1903

SCIENCE AND BUDDHISM

(Inscribed to the revered Memory of Thomas Henry 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 exis ts, 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. W e m ust resolutely exclude the accidental features of both, es pecially 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 sponser. Professer Huxley has dealt with one in his "Pseudo-Scientific Realism": Professer Rhvs 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 leas t a friendly greeting for Atheism and Materialism in their grosser and more militant forms.

Let it be understood then, from the o utset, 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 A nimistic 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."¹

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 unanim 0115 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 t hat any p erson who persists in tuning Buddhism to his own Jew's harp in this w av is risking his reputation, e ither f or scholar-ship or good faith. Scientific men are common enough in the West, if Buddhists are not; and I may safely leave in their h ands 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 im material; a thing is true or not true, whoever said it. We believe Mr. Savage Landor when he affirms that Lhassa is an im portant town in Tibet. Where only probabilities are concerned we are of cours e influenced by the moral character and mental attainments of the s peaker,

¹ See Childers, Pali Dictionary, s.v. Nibbana.

but here I have nothing to do with what is uncertain.¹

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, jus t 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 Sisv phean task of seriously upholding the literal interpretation of obviously fantastic passages.² 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 reas onable investigation to its assertions. Examples of s uch s uccinctness and clarity may be found in The Four

Noble Truths ; The Three Characteris tics ; The Ten F etters; and there is clearly a definite theory in the idea of Karm a. Such ideas are bas ic, and are as a thread on which

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

² Sim ilarly, wher e Buddhist par ables are of a m vstical nature, where a complicated symbolism of num bers (for example) is intended to shadow a tr uth, we m ust discar d them . My experience of mysticism is som ewhat large; its final dictum is that the parable x may be equated to $a, b, c, d \dots z$ by six- and-twenty different per sons, or by one per son in six- andtwenty differ ent m oods. E ven had we a strong traditional explanation I should m aintain my position. T he weapons of the Higher Criticism, supplem ented by Common Sense, are perfectly valid and inevitably destructive against any such structur e. But I am surely in danger of becom ing r idiculous in writing thus to the scientific wo rld. Wh at I really wish to show is that one ned not look for all the Buddhist fancy dishes to the per il of the scientific backhanded str oke I digestion. And by а wish to im press as deeply as possible upon my Buddhist friends that too m uch zeal for the accidentals of our religion will surely result in the overwhelm ing of its essentials in the tide of justly scornful or justly casuistic criticism.—A. C.

the beads of Arabian-Night-Entertainment are strung.¹

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

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

III.

THE FOUR NOBLE TRUTHS.

(1) SORROW.—Existence is Sorrow. T his 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 Cosm ic Process." And in the same essay, though he is disposed to denv more than the rudiments of consciousness to the lower form s of life, he is guite clear that pain varies directly (to put it loosely) with the degree of consciousness. Cf. also "Animal Automatism," pp. 236-237.

(2) S ORROW'S CAUSE.—The cause of sorrow is desire. I take desire here to include such a phenomenon as the tendency of two molecules of hy drogen and chlorine to com bine under certain conditions. If death be painful to m e, it is presum ably so to a m olecule ; 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 m ay be there. And what I call "fatigue" may be the echo in my central consciousness of the

¹ See Prof. Rhys Davids on the "Jataka."

shriek of a peripheral anguish. Here we leave the dom ain of fact; but at leas t 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.¹

The existence of thes e desires, or rather necessities, which I realise to be m ine, 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) S ORROW'S CEASING.—The ces sation of desire is the cessation of sorrow. This is a simple logical inference form the second Truth, and needs no comment.

(4) T HE NOBLE EIGHTFOLD PATH.— There is a way, to be cons idered 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 Cosm os; and, in particular, to man.²

IV.

THE THREE CHARACTERISTICS.

