

God lives in essence, human souls
In Him find Lethean atmosphere
To sense the graces, stifle fear,
And seize upon ambition's tolls:

To grasp the wonder of the mite,
The miracle of blossom's fold,
And fearlessly of mind to hold
In loving awe the Infinite.

Charles Sloan Reid.

IDOLATRY

God reigns! The attitude of mind
 Outlines the Deity's strange form,
The spirit of the raging wind,
 Astride the lightnings of the storm,
Within the golden orb of day,
 The crescent moon's profile at night,
Propitious light in moulded clay,
 In stone gargoyle the vested might,
The leaping flame of deathless fire,
 The thund'ring cataract sublime,
The crocodile in brackish mire,
 A brazen calf the God-head's mime,
The totem's secret, housed in faith,
 That holds the worshipped being near,
Ancestral urns, with 'prisoned wraith
 The pledge of exaltation here,
The crucifix, of Christian prayed,
 Transfiguration's visioned scene,
The unseen Trinity arrayed
 In spheres beyond a star-meshed screen.
Strange forms of nature, mind and art,
 The gracious God is in them all,
Projected from the faithful heart
 Of devotee in humble thrall.

Charles Sloan Reid.

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