

## SCIENCE AND BUDDHISM

*(Inscribed to the revered Memory of Thomas Henrey Huxley.)*

## I.

THE purpose of this essay is to draw a strict comparison between the modern scientific conceptions of Phenomena and their explanation, where such exists, and the ancient ideas of the Buddhists; to show that Buddhism, alike in theory and practice, is a scientific religion; a logical superstructure on a basis of experimentally verifiable truth ; and that its method is identical with that of science. We must resolutely exclude the accidental features of both, especially of Buddhism; and unfortunately in both cases we have to deal with dishonest and shameless attempts to foist on either opinions for which neither is willing to stand sponsor. Professor Huxley has dealt with one in his "Pseudo-Scientific Realism"; Professor Rhys Davids has demolished the other in that one biting comment on "Esoteric Buddhism" that it was "not Esoteric and certainly not Buddhism." But some of the Theosophic mud still sticks to the Buddhist chariot; and there are still people who believe that sane science has at least a friendly greeting for Atheism and Materialism in their grosser and more militant forms.

Let it be understood then, from the outset, that if in Science I include metaphysics, and in Buddhism meditation-practices, I lend myself neither to the whittlers or "reconcilers" on the one hand, nor to the Animistic jugglers on the other. Apart from the Theosophic rubbish, we find Sir Edwin Arnold writing:

"Whoever saith Nirvana is to cease,  
Say unto such they lie."

Lie is a strong word and should read "translate correctly."<sup>1</sup>

I suppose it would not scan, nor rhyme: but Sir Edwin is the last person to be deterred by a little thing like that.

Dr. Paul Carus, too, in the "Gospel of Buddha," is pleased to represent Nirvana as a parallel for the Heaven of the Christian. It is sufficient if I reiterate the unanimous opinion of competent scholars, that there is no fragment of evidence in any canonical book sufficient to establish such interpretations in the teeth of Buddhist tradition and practice ; and that any person who persists in tuning Buddhism to his own Jew's harp in this way is risking his reputation, either for scholarship or good faith. Scientific men are common enough in the West, if Buddhists are not; and I may safely leave in their hands the task of castigating the sneak-thieves of the Physical area.

## II.

The essential features of Bhuddism have been summed up by the Buddha himself. To me, of course, what the Buddha said or did not say is immaterial; a thing is true or not true, whoever said it. We believe Mr. Savage Landor when he affirms that Lhasa is an important town in Tibet. Where only probabilities are concerned we are of course influenced by the moral char-

<sup>1</sup> See Childers, Pali Dictionary, s.v. Nibbana.

acter and mental attainments of the speaker, but here I have nothing to do with what is uncertain.<sup>1</sup>

There is an excellent test for the value of any passage in a Buddhist book. We are, I think, justified in discarding passages which are clearly Oriental fiction, just as modern criticism, however secretly Theistic, discards the Story of Hasisadra or of Noah. In justice to Buddhism, let us not charge its Scripture with the Sisyphean task of seriously upholding the literal interpretation of obviously fantastic passages.<sup>2</sup> May our Buddhist zealots be warned by the fate of old-fashioned English orthodoxy! But when Buddhism condescends to be vulgarly scientific; to observe, to classify, to *think*; I conceive we may take the matter seriously, and accord a reasonable investigation to its assertions. Examples of such succinctness and clarity may be found in The Four Noble Truths; The Three Characteristics; The Ten Fetters; and there is clearly a definite theory in the idea of Karma. Such ideas are basic, and are as a thread on which

1 See Huxley's classical example of the horse, zebra and centaur.

<sup>2</sup> Similarly, where Buddhist parables are of a mystical nature, where a complicated symbolism of numbers (for example) is intended to shadow a truth, we must discard them. My experience of mysticism is somewhat large; its final dictum is that the parable *x* may be equated to *a, b, c, d . . . z* by six-and-twenty different persons, or by one person in six-and-twenty different moods. Even had we a strong traditional explanation I should maintain my position. The weapons of the Higher Criticism, supplements by comon Sense, are perfectly valid and inevitably destructive against any such structure. But I am surely in danger of becoming ridiculous in writing thus to the scientific world. What I really wish to show is that one ned not look for all the Buddhist fancy dishes to the peril of the scientific digestion. And by a backhanded stroke I wish to impress as deeply as possible upon my Buddhist friends that too much zeal for the accidentals of our religion will surely result in the overwhelming of its essentials in the tide of justly scornful or justly casuistic criticism.—A. C.

the beads of Arabian-Night-Entertainment are strung.<sup>3</sup>

I propose therefore to deal with these and some other minor points of the Buddhist metaphysis, and trace out their scientific analogies, or, as I hope to show, more often identities.

First then let us examine that great Summary of the Buddhist Faith, the Four Noble Truths.

### III.

#### THE FOUR NOBLE TRUTHS.

(I) SORROW.—Existence is Sorrow. This means that "no known form of Existence is seperable from Sorrow." This truth is stated by Huxley, almost in so many words, in *Evolution and Ethics*. "It was no less plain to some of these antique philosophers than to the fathers of modern philosophy that suffering is the badge of all the tribe of sentient things; that it is no accidental accompaniment, but an essential constituent of the Cosmic Process." And in the same essay, though he is disposed to deny more than the rudiments of consciousness to the lower forms of life, he is quite clear that pain varies directly (to put it loosely) with the degree of consciousness. Cf. also "Animal Automatism," pp. 236-237.

(2) SORROW'S CAUSE.—The cause of sorrow is desire. I take desire here to include such a phenomenon as the tendency of two molecules of hydrogen and chlorine to combine under certain conditions. If death be painful to me, it is presumably so to a molecule; if we represent one operation as pleasant, the converse is presumably painful. Though I am not conscious of the individual pain of the countless deaths involved in this my act of writin, it may be there. And what I call "fatigue" may be the echo in my central consciousness of the

<sup>3</sup> See Prof. Rhys Davids on the "Jataka."

shriek of a peripheral anguish. Here we leave the domain of fact; but at least as far our knowledge extends, all or nearly all the operations of Nature are vanity and vexation of spirit. Consider food, the desire for which periodically arises in all conscious beings.<sup>1</sup>

The existence of these desires, or rather necessities, which I realise to be mine, is unpleasant. It is this desire inherent in me for continued consciousness that is responsible for it all, and this leads us to the Third Noble Truth.

(3) SORROW'S CEASING.—The cessation of desire is the cessation of sorrow. This is a simple logical inference from the second Truth, and needs no comment.

(4) THE NOBLE EIGHTFOLD PATH.—There is a way, to be considered later, of realising the Third Truth. But we must, before we can perceive its possibility on the one hand, or its necessity on the other, form a clear idea of what are the Buddhist tenets with regard to the Cosmos; and, in particular, to man.<sup>2</sup>

#### IV.

##### THE THREE CHARACTERISTICS.

The Three Characteristics (which we may predicate of all known existing things:

- (a) Change. Anikka.
- (b) Sorrow. Dukkha.
- (c) Absence of an Ego. Anatta.