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

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

¹ Change is the great enem y, the im mediate cause of pain. Unable to arrest it, I slo w the process, and render it tem porarily painless, by eating. T his is a concession to weakness, no doubt, in one sense. Do I eatr eally in or der to check change, or to m aintain m y ego-consciousness? Change I desire, for my present condition is sorrow. I really desire the impossible; completely to retain m y present egoity with all its conditions reversed.—A. C.

² For an able and luminous exposition of "The Four Noble T ruths" I r efer the r eader to the pam phlet bearing that title by by 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 d ip his foot twice into the sam e water, so no man can, with exactnes s, affirm of any thing in the sensible world that it is. As he utters t he words, nay, as he thinks them, the predicate ent has ceases to be applicable; the pres 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 e very 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 com batants 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 mo des of being of which we neither have a conception, nor are com petent to form any, back to the indefinable latency from which they arose. Thus the most obvious attribute of the cosmos is its impermenance. It as sumes 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 adm irable s ummary 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 B erkeley certainly never meant to go—a curious parallel fulfilm ent of Christ's curse against Peter (John xxi.). The Bishop demolishes the idea of a substratum of matter, and Hume follows by apply ing an identical process of reasoning to the phenomena of mind.¹

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 s oul free; the former being the basis of our normal consciousness; the latter of the Nirvikalpa-Samadhi conscious-

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

"In him, thus unwisely consider ing, ther e 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 r eal and tr ue he gets the notion, 'By my self, I am conscious of m y 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 com mitted here and there; now this soul of m ine is permanent, lasting, eternal, has the inhe rent quality of never changing, and will contiue for ever and ever!'

"This, brethren, is called the walking in delusion, the jungle of delusion, the wilder ness 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 m ay consider the sixth as the contrary of the f ifth, and correct. The whole passage is highly technical, per haps 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.¹

The Buddhist makes a clean sweep of all this sort of nonsense. He analy ses 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 Professer Huxley 's Essay "On Sensation and the Unity of the Structure of Sensiferous Organs," observes, on lifting h is 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 Nonego.² 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 c arefully 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

¹ As Bishop Butler so conclusively showed.

² I m ay in cidentally rem ark th at a very few hours' practice (see Section VIII.) cause "1 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. Mahasatipatthana.)

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 becaus e 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 des ire to play with lead soldiers? A m 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 sim ple statem ent which, if not certain, is at least not im probable. There is, he will tell y ou, 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 s ubtler matter, the cy cle is less rapid.1

As a nominalist, I hope not to be misunderstood when I compare this to the relative mutability of the individual and the species.² We have enough examples free from such possibility of misinterpretation in our own bodies. Compare the longevity of a bone with that of a cor puscle. But it is this "Substratum" universe, which must not be confounded with the substratum, the arguments for whose existence Berkeley so utterly shattered,¹ 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

¹ W ithout an elabor ate analy sis of the ideas involved in the Ding an sich of Kant, and of H. Spencer's definition of all things as M odes 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 ma tter. 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 som ewhat cowardly way of dealing with the question; I prefer to insist that if we once adm it that the unknowable (by reason) to consciousness m ay 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 m edical 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 lar ge body of evidence fr om 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 m an 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 per haps it m ust always diminish them . T he 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.

¹ Cf. Hu xley, cited *supra*, "possibly , thr ough modes of being of which we neither have a conception, nor are competent to form any...."

² Cf. "Evolution and Ethics," note 1.

survives death, what does it m atter 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 me?" said, "What has posterity done for But som ethin does persist; something changing, though less slowly. What evidence have we after all that an anim al 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 agains t-at leas t with regard to the latter hy pothesis !---I suspend my judgement, leave the guestion alone, and proceed to m ore practical points that are offered by these interesting but not overuseful metaphysical speculations.

V.

KARMA.

The Law of Causation is formally identical with this. Karm a m eans " 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 ultim ation, the doctrine of Karm a is identical with determinism. On this subject much wisdom, with an infinite amount of rubbish, has been written. I therefore dism iss it in these few words, confident that the established identity can never be shaken.

VI.

THE TEN FETTERS OR SANYOGANAS.