<sup>1</sup> Change is the great enemy, the immediate cause of pain. Unable to arrest it, I slow the process, and render it temporarily painless, by eating. This is a concession to weakness, no doubt, in one sense. Do I eat really in order to check change, or to maintain my consciousness? Change I desire, for my present condition is sorrow. I really desire the impossible; completely to retain my present egoity with all its conditions reversed.—A. C.

<sup>2</sup> For an able and luminous exposition of "The Four Noble Truths" I refer the reader to the pamphlet bearing that title by my old friend Bikkhu Ananda Maitriya, published by the Buddhasasana Samagama, 1 Pagoda Road, Rangoon.—A. C.

This is the Buddhist assertion. What does Science say?

(a) Huxley, "Evolution and Ethics":

"As no man fording a swift stream can dip his foot twice into the same water, so no man can, with exactness, affirm of anything in the sensible world that it is. As he utters the words, nay, as he thinks them, the predicate ceases to be applicable; the present has become the past; the 'is' should be 'was.' And the more we learn of the nature of things the more evident is it that what we call rest is only unperceived activity; that seeming peace is silent but strenuous battle. In every part, at every moment, the state of the cosmos is the expression of a transitory adjustment of contending forces, a scene of strife, in which all the combatants fall in turn. What is true of each part is true of the whole. Natural knowledge tends more and more to the conclusion that "all the choir of heaven and furniture of the earth" are the transitory forms of parcels of cosmic substance wending along the road of evolution, from nebulous potentiality, through endless growths of sun and planet and satellite, through all varieties of matter; through infinite diversities of life and thought, possibly, through modes of being of which we neither have a conception, nor are competent to form any, back to the indefinable latency from which they arose. Thus the most obvious attribute of the cosmos is its impermanence. It assumes the aspect not so much of a permanent entity as of a changeful process, in which naught endures save the flow of energy and the rational order which pervades it."

This is an admirable summary of the Buddhist doctrine.

(b) See above on the First Noble Truth.

(c) This is the grand position which Buddha carried against the Hindu philosophers. In our own country it is the argument of Hume, following Berkeley to a place where Berkeley certainly never meant to go—a curious parallel fulfilment of Christ's curse against Peter (John xxi.). The Bishop demolishes the idea of a substratum of matter, and

Hume follows by applying an identical process of reasoning to the phenomena of mind.<sup>1</sup>

Let us consider the Hindu theory. They classify the phenomena (whether well or ill matters nothing), but represent them all as pictured in, but not affecting, a certain changeless, omniscient, blissful existence called Atman. Holding to Theism, the existence of evil forces them to the Fichtean position that "the Ego posits the Non-Ego," and we learn that nothing really exists after all but Brahm. They then distinguish between Jivatma, the soul-conditioned, and Paramatma, the soul free; the former being the basis of our normal consciousness; the latter of the Nirvikalpa-Samadhi conscious-

<sup>1</sup> The Buddhist position *may* be interpreted as agnostic in this matter, these arguments being directed against, and destructive of, the unwarranted assumptions of the Hindus; but no more. See Sabbasava Sutta, 10.

"In him, thus unwisely considering, there springs up one or other of the six (absurd) notions.

"As something real and true he gets the notion, 'I have a self.'

"As something real and true he gets the notion, 'I have not a self.'

"As something real and true he gets the notion, 'By my self, I am conscious of my self.'

"As something real and true he gets the notion, 'By my self, I am conscious of my non-self.'

"Or again, he gets the notion, 'This soul of mine can be perceived, it has experienced the result of good or evil actions committed here and there; now this soul of mine is permanent, lasting, eternal, has the inherent quality of never changing, and will continue for ever and ever!'

"This, brethren, is called the walking in delusion, the jungle of delusion, the wilderness of delusion, the puppet-show of delusion, the writhing of delusion, the fetter of delusion."

There are, it may be noted, only five (not six) notions mentioned, unless we take the last as double. Or we may consider the sixth as the contrary of the fifth, and correct. The whole passage is highly technical, perhaps untrustworthy; in any case, this is not the place to discuss it. The sun of Agnosticism breaking through the cloud of Anatta is the phenomenon to which I wished to call attention.—A. C.

ness; this being the sole condition on which morals, religion, and fees to priests can continue. For the Deist has only to advance his fundamental idea to be forced round in a vicious circle of absurdities.<sup>1</sup>

The Buddhist makes a clean sweep of all this sort of nonsense. He analyses the phenomena of mind, adopting Berkeley's paradox that "matter is immaterial," in a sane and orderly way. The "common-sense Philosopher," whom I leave to chew the bitter leaves of Professor Huxley's Essay "On Sensation and the Unity of the Structure of Sensiferous Organs," observes, on lifting his arm, "I lift my arm." The Buddhist examines this proposition closely, and begins:

"There is a lifting of an arm."

By this terminology he avoids Teutonic discussions concerning the Ego and Non-ego.<sup>2</sup> But how does he know this proposition to be true? By sensation. The fact is therefore:

"There is a sensation of the lifting of an arm."

But how does he know that? By perception. Therefore he says:

"There is a perception of a sensation, &c."

And why this perception? From the inherent tendency.

(Note carefully the determinist standpoint involved in the enunciation of his Fourth Skandha; and that it comes lower than Viññanam.)

"There is a tendency to perceive the sensation, &c."

And how does he know that there is a tendency? By consciousness. The final analysis reads:

"There is a consciousness of a tendency to perceive the sensation of a lifting of an arm."

He does not, for he cannot, go further back. He will not suppose, on no sort of evidence, the substratum of Atman uniting

<sup>1</sup> As Bishop Butler so conclusively showed.

<sup>2</sup> I may incidentally remark that a very few hours' practice (see Section VIII.) cause "I lift my arm" to be intuitively denied.—A. C.

consciousness to consciousness by its eternity, while it fixes a great gulf between them by its changelessness. He states the knowable, states it accurately, and leaves it there. But there is a practical application of this analysis which I will treat of later. (See VIII. *Mahapatthana*.)

We are told that the memory is a proof of some real "I." But how treacherous is this ground! Did a past event in my life not happen because I have forgotten it? O the analogy of the river water given above is most valid! I who write this am not I who read it over and correct it. Do I desire to play with lead soldiers? Am I the doddering old cripple who must be wheeled about and fed on whisky and bread and milk? And is my difference from them so conspicuously less than from the body lying dead of which those who see it will say. "This was Aleister Crowley"?

What rubbish it is to suppose that an eternal substance, sentient or not, omniscient or not, depends for its information on so absurd a series of bodies as are groups under that "Crowley"!

Yet the Buddhist meets all arguments of the spiritual order with a simple statement which, if not certain, is at least not improbable. There is, he will tell you, a "spiritual" world, or to avoid any (most unjustifiable) misunderstandings, let us say a world of subtler matter than the visible and tangible, which has its own laws (analogous to, if not identical with, those laws of matter with which we are acquainted) and whose inhabitants change, and die, and are re-born very much as ordinary mortal beings. But as they are of subtler matter, the cycle is less rapid.<sup>1</sup>

As a nominalist, I hope not to be misunderstood when I compare this to the relative mutability of the individual and the species.<sup>2</sup> We have enough examples free

from such possibility of misinterpretation in our own bodies. Compare the longevity of a bone with that of a corpuscle. But it is this "Substratum" universe, which must not be confounded with the substratum, the arguments for whose existence Berkeley so utterly shattered,<sup>1</sup> which may conserve memory for a period greatly exceeding that of one of its particular avatars. Hence the "Jataka." But the doctrine is not very essential; its chief value is to show what serious difficulties confront us, and to supply a reason to struggle to some better state. For if nothing

<sup>1</sup> Without an elaborate analysis of the ideas involved in the Ding an sich of Kant, and of H. Spencer's definition of all things as Modes of the Unknowable, I may point out in passing that all these hypotheses are as sterile as the "vital principle" in biology, or "phlogiston" in chemistry. They lead literally nowhere. That the phenomenal world is an illusion is all very well; one girds up one's loins to seek reality; but to prove reality unknowable is to shut all avenues to the truth-loving man, and open all to the sensualist. And, if we accept either of the above philosophies, it does not matter. That we feel it does matter is sufficient refutation, for we must obey the sentence awarded on our own testimony, whether we like it or not.

I am aware that this is a somewhat cowardly way of dealing with the question; I prefer to insist that if we once admit that the unknowable (by reason) to consciousness may be known (by concentration) to super-consciousness, the difficulty vanishes.

I think Huxley goes too far in speaking of a man "self-hypnotised into cataleptic trances" without medical evidence of a large number of cases. Edward Carpenter, who has met Yogis, and talked long and learnedly with them, tells a different story.

Even had we a large body of evidence from Anglo-Indian medical men, the proof would still be lacking. They might not be the real men. The Indian native would take intense delight in bringing round the village idiot to be inspected in the character of a holy man by the "Doctor Sahib."

The Anglo-Indian is a fool; a minimum medical education is in most cases insufficient to abate the symptoms to nil, though perhaps it must always diminish them. The Hindu is the Sphinx of civilisation; nearly all that has been written on him is worthless; those who know him best know this fact best.—A. C.

<sup>1</sup> Cf. Huxley, cited *supra*, "possibly, through modes of being of which we neither have a conception, nor are competent to form any. . . ."

<sup>2</sup> Cf. "Evolution and Ethics," note 1.

survives death, what does it matter to us? Why are we to be so altruistic as to avoid the reincarnation of a being in all points different from ourselves? As the small boy said, "What has posterity done for me?" But something does persist; something changing, though less slowly. What evidence have we after all that an animal does not remember his man-incarnation? Or, as Levi says, "In the suns they remember, and in the planets they forget." I think it unlikely (may be), but in the total absence of all evidence for or against—at least with regard to the latter hypothesis!—I suspend my judgement, leave the question alone, and proceed to more practical points that are offered by these interesting but not over-useful metaphysical speculations.

V.

KARMA.

The Law of Causation is formally identical with this. Karma means "that which is made," and I think it should be considered with strict etymological accuracy. If I place a stone on the roof of a house, it is sure to fall sooner or later; *i.e.*, as soon as the conditions permit. Also, in its ultimatum, the doctrine of Karma is identical with determinism. On this subject much wisdom, with an infinite amount of rubbish, has been written. I therefore dismiss it in these few words, confident that the established identity can never be shaken.

VI.

THE TEN FETTERS OR SANYOGANAS.

1. Sakkaya-ditthi. Belief in a "soul."
2. Vikikikha. Doubt.
3. Silabbata-parâ-mâsa. Reliance on the efficacy of rites and ceremonies.
4. Kama. Bodily Desires.

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|--------------|-----------------------------------|
| 5. Patigha.  | Hatred.                           |
| 6. Rupaṅga.  | Desire for bodily immortality.    |
| 7. Arupaṅga. | Desire for spiritual immortality. |
| 8. Mano.     | Pride.                            |
| 9. Udhakka.  | Self-righteousness.               |
| 10. Avigga.  | Ignorance.                        |

(1) For this is a *petitio principii*.

(2) This, to a scientist, is apparently anathema. But it only means, I think, that if we are not settled in our minds we cannot work. And this is unquestionable. Suppose a chemist to set to work to determine the boiling-point of a new organic substance. Does he stop in the midst, struck by the fear that his thermometer is inaccurate? No! he has, unless he is a fool, tested it previously. We must have our principia fixed before we can do research work.

(3) A scientist hardly requires conviction on this point!

(4) Do you think to combine Newton and Caligula? The passions, allowed to dominate, interfere with the concentration of the mind.

(5) Does brooding on your dislikes help you to accurate observation? I admit that a controversy may stir you up to perform prodigies of work, but while you are actually working you do not suffer the concentration of your mind to be interfered with.

(6 & 7) This Fetter and the next are contingent on your having perceived the suffering of all forms of conscious existence.

(8) Needs no comment. Pride, like humility, is a form of delusion.

(9) Is like unto it, but on the moral plane.

(10) The great enemy. Theists alone have found the infamous audacity to extol the merits of this badge of servitude.

We see, then, that in this classification a scientist will concur. We need not discuss the question whether or no he would find others to add. Buddhism may not be complete, but, as far as it goes, it is accurate.

## VII.

THE RELATIVE REALITY OF CERTAIN  
STATES OF CONSCIOUSNESS

Whether we adopt Herbert Spencer's dictum that the primary testimony of consciousness is to the existence of externality, or no;<sup>1</sup> whether or no we fly to the extreme idealistic position; there is no question that, to our normal consciousness, things as they present themselves—apart from obvious illusion, if even we dare to except this—are undisprovable to the immediate apprehension. Whatever our reason may tell us, we act precisely as through Berkeley had never lived, and the herculean Kant had been strangled while yet in his cradle by the twin serpents of his own perversity and terminology.

What criterion shall we apply to the relative realities of normal and dream consciousness? Why do I confidently assert that the dream state is transitory and unreal?

In that state I am equally confident that my normal consciousness is invalid. But as my dreams occupy a relatively small portion of my time, and as the law of causation seems suspended, and as their vividness is less than that of ordinary consciousness, and above all, as in the great majority of cases I can show a cause, dating from my waking hours, for the dream, I have four strong reasons (the first explanatory to some extent of my reasons for accepting the others) for concluding that the dream is fictitious.

But what of the "dreamless" state? To the dreamer his normal faculties and memories arise at times, and are regarded as fragmentary and absurd, even as the remembrance of a dream is to the waking man. Can we not conceive then of a "dreamless" life, of

which our dreams are the vague and disturbed transition to normal consciousness?

The physiological evidence goes literally for nothing. Even were it proved that the recipio-motor apparatus of a "dreamless" sleeper was relatively quiescent, would that supply any valid argument against the theory I have suggested? Suggested, for I admit that our present position is completely agnostic in respect to it, since we have no evidence which throws light on the matter; and study of the subject would appear to be mere waste of time.