- I. Sakkay a-ditthi. Belief in a "soul."
- **2**. V i*k*iki*kk*ha. Doubt.
- 3. Silabbata-parâ- Reliance on the effimâsa cacy of rites and and ceremonies.
- 4. Kama. Bodily Desires.

- 5. Patigha. H atred.
- 6. Ruparaga. Desire for bodily im mortality.
- 7. Aruparaga. Desire for spiritual i mmortality.
- 8. Mano. Pride.
- 9. Udha kka. 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 m inds we cannot work. And this is unquestionable. Suppose a chemist to set to work to determ ine the boiling-point of a new organic substance.

Does he stop in the midst, struck by the fear that his therm ometer 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 y our dislikes help you to accurate obs ervation? I admit that a controversy may stir y ou up to perform prodigies of work, but while y ou 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 com ment. 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 d iscuss 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;¹ whether or no we fly to the extrem e 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 vet in his cradle by the twin serpents of his own perversity and terminology.

What criterion shall we apply to the relative realities of norm al and dream consciousness? Why do I confidently assert that the dream s tate is trans itory and unreal?

In that state I am equally confident that my normal consciousness is invalid. But as m y dream s 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 s how a caus e, 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 quies cent, 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 m atter; 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 tim e s ense is uprooted as never before, and that these influences are perm anent. Then, you will say, delirium trem ens (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 m ay 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 as ide from the vital fact; a skirmish, and not a pitched battle.

This "dream" I have thus described is the state called Dhy ana by the Hindus and Buddhists. The method of attaining it is sane, healthy, and scientific. I would not take the pains to desc ribe that method, had not illiterate, and too often m ystical advocates of the practice obs cured the s imple

¹ Mahasatipatthana (Sec. VIII.) d oes ad mit 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 m ind is com pelled 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 .1 The latter portion is, to m y m ind, the essential one. The work is comparable to that of an electrician who should sit for hours with h is 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 bey ond 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 com plex-means. For the finger on the resistance-box we substitute the Will; and its control extends but to the Mind ; for the ev e 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, c onnected 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.²

¹ Huxley, Essays, V., 136.

² This last sentence will be best understood by those who have practised up to a cer tain 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 im prove, this becomes first difficult, then im possible. At first sight this fact suggests that we are injuring our brains by the practice, but the explanation is as follows: Suppose we figur e the central consciousness as the Sun. intent on seeing that nothing falls into him . Fir st 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 not fr om any of those planets

How any sane person can describe this process as delusive and unhealthy passes my comprehension; that any scientist should do s o 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; as ceticism 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 meditatior. 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.¹

Now to such an observer certain phenomena present themselves sooner or later which have the qualities above predicated of our im aginary " dream" preceded by transition-state very like total loss of consciousness. Are these fatigue phenomena? Is it that this practice for som e as v et unknown reason stimulates some special nerve-centre? P erhaps; the subject requires investigation; I am not a phy siologist. Whatever phy siology may say, it is at least clear that if this state is accompanied with an intense and passionles bliss beyond any thing that the normal man can conceive of, and unaccom panied with the slightest prejudice to the mental and physical health, it is most highly desirable. And to the scientist is presen ts a magnificent field of research.

with which he is fam iliar, 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 sy stem is going, since he no longer receives shocks from it.—A. C.

¹ Hallucination especially is to be f eared. Light-headedness from want of food is quite sufficient explanation for many "Mystic raptures." I do not car e to invoke hysteria and epilepsy without positive evidence.—A. C.