But the suggestion is valuable as affording us a possibly rational explanation, conformable to the waking man, which the dreamer would indignantly reject.

Suppose, however, a dream so vivid that the whole waking man is abased before its memory, that his consciousness of it appears a thousand times more real than that of the things about him; suppose that his whole life is moulded to fit the new facts thus revealed to him; that he would cheerfully renounce years of normal life to obtain minutes of that dream-life; that his time sense is uprooted as never before, and that these influences are permanent. Then, you will say, delirium tremens (and the intoxication of hashish, in respect more particularly of the time sense) afford us a parallel. But the phenomena of delirium tremens do not occur in the healthy. As for the suggestion of auto-hypnosis, the memory of the "dream" is a sufficient reply. However this may be, the simple fact of the superior apparent reality—a conviction unshakable, *inépuisable* (for the English has no word), is a sufficient test. And if we condescend to argue, it is for pleasure, and aside from the vital fact; a skirmish, and not a pitched battle.

This "dream" I have thus described is the state called *Dhyana* by the Hindus and Buddhists. The method of attaining it is sane, healthy, and scientific. I would not take the pains to describe that method, had not illiterate, and too often mystical advocates of the practice obscured the simple

<sup>1</sup> *Mahasatipathana* (Sec. VIII.) does admit this perhaps. Yet its very object is to correct consciousness on the lines indicated by reason.

grandeur of our edifice by jimcrack pinnacles of stucco—as who should hang the Taj Mahal with fairy lamps and chintz.

It is simple. The mind is compelled to fix its attention on a single thought; while the controlling power is exercised and a profound watchfulness kept up lest the thought should for a moment stray.<sup>1</sup> The latter portion is, to my mind, the essential one. The work is comparable to that of an electrician who should sit for hours with his finger on a delicately adjusted resistance-box and his eye on the spot of light of a galvanometer, charged with the duty of keeping the spot still, at least that it should never move beyond a certain number of degrees, and of recording the more important details of his experiment. Our work is identical in design, though worked with subtler—if less complex—means. For the finger on the resistance-box we substitute the Will ; and its control extends but to the Mind ; for the eye we substitute the Introspective Faculty with its keen observation of the most minute disturbance, while the spot of light is the Consciousness itself, the central point of the galvanometer scale the predetermined object, and the other figures on the scale, other objects, connected with the primary by order and degree, sometimes obviously, sometimes obscurely, perhaps even untraceably, so that we have no real right to predicate their connection.<sup>2</sup>

<sup>1</sup> Huxley, *Essays*, V., 136.

<sup>2</sup> This last sentence will be best understood by those who have practised up to a certain point. At first it is easy to trace back by a connected chain of thoughts from the thought which awakes us to the fact that we are wandering to the original thought. Later, and notably as we improve, this becomes first difficult, then impossible. At first sight this fact suggests that we are injuring our brains by the practice, but the explanation is as follows: Suppose we figure the central consciousness as the Sun, intent on seeing that nothing falls into him. First the near planets are carefully arranged, so that no collision can occur; afterwards Jupiter and Saturn, until his whole system is safe. If then any body fall upon the Sun, he knows that it is

How any sane person can describe this process as delusive and unhealthy passes my comprehension; that any scientist should do so implies an ignorance on his part of the facts.

I may add that the most rigid necessity exists for perfect health of body and mind before this practice can begin; asceticism is as sternly discouraged as indulgence. How would the electrician do his work after a Guildhall Banquet? The strain of watching would be too much, and he would go off to sleep. So with the meditator. If, on the other hand, he had been without food for twenty-four hours, he might—indeed, it has been done often—perform prodigies of work for the necessary period; but a reaction must follow of proportionate severity. Nobody will pretend that the best work is done starving.<sup>3</sup>

Now to such an observer certain phenomena present themselves sooner or later which have the qualities above predicated of our imaginary “dream” preceded by a transition-state very like total loss of consciousness. Are these fatigue phenomena? Is it that this practice for some as yet unknown reason stimulates some special nerve-centre? Perhaps; the subject requires investigation; I am not a physiologist. Whatever physiology may say, it is at least clear that if this state is accompanied with an intense and passionless bliss beyond anything that the normal man can conceive of, and unaccompanied with the slightest prejudice to the mental and physical health, it is most highly desirable. And to the scientist is presents a magnificent field of research.

not from any of those planets with which he is familiar, and, lord of his own system, cannot trace the course or divine the cause of the accident which has disturbed him. And he will accept this ignorance as a proof of how well his own system is going, since he no longer receives shocks from it.—A. C.

<sup>3</sup> Hallucination especially is to be feared. Light-headedness from want of food is quite sufficient explanation for many “Mystic raptures.” I do not care to invoke hysteria and epilepsy without positive evidence.—A. C.

Of the metaphysical and religious theories which have been built upon the facts here stated, I have nothing to say in this place. The facts are not at the disposition of all; from the nature of the subject each man must be his own witness. I was once twitted by some shallow-pated person with the fact that my position cannot be demonstrated in the laboratory, and that therefore (save the mark!) I must be a mystic, an occultist, a theosophist, a mystery-monger, and what not. I am none of these. The above criticism applies to every psychologist that ever wrote, and to the man who makes the criticism by the fact of his making it. I can only say : "You have your own laboratory and apparatus, your mind; and if the room is dirty and the apparatus ill put together, you have certainly not me to blame for it."

The facts being of individual importance, then, there is little use if I detail the results of my own experience. And the reason for this reticence—for I plead guilty to reticence—that to explain would damage the very apparatus whose use I am advocating. For did I say that such and such a practice leads one to see a blue pig, the suggestion is sufficient to cause one class of people to see a blue pig where none existed, and another to deny or suspect the blue pig when it really appeared, though the latter alternative is unlikely. The conscious phenomenon, and the bliss, is of so stupendous and well-defined a nature that I cannot imagine any preconceived idea powerful enough to diminish it appreciably. But for the sake of the former class I hold my tongue.<sup>1</sup>

I trust it is now perfectly clear, if my statements are accepted—and I can only

<sup>1</sup> On the advisability of so doing I am open to conviction. The scientific mind, I might argue, will not readily fall into that error ; and for the others, they will be useless as a research phalanx, and may as well see blue pigs and be happy as not. In the past, no doubt, research has been choked by the multitude of pseudo-blue-pig-people, from the "T.S." to the "G.D." We must distinguish by methods, not by results.—A. C.

most seriously assure you that honest laborious experiment will be found to verify them in every particular—that whatever arguments are brought forward destructive of the reality of Dhyana, apply with far more force to the normal state, and it is evident that to deny the latter seriously is *ipso facto* to become unserious. Whether the normal testimony may be attacked from above, by insisting on the superior reality of Dhyana—and *à fortiori* of Samadhi, which I have not experienced, and consequently do not treat of, being content to accept the highly probably statements of those who profess to know, and who have so far not deceived me (*i.e.* as to Dhyana), is a question which it is not pertinent to the present argument to discuss.<sup>1</sup> I shall, however, suggest certain ideas in the following section, in which I propose to discuss the most famous of the Buddhist meditations (Mahasatipatthana, its method, object, and results.