Of the metaphy sical and religious t heories which have been built upon the facts here stated. I have nothing to s ay in this place. The facts are not at the disposition of all: from the nature of the s ubject 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 m ust be a m vstic, 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 y our own laboratory and apparatus, y our mind; and if the room is dirty and the apparatus ill put together, y ou 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 advocathat such and such a ting. For did I say practice leads one to s ee 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.¹

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

¹ On the advisibility of so doing I am open to conviction. T he scientific m ind, I m ight ar gue, 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. I n the past, no doubt, r esearch has been choked by the m ultitude 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 y ou that honest laborious experim ent will be found to verify them in every particular—that whatever arguments are brought forward destructive of the reality of Dhy ana, apply with far more force to the norm al state, and it is evident that to denv 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 Dhy ana-and à fortiori of Samadhi, which I have not experienced, and consequently do not treat of, being content to accept the highly probably s tatements of those who profess to know, and who have so far not deceived m e (i.e. as to Dhyana), is a question which it is not pertinent to the present argum ent to dis cuss.¹ 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 m ind 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 P ranayama. It is essentially an observation-practice, which later assumes an analy tic as pect 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

¹ The gr avest doubts assail me on further examination of this point. I am now (1906) convinced that the exper iences to which I refer constitute Samadhi. The accursed pedentry of the pundits has led to the intr oduction of a thousand useless subtleties in philosophical ter minology, 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.—A. C. 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 c omplicated muscular contractions, &c. ; but this is not necessary. Concentrate on some series of simple movements.

When this through habit becomes i ntuitive so that the thought is *really* "T here 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 m ay begin to analyse, as explained above, and the s econd stage is "There is a s ensation (Vedana) of a raising, &c." Sensati ons are further clas sed 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),¹ we procede to Sañña, perception.

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

When this has becom e 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 m ore pain; only an intense interest sim ilar to that which has enabled men of science to watch and note the progress of their own death-agony. Un-

¹ "W hy should y ou expect Vedana to m ake 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 m e it had seemed obvious. The fact had been assim ilated. To meditate on any thing is to per ceive its unr eal 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 V iññanam pursue the analy sis to its ultimation, "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 psy chologist of any standing will quarrel with this.¹ Reasoning in fact leads us to this analysis; the Buddhist goes further only in so far as h e may be said to knock down the scaffolding of reasoning processes, and to assimilate t he 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 grammer.

I have called this m editation the most famous of the Buddhist meditations, b ecause it is stated by the Buddha himself that if one practices it honestly and intelligently a r esult is certain. And he says this of no other.

I have personally not found the time to devote m yself seriously to this Mahasatipatthana, and the s tatements here m ade are those derived from reason and not from experience. But I can say that the unreality of the grosser (rupa) relative to the sublter Vedana and still m ore 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 pers on m ust be very near the s tate called Nirvana, whatever m ay be meant by

¹ 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 m ysterymongers 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 S pencer's "Transfigured Realis m." 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 statem ent that Idealism is but verbally intelligible is for m y purpose the most admirable thing he could have said.

He is wrong in say ing 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 m y m ind that that the great difficulty habitually experienced by the normal mind in the assim ilation of m etaphysics is due to the actual lack of experience in the m reader of the ind of the phenomena discussed. I will go so far as to say that perhaps Mr. Spencer himself is so bitter because he him self has actual experience of "Transfigured Realis m" as a directly presented phenomenon; for if he supposes that the normal healthy mind can perceive what he perceives. Berkeley's a rguments must se em to him mere wanton stupidity.

I class the Hindu philosophy with the Idealist; the Bhuddistic with that of Mr. Herbert S pencer; the great difference between the two being that the Buddhists recognise clearly these (or similar) conclusions as phenomena, Mr. S pencer, 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 tes timony 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 obs erve more accurately—has this source of possible error been sufficiently recognised?—what its testimony really is.