## VIII.

### MAHASATIPATTHANA.

This meditation differs fundamentally from the usual Hindu methods by the fact that the mind is not restrained to the contemplation of a single object, and there is no interference with the natural functions of the body as there is, *e.g.*, in Pranayama. It is essentially an observation-practice, which later assumes an analytic aspect in regard to the question, "What is it that is really observed?"

The Ego-idea is resolutely excluded from the start, and so far Mr. Herbert Spencer will have nothing to object ("Principles of

<sup>1</sup> The gravest doubts assail me on further examination of this point. I am now (1906) convinced that the experiences to which I refer constitute Samadhi. The accursed pedantry of the pundits has led to the introduction of a thousand useless subtleties in philosophical terminology, the despair alike of the translator and the investigator, until he realises that it is pedantry, and as worthless as the rest of oriental literature in all matters of exactitude.

Psychology," ii. 404). The breathing, motions of walking, &c., are merely observed and recording; for instance, one may sit down quietly and say: "There is an indrawing of the breath." "There is an expiration," &c. Or, walking, "There is a raising of the right foot," and so on, just as it happens. The thought is of course not quick enough to note all the movements or their subtle causes. For example, we cannot describe the complicated muscular contractions, &c. ; but this is not necessary. Concentrate on some series of simple movements.

When this through habit becomes intuitive so that the thought is *really* "There is a raising," as opposed to "I raise" (the latter being in reality a complex and adult idea, as philosophers have often shown, ever since Descartes fell into the trap), one may begin to analyse, as explained above, and the second stage is "There is a sensation (Vedana) of a raising, &c." Sensations are further classed as pleasant or unpleasant.

When this is the true intuitive instantaneous testimony of consciousness (so that "There is a raising, &c." is rejected as a palpable lie),<sup>1</sup> we proceed to Sañña, perception.

"There is a perception of a (pleasant or unpleasant) sensation of a raising, &c."

When this has become intuitive—why ! here's a strange result ! The emotions of pain and pleasure have vanished. They are subincluded in the lesser skandha of Vedana, and Sañña is free from them. And to him who can live in this third stage, and live so for ever, there is no more pain; only an intense interest similar to that which has enabled men of science to watch and note the progress of their own death-agony. Un-

<sup>1</sup> "Why should you expect Vedana to make Rupa appear illusory?" asked a friend of mine, on reading through the MS. of this essay. The reason of my omission to explain is that to me it had seemed obvious. The fact had been assimilated. To meditate on anything is to perceive its unreal nature. Notably this is so in concentrating on parts of the body, such as the nose. On this phenomenon the Hindus have based their famous aphorism, "That which can be thought is not true."—A. C.

fortunately the living in such a state is conditional on sound mental health, and terminable by disease or death at any moment. Were it not so, the First Noble Truth would be a lie.

The two further stages Sankhara and Viññanam pursue the analysis to its ultimatum, "There is a consciousness of a tendency to perceive the (pleasant or unpleasant) sensation of a raising of a right foot" being the final form. And I suppose no psychologist of any standing will quarrel with this.<sup>1</sup> Reasoning in fact leads us to this analysis; the Buddhist goes further only in so far as he may be said to knock down the scaffolding of reasoning processes, and to assimilate the actual truth of the matter.

It is the difference between the schoolboy who painfully construes "Balbus murum ædificavit," and the Roman who announces that historic fact without a thought of his grammar.

I have called this meditation the most famous of the Buddhist meditations, because it is stated by the Buddha himself that if one practices it honestly and intelligently a result is certain. And he says this of no other.

I have personally not found the time to devote myself seriously to this Mahasati-patthana, and the statements here made are those derived from reason and not from experience. But I can say that the unreality of the grosser (rupa) relative to the subtler Vedana and still more subtle Sañña becomes rapidly apparent, and I can only conclude that with time and trouble the process would continue.

What will occur when one reaches the final stage of Viññanam, and finds no Atman behind it ? Surely the Viññanam stage will soon seem as unreal as the former have become. It is idle to speculate; but if I may escape the imputation of explaining the obscure by the more obscure, I may hint that such a person must be very near the state called Nirvana, whatever may be meant by

<sup>1</sup> I deal with Mr. Spencer and "Transfigured Realism" in a note at the end of this section.—A. C.

this term. And I am convinced in my own mind that the Ananda (bliss) of Dhyana will surely arise long before one has passed even up to Sankhara.

And for the reality, 'twill be a brave jest, my masters, to fling back on the materialists that terrible gibe of Voltaire's at the mystery-mongers of his day: "Ils nient ce qui est, et expliquent ce qui n'est pas."

#### NOTE TO SECTION VIII.

##### *Transfigured Realism.*

I will not waste my own time and that of my readers by any lengthy discussion of Mr. Herbert Spencer's "Transfigured Realism." I will not point out in greater detail how he proposes, by a chain of reasoning, to overthrow the conclusions he admits as being those of reason.

But his statement that Idealism is but verbally intelligible is for my purpose the most admirable thing he could have said.

He is wrong in saying that idealists are bewildered by their own terminology ; the fact is that idealist conclusions are presented directly to consciousness, when that consciousness is Dhyanic. (Cf. Section XI.)

Nothing is clearer to my mind that that the great difficulty habitually experienced by the normal mind in the assimilation of metaphysics is due to the actual lack of experience in the mind of the reader of the phenomena discussed. I will go so far as to say that perhaps Mr. Spencer himself is so bitter because he himself has actual experience of "Transfigured Realism" as a directly presented phenomenon; for if he supposes that the normal healthy mind can perceive what he perceives, Berkeley's arguments must seem to him mere wanton stupidity.

I class the Hindu philosophy with the Idealist; the Bhuddistic with that of Mr. Herbert Spencer; the great difference between the two being that the Buddhists recognise clearly these (or similar) conclusions as phenomena, Mr. Spencer, inconsistently

enough, only as truths verified by a higher and more correct reasoning than that of his opponents.

We recognise, with Berkeley, that reason teaches us that the testimony of consciousness is untrue; it is absurd, with Spencer, to refute reason ; instead we take means to bring consciousness to a sense of its improbity. Now our (empiric) diagnosis is that it is the dissipation of mind that is chiefly responsible for its untruthfulness. We seek (also by empiric means, alas!) to control it, to concentrate it, to observe more accurately—has this source of possible error been sufficiently recognised?—what its testimony really is.

Experience has taught me, so far as I have been able to go, that Reason and Consciousness have met together; Apprehension and Analysis have kissed one another. The reconciliation (in fact, remember, and not in words) is at least so nearly perfect that I can confidently predict that a further pursuit of the (empirically-indicated) path will surely lead to a still further and higher unity.

The realisation of the hopes held out by the hypothesis is then of clear evidential value in support of that hypothesis, empiric as it was, and is. But with the growth and gathering-together, classifying, criticism of our facts, we are well on the way to erect a surer structure on a broader basis.