Experience has taught me, so far as I h ave been able to go, that Reason and Consciousness have met together; Apprehension and Analysis have kissed one another. The reconciliation (in fact, rem ember, 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 hy pothesis is then of clear evidential value in support of that hypothesis, empiric as it was, and is. But with the growth and gathering-together, classify ing, 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 m editations and ideas, there is no neces sary 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 c ausation ; if this be metaphysics, so far Buddhism is metaphysical, but no further. While deny ing 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 Ty cho Brahe as the One Guide? How far the Buddha had he reverenced 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 m ore than two thousand y ears ago: "Therefore, O Ananda, be ye lamps unto yourselves. Be ye a refuge to yourselves. Betake y ourselves to no external refuge. Hold fast to the truth as a lam p. Hold fas t as a refugee to the truth. Look not for refuge to any one besides y ourselves." (M ahaparanibbana S utta, 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 sham e of Galileo, the obscurantism of the Schoolmen, the "my stery" of the hardpressed priests, the weapons carnal and spiritual of stake and rack, the labyrinths of lying and vile intrigue by which Science, t he 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 y ou 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 m oment'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 Tes tament, 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! 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 y ou will join forces with five hundred m illions of your fellowmen. And y ou will not be privates in the army; for you the highest place, the place of leaders, waits; as far as the trium phs of the intellect are concerned, it is to Western Science that we look Your achievements have shattered the battle-array of dogm a and despotism; y our columns roll in trium phant power through the breaches of false m etaphysics and baseless l ogic; you have fought that battle, and the laurels are on y our brows. The battle was fought by us more than two thousand y ears ago; the authority of the Vedas, the restrictions of caste, were shattered by the invulnerable sword of truth in Buddha's hand: we are vour brothers. But in the race of intellect we have fallen behind a little; will you take no interest in us, who have been v our 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 clam our of priests, presbyters, ministers: whatever name they choose for them selves, we can at leas t put them aside in one great class, the Thought-stiflers; and these truths are thosse 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 Buddhasanana Samagama¹ appeals; it is time that Buddhism reformed itself from within: though its truths be held untarnished (and even this is not every where the cas e), 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 m en of intellect, of the men in whose hands the future lie s, there is then an awakening, a true redem ption, of the weary and forgetful Empires of the East.

Х

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 Sec-tion 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 Am en! 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.

 \therefore No existing thing is or can be in Nirvana.

Now here is the great difficulty; for this syllogism is perfectly sound, and y et 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

¹ Or International Buddhist Society, founded in Rangoon in 1903.

Buddhist tradition, the ety mology, 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, \dot{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 s tatement, I m ay 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. Thes e (*a*) and (*b*) were simultaneous."

I subsequently discovered this peculiar state of cons ciousness classified in the Abhidhamma. That it is a contradiction in terms I am perfectly aware; to as sign any meaning to it is frankly beyond me; but I am as certain that s uch a s tate once existed in me as I am of anything.

Similarly with Nirvana and its definition. The Arahat knows what it is. and describes it by its accidentals, such as bliss. I m ust raise, very reluctantly, a protest against the idea of Professer Rhy s 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 any thing we can at pres ent 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 sim ple first step, which every true Buddhist has taken, Sam maditthi, is a very different thing from the point of view of an Arahat. The Buddha stated expressly that none but an Arahat could really comprehend the Dhamma.

And s o for all the Eight S tages; 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 bein are by nature endowed with the Three Character-istics of Sorrow, Transitoriness, and Absence of any immortal principle or Atma-such a one is said to be Sam maditthi, to hold right views, and the term has com e to m ean 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 W ay, and, if he but try, there will come to him the power to overcome the other fetters that restri ct 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 Sam maditthi, 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 m ind this Right Aspiration. W hen all things suffer, we at least will not increase their burden, so we aspire to become pitiful and loving, to cherish illwill 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 w e aspire to renounce the pleasures of s ense, to love and pity all that lives, yet perhaps we often fail in the accom plishment of our aspiration. But if the desire to becom e 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 m alice towards none, will ever speak only fair and s oft words. By a man's speech do we learn his nature, and that one whose Right Aspirations are b earing fruit attains to the Third Step, R ight Speech, Sammaváca. S peaking 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 becaus e 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 m ercy, therefore is Stage the Fourth called Right Conduct. To him who has gained this Fourth Stage, his intense as-piration, his right understanding, his care-fully 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 y et holier, that habit of Right Action grows fi rm 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 als o, 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—Sammá ajivo.

Abstaining from all that can caus e pain, he has become blameless, and can live only by such occupations as can bring no sorrow in their train.¹

"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

¹ From m y point of view, this is of cour se impossible. See Sec. III. If wilful in fliction of pain only is meant, our state becom es m oral, or even worse!—mystical. I should prefer to cancel this sentence. Cf. Appendix I, *supra.*—A. C.

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, Sammávayamo, 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.¹ 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 Sam mávayamo and above, that these interpretations are but reflections of those upon a higher planethe 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, s ince the h uman mind has had its present constitution, have language, classified, been translated into sought after, alway s above language, but n ot 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,

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 supernormal phenomena of the mind as we are in advance of our fathers in the sciences of the physical world.¹

Note carefully this practical s ense of m y 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 hy steria and intoxication; but from method and research.

Shut the temple ; open the laboratory!

XI.

THE TWILIGHT OF THE GERMANS.²

It is a com monplace of scientific m en that metaphysics is mostly moonshine; that it is largely an argument in a circle cannot easily be disputed; that the advance s ince 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.

¹ A few weeks after writing these words I came across the following passage in T vndall's "Scientific Materialism" which I had not previously read: "Two-thirds of the rays em itted by the sun fail to ar ouse the sense of vision. The rays exist, but the visual or gan requisite for their translation into light does not exist. And so, from this r egion of dar kness and m ystery which now surrounds us, r ays m ay now be darting, which require but the developm ent of the pr oper intellectual organs to translate them into knowledge as far sur passing our s as our S surpasses that of the wallowing reptiles which once held possession of this planet."-A. C.

² A Note showing the necessity and scope of the Work in question.

¹ It is of course a special kind of effort, not mere struggle.

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 My stic. 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 agains t such an attem pt. I am not of them; humanity has grown up; if the knowledge be dangerous in unexpected way s, 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 indes cribable s ensation of bliss."

Very well! but I want this formula verified a hundred times, a t housand 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 p henomenon 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 muddleheaded "reconcilements" all complete.

One fact, O Sri Çankaracharya, does not make a theory ; let us rem ember y our fate, and avoid generalising on insufficient evidence. W ith this word of warning, I leave the metaphysician to wallow in his m ire, 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 dilem ma 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 Saranangachami. Dhammam Saranangachami. Sangham Saranangachami. 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 c owardly shirking of burdens—burdens which cannot be shirked. It is a plain estimate of our auxiliaries in the battle; the cosm ic 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 sim plest 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 M otion, negates change in consciousness—these observed orders of fact are our bases. I take my refuge in the Sangha.

These are not is olated efforts on my part; although in one sense isolation is eternally perfect and can never be overcome, ¹ in another s ense as sociates are pos sible 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 t hese paths of Research.

Is the Way very hard? Is the brain tired? The results slow to com e? Others are working, failing, struggling, crowned here and there with rare garlands of success. Success for ourse lves, success for othe rs; 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 garm ents, 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 adm itting Buddhism to be merely a branch of Science, we have shown it to be a most important branch, since its prom ise is to break down the walls at which Science stops.

When Professor Ray Lankester has to write, "The whole order of nature, i neluding living and l ifeless 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 m ankind 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 bey ond and beside it which our s enses 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 v ears ago, should have declared any knowledge of the c hemistry of the fixed stars impossible. To invent new methods, and to revolutionise the functions of the senses by training or other-wise is the to-morrow¹ routine work of But, alas ! he goes even further.

"Similarly we seek by the study of cerebral disease to trace the genes is of the phenomena which are supposed by some physicists who have stray ed 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 m ore knowledge than y ourself) is itself a symptom familiar to alienists. (I m ay say I hold no brief for Professor Lodge, here attacked. I am not even interes ted 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,

If Science is never to go bev ond its present lim its; if the barriers which m etaphysical speculation shows to exist are never to be trans cended, 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 bey ond. We admit that all mental methods known are singularly liable to illusion and inaccuracy of any sort So were the early determ inations of s pecific heat. Even biologists have erred. But to the true scientist every failure is a steppingstone to s uccess; every m istake is the key to a new truth.

And the history of our Science is the history of all Science. If y ou 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 ty pe 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.