#### IX.

##### AGNOSTICISM.

It should be clearly understood, and well remembered, that throughout all these meditations and ideas, there is no necessary way to any orthodox ontology whatever. As to the way of salvation, we are not to rely on the Buddha; the vicious lie of vicarious atonement finds no place here. The Buddha himself does not escape the law of causation ; if this be metaphysics, so far Buddhism is metaphysical, but no further. While denying obvious lies, it does not set up dogmas; all its statements are susceptible of proof—a child can assent to all the more important.

And this is Agnosticism. We have a scientific religion. How far would Newton have got if he had stuck to Tycho Brahe as the One Guide? How far the Buddha had he revered the Vedas with blind faith? Or how far can we proceed even from partial truth, unless a perfectly open mind be kept regarding it, aware that some new phenomenon may possibly overthrow our most fundamental hypotheses ! Give me a reasonable proof of some (intelligent) existence which is not liable to sorrow, and I will throw the First Noble Truth to the dogs without a pang. And, knowing this, how splendid is it to read the grand words uttered more than two thousand years ago: "Therefore, O Ananda, be ye lamps unto yourselves. Be ye a refuge to yourselves. Betake yourselves to no external refuge. Hold fast to the truth as lamp. Hold fast as a refugee to the truth.. Look not for refuge to any one besides yourselves." (Mahaparanibbana Sutta, ii. 33.) And to such seekers only does the Buddha promise "the very topmost Height"—if only they are "anxious to learn." This is the corner-stone of Buddhism; can scientific men deny their assent to these words when they look back on the history of Thought in the West; the torture of Bruno, the shame of Galileo, the obscurantism of the Schoolmen, the "mystery" of the hard-pressed priests, the weapons carnal and spiritual of stake and rack, the labyrinths of lying and vile intrigue by which Science, the child, was deformed, distorted, stunted, in the interest of the contrary proposition?

If you ask me why you should be Buddhists and not indifferentists, as you are now, I tell you that I come, however unworthy, to take up the sword that Huxley wielded; I tell you that the Oppressor of Science in her girlhood is already at work to ravish her virginity; that a moment's hesitation, idleness, security may force us back from the positions so hardly won. Are we never to go forward, moreover ? Are our children still to be taught as facts the stupid and indecent fables of the Old Testament, fables

that the Archbishop of Canterbury himself would indignantly repudiate ? Are minds to be warped early, the scientific method and imagination checked, the logical faculty thwarted—thousands of workers lost each year to Science?

And the way to do this is not only through the negative common-sense of indifference ; organise, organise, organise! For a flag we offer you the stainless lotus-banner of the Buddha, in defence of which no drop of blood has ever been, nor ever will be shed, a banner under which you will join forces with five hundred millions of your fellow-men. And you will not be privates in the army ; for you the highest place, the place of leaders, waits; as far as the triumphs of the intellect are concerned, it is to Western Science that we look. Your achievements have shattered the battle-array of dogma and despotism; your columns roll in triumphant power through the breaches of false metaphysics and baseless logic; you have fought that battle, and the laurels are on your brows. The battle was fought by us more than two thousand years ago; the authority of the Vedas, the restrictions of caste, were shattered by the invulnerable sword of truth in Buddha's hand; we are your brothers. But in the race of intellect we have fallen behind a little; will you take no interest in us, who have been your comrades? To Science Buddhism cries: Lead us, reform us, give us clear ideas of Nature and her laws; give us that basis of irrefragable logic and wide knowledge that we need, and march with us into the Universe !

The Buddhist faith is not a blind faith ; its truths are obvious to all who are not blinded by the spectacles of bibliolatry and deafened by the clamour of priests, presbyters, ministers: whatever name they choose for themselves, we can at least put them aside in one great class, the Thought-stiflers; and these truths are those which we have long accepted and to which you have recently and hardly won.

It is to men of your stamp, men of inde-

pendent thought, of keen ecstasy of love of knowledge, of practical training, that the Buddhasana Samagama<sup>1</sup> appeals; it is time that Buddhism reformed itself from within; though its truths be held untarnished (and even this is not everywhere the case), its methods, its organisation, are sadly in need of repair; research must be done, men must be perfected, error must be fought. And if in the West a great Buddhist society is built up of men of intellect, of the men in whose hands the future lies, there is then an awakening, a true redemption, of the weary and forgetful Empires of the East.

X

THE NOBLE EIGHTFOLD PATH

To return from our little digression to the original plan of our essay. It is time to note the "Noble Eightfold Path," referred to and its consideration deferred, in Section III.

In this Fourth Noble Truth we approach the true *direction* of Buddhism; progress is but another word for change; is it possible to move in a direction whose goal is the changeless? The answer is Yea and Amen! and it is detailed in the Noble Eightfold Path, of which I propose to give a short resumé. First, however, of the goal. It may be readily syllogised:

All existing things are (by nature, inevitably) subject to change.

In Nirvana is no change.

∴ No existing thing is or can be in Nirvana.

Now here is the great difficulty; for this syllogism is perfectly sound, and yet we speak of attaining Nirvana, tasting Nirvana, &c.

[We must distinguish the Hindu Nirvana, which means Cessation of Existence in certain Lokas; never absolute Cessation, as

the Buddhist tradition, the etymology, and the logical value alike require for the word as applied to the Buddhist goal. See Chidders, Pali Dictionary, *sub voce* Nibbana.]

The explanation is really as follows : only by this term Nirvana can we foreshadow to you the reality; for even as the Dawn of Dhyana is indescribable in language, *a fortiori* Nirvana is so. To give an example, for that something of the sort is necessary I freely admit, to defend so apparently mystical a statement, I may give the following from my own experience.

In a certain meditation one day I recorded:

"I was (a) conscious of external things seen behind after my nose had vanished. (b) Conscious that I was *not* conscious of these things. These (a) and (b) were simultaneous."

I subsequently discovered this peculiar state of consciousness classified in the Abhidhamma. That it is a contradiction in terms I am perfectly aware; to assign any meaning to it is frankly beyond me; but I am as certain that such a state once existed in me as I am of anything.

Similarly with Nirvana and its definition. The Arahata knows what it is, and describes it by its accidentals, such as bliss. I must raise, very reluctantly, a protest against the idea of Professor Rhys Davids (if I have understood him aright) that Nirvana is the mental state resulting from the continuous practice of all the virtues and methods of thought characteristic of Buddhism. No; Nirvana is a state belonging to a different plane, to a higher dimension than anything we can at present conceive of. It has perhaps its analogies and correspondences on the normal planes, and so shall we find of the steps as well as of the Goal. Even the simple first step, which every true Buddhist has taken, Sammaditthi, is a very different thing from the point of view of an Arahata. The Buddha stated expressly that none but an Arahata could really comprehend the Dhamma.

<sup>1</sup> Or International Buddhist Society, founded in Rangoon in 1903.

And so for all the Eight Stages; as regards their obvious meaning on the moral plane, I can do no better than quote my friend Bhikku Ananda Maitriya, in his "Four Noble Truths."

"He who has attained, by force of pure understanding, to the realisation of the Four Noble Truths, who has realised the fact that depends from that understanding, namely that all the constituents of being are by nature endowed with the Three Characteristics of Sorrow, Transitoriness, and Absence of any immortal principle or Atma—such a one is said to be Sammaditthi, to hold right views, and the term has come to mean one of the Buddhist Faith. We may not have taken the other and higher steps on the Noble Eightfold Path; but must have realised those Four Truths and their sequential three Characteristics. He who has attained Sammaditthi has at least entered upon the Holy Way, and, if he but try, there will come to him the power to overcome the other fetters that restrict his progress. But first of all he must abandon all those false hopes and beliefs; and one who has done this is called a Buddhist. And this holding of Right Views, in Pali Sammaditthi, is the first step upon the Noble Eightfold Path.

"The second stage is Right Aspiration—*Sammasankappo*. Having realised the woe and transitoriness and soullessness of all life, there rises in the mind this Right Aspiration. When all things suffer, we at least will not increase their burden, so we aspire to become pitiful and loving, to cherish ill-will toward none, to retire from those pleasures of sense which are the fruitful cause of woe. The will, we all know, is ever readier than the mind, and so, though we aspire to renounce the pleasures of sense, to love and pity all that lives, yet perhaps we often fail in the accomplishment of our aspiration. But if the desire to become pitiful and pure be but honest and earnest, we have gained the Second Step upon the Path—*Sammasankappo*, Right Aspiration.

"He whose motives are pure has no need

to conceal the Truth—he who truly loves and who has a malice towards none, will ever speak only fair and soft words. By a man's speech do we learn his nature, and that one whose Right Aspirations are bearing fruit attains to the Third Step, Right Speech, *Sammavāca*. Speaking only the Truth in all things, never speaking harshly or unkindly, in his speech realising the love and pity that is in his heart—that man has attained to Stage the Third.

"And because of the great power of a man's thoughts and words to change his being, because by thinking of the pitiful our acts grow full of mercy, therefore is Stage the Fourth called Right Conduct. To him who has gained this Fourth Stage, his intense aspiration, his right understanding, his carefully guarded speech—perhaps for many years of self-control—have at last borne outward fruit, till all his acts are loving, and pure, and done without hope of gain, he has attained the Fourth Step, called *Sammakammanto*.

"And when, growing yet holier, that habit of Right Action grows firm and inalienable, when his whole life is lived for the Faith that is in him, when every act of his daily life, yea, of his sleep also, is set to a holy purpose, when not one thought or deed that is cruel or unpitiful can stain his being—when, not even as a duty, will he inflict pain by deed, word, or thought—then he has gained the Fifth High Path, the Living of the Life that's Right—*Sammā ajivo*. Abstaining from all that can cause pain, he has become blameless, and can live only by such occupations as can bring no sorrow in their train.<sup>1</sup>

"To him who has lived so, say the Holy Books, there comes a power which is unknown to ordinary men. Long training and restraint have given him conquest of his mind, he can

<sup>1</sup> From my point of view, this is of course impossible. See Sec. III. If wilful infliction of pain only is meant, our state becomes moral, or even worse!—mystical. I should prefer to cancel this sentence. Cf. Appendix I.—A. C. ["The Three Characteristics."—T.S.]

now bring all his powers with tremendous force to bear upon any one object he may have in view, and this ability so to use the energies of his being to put forth a constant and tremendous effort of the will, marks the attainment of the Sixth Stage, *Sammāvayamo*, usually translated Right Effort, but perhaps Right Will-Power would come nearer to the meaning, or Right Energy, for effort has been made even to attain to *Sammaditthi*.<sup>1</sup> And this power being gained by its use he is enabled to concentrate all his thoughts and hold them always upon one object—waking or sleeping, he remembers who he is and what his high aim in life—and this constant recollection and keeping in mind of holy things, is the Seventh Stage, *Sammasati*. And by the power of this transcendent faculty, rising through the Eight High Trances to the very threshold of Nirvana, he at last, in the Trance called *Nirodha Samapatti*, attains, even in this life, to the Deathless Shore of Nirvana, by the power of *Sammasamadhi*, Right Concentration. Such a one has finished the Path—he has destroyed the cause of all his chain of lives, and has become *Arahan*, a Saint, a Buddha himself.”

But none knows better than the venerable *Bhikkhu* himself, as indeed he makes clear with regard to the steps *Sammāvayamo* and above, that these interpretations are but reflections of those upon a higher plane—the scientific plane. They are (I have little doubt) for those who have attained to them mnemonic keys to whole classes of phenomena of the order anciently denominated magical, phenomena which, since the human mind has had its present constitution, have been translated into language, classified, sought after, always above language, but not beyond a sane and scientific classification, a rigid and satisfactory method, as I most firmly believe. It is to establish such a method; to record in the language, not of the temple, but of the laboratory, its results,

<sup>1</sup> It is of course a special kind of effort, not mere struggle.

that I make this appeal ; that I seek to enlist genuine, not pseudo-scientific men in the Research ; so that our children may be as far in advance of us in the study of the supernatural phenomena of the mind as we are in advance of our fathers in the sciences of the physical world.<sup>1</sup>

Note carefully this practical sense of my intention. I care nothing for the academic meanings of the steps in the Path; what they meant to the *Arahats* of old is indifferent to me. “Let the dead past bury its dead!” What I require is an advance in the Knowledge of the Great Problem, derived no longer from hearsay revelation, from exalted fanaticism, from hysteria and intoxication; but from method and research.

Shut the temple ; open the laboratory!

## XI.

### THE TWILIGHT OF THE GERMANS.<sup>2</sup>

It is a commonplace of scientific men that metaphysics is mostly moonshine; that it is largely an argument in a circle cannot easily be disputed; that the advance since Aristotle is principally verbal none may doubt; that no parallel advance to that of science has been made in the last fifty years is certain.

The reason is obvious.

Philosophy has had two legitimate weapons—introspection and reason; and introspection is not experiment.

<sup>1</sup> A few weeks after writing these words I came across the following passage in Tyndall’s “Scientific Materialism” which I had not previously read: “Two-thirds of the rays emitted by the sun fail to arouse the sense of vision. The rays exist, but the visual organ requisite for their translation into light does not exist. And so, from this region of darkness and mystery which now surrounds us, rays may now be darted, which require but the development of the proper intellectual organs to translate them into knowledge as far surpassing ours as ours surpasses that of the wallowing reptiles which once held possession of this planet.”—A. C.

<sup>2</sup> A Note showing the necessity and scope of the Work in question.

The mind is a machine that reasons; here are its results. Very good; can it do anything else? This is the question not only of the Buddhist; but of the Hindu, of the Mohammedan, of the Mystic. All try their various methods; all attain results of sorts; none have had the genuine training which would have enabled them to record those results in an intelligible, orderly form.

Others deliberately set their face against such an attempt. I am not of them; humanity has grown up; if the knowledge be dangerous in unexpected ways, what of bacteriology? I have obtained one result; a result striking at the very condition of consciousness; which I may formulate as follows:

“If a single state of consciousness persist unchanged for a period exceeding a very few seconds, its duality is annihilated; its nature is violently overthrown; this phenomenon is accompanied by an indescribable sensation of bliss.”

Very well! but I want this formula verified a hundred times, a thousand times, by independent investigators. I want it better stated; its conditions modified, defined exactly. I want it to leave its humble station as my observation, and put into the class of regular phenomena.

But I am verging back towards Hindu philosophy, and it is a reminder well needed at this moment. For this experience of the destruction of duality, this first phenomenon in the series, has, in all its illusory beauty, been seized upon, generalised from, by philosophers, and it is to this basis of partial and therefore deceptive fact that we owe the systems of Vedanta and Idealism, with their grotesque assumptions and muddle-headed “reconcilements” all complete.

One fact, O Sri Çankaracharya, does not make a theory; let us remember your fate, and avoid generalising on insufficient evidence. With this word of warning, I leave the metaphysician to wallow in his mire, and look toward better times for the great problems of philosophy. Remember that

when the solution is attained it is not the solution of one learned man for his fellows, but one realised and assimilated by every man in his own consciousness.

And what the solution may be none of us can foreshadow. To hoist the problem on to the horns of a dilemma will avail nothing when  $A=A$  may be no longer true; and this by no Hegelian word-juggle; but by direct apperception as clear as the sun at noon.

Therefore; no work more, but—to the work!

## XII.

### THE THREE REFUGES.

Buddham Saranagachami.

Dhammam Saranagachami.

Sangham Saranagachami.

I take my refuge in the Buddha.

I take my refuge in the Dhamma.

I take my refuge in the Sangha.

This formula of adhesion to Buddhism is daily repeated by countless millions of humanity; what does it mean? It is no vain profession of reliance on others; no cowardly shirking of burdens—burdens which cannot be shirked. It is a plain estimate of our auxiliaries in the battle; the cosmic facts on which we may rely, just as a scientist “relies” on the conservation of energy in making an experiment.

Were that principle of uncertain application, the simplest quantitative experiment would break hopelessly down.

So for the Buddhist.

I take my refuge in the Buddha. That there was once a man who found the Way is my encouragement.

I take my refuge in the Dhamma. The Law underlying phenomena and its unchanging certainty; the Law given by the Buddha to show us the Way, the inevitable tendency to Persistence in Motion or Rest—and Persistence, even in Motion, negates change in consciousness—these observed orders of fact are our bases.

I take my refuge in the Sangha.

These are not isolated efforts on my part; although in one sense isolation is eternally perfect and can never be overcome,<sup>1</sup> in another sense associates are possible and desirable. One third of humanity are Buddhists; add men of Science and we form an absolute majority ; among Buddhists a very large proportion have deliberately gone out from social life of any kind to tread these paths of Research.

Is the Way very hard? Is the brain tired? The results slow to come? Others are working, failing, struggling, crowned here and there with rare garlands of success. Success for ourselves, success for others; is it not *Compassion* that binds us closer than all earthly ties? Ay, in joy and in sorrow, in weakness and in strength, do I take my refuge in the Sangha.

### XIII

#### CONCLUSION

Let me give a rapid resumé of what we have gone through.

(a) We have stripped Science and Buddhism of their accidental garments, and administered a rebuke to those who so swathe them.

(b) We have shown the identity of Science and Buddhism in respect of:

- (1) Their fact.
- (2) Their theory.
- (3) Their method.
- (4) Their enemies.

(c) While thus admitting Buddhism to be merely a branch of Science, we have shown it to be a most important branch, since its promise is to break down the walls at which Science stops.

When Professor Ray Lankester has to write, "The whole order of nature, including living and lifeless matter—man, animal, and

gas—is a network of mechanism, the main features and many details of which have been made more or less obvious to the wondering intelligence of mankind by the labour and ingenuity of scientific investigators. But no sane man has ever pretended, since science became a definite body of doctrine, that we know or ever can hope to know or conceive of the possibility of knowing, whence this mechanism has come, why it is there, whither it is going, and what there may or may not be beyond and beside it which our senses are incapable of appreciating. These things are not 'explained' by science, and never can be," he gives a curious example of that quaint scientific pride which knows the limits of its powers, and refuses to entertain the hope of transcending them. Unfortunately, he is as one who, a hundred years ago, should have declared any knowledge of the chemistry of the fixed stars impossible. To invent new methods, and to revolutionise the functions of the senses by training or otherwise is the routine work of to-morrow.<sup>1</sup> But, alas ! he goes even further.

"Similarly we seek by the study of cerebral disease to trace the genesis of the phenomena which are supposed by some physicists who have strayed into biological fields to justify them in announcing the 'discovery' of 'Telepathy' and a belief in ghosts."

To talk of cerebral disease as the characteristic of one who merely differs from you (and that because he has more knowledge than yourself) is itself a symptom familiar to alienists. (I may say I hold no brief for Professor Lodge, here attacked. I am not even interested in any of his results, as such of them as I am acquainted with deal with objective and trivial phenomena.)

Of course, as long as what Darwin called variation is called disease by Professor Ray Lankester, we shall (if we accept his views,

<sup>1</sup> *i.e.*, on normal planes

<sup>1</sup> See note p. 98

and it will go hard with us if we do not ! ) regard all progress in any direction as morbid. So (as with Lombroso) "disease" will become a mere word, like its predecessor "infidelity," and cease to carry any obloquy.

If Science is never to go beyond its present limits; if the barriers which metaphysical speculation shows to exist are never to be transcended, then indeed we are thrown back on faith, and all the rest of the nauseous mess of medieval superstition, and we may just as well have vital principle and creative power as not, for Science cannot help us. True, if we do not use all the methods at our disposal! But we go beyond. We admit that all mental methods known are singularly liable to illusion and inaccuracy of any sort. So were the early determinations of specific heat. Even biologists have erred. But to the true scientist every failure is a stepping-stone to success; every mistake is the key to a new truth.

And the history of our Science is the history of all Science. If you choose to ape Christendom and put the pioneers of rational investigation into the nature of consciousness on the rack (*i.e.* into lunatic asylums) I doubt not we shall find our Bruno. But it will add an additional pang that persecution should come from the house of our friends.

Let us, however, turn away from the aspect of criticism which an accidentla controversy has thus caused me to notice, and so to anticipate the obvious line of attack which the more frivolous type of critic will employ, and return to our proper business, the summary of our own position with regard to Buddhism.

Buddhism is a logical development of the observed facts; whoso is with me so far is *Sammaditthi*, and has taken the first step on the Noble Eightfold Path.

Let him aspire to knowledge, and the Second Step is under his feet.

The rest lies with Research.

Aum ! I take my refuge holy in the Light and Peace of Buddh.

Aum ! I take my refuge, slowly working out His Law of Good.

Aum ! I take my refuge lowly in His Pitying Brotherhood.