MOTHER INDIA

JULY, 1968

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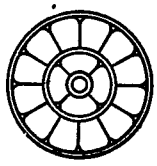
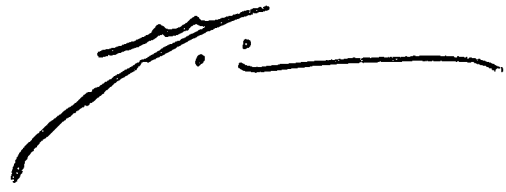


Lord, Thou hast willed, and I execute.

A new light breaks upon the earth,

A new world is born.

The things that were promised are fulfilled.



MOTHER INDIA

MONTHLY REVIEW OF CULTURE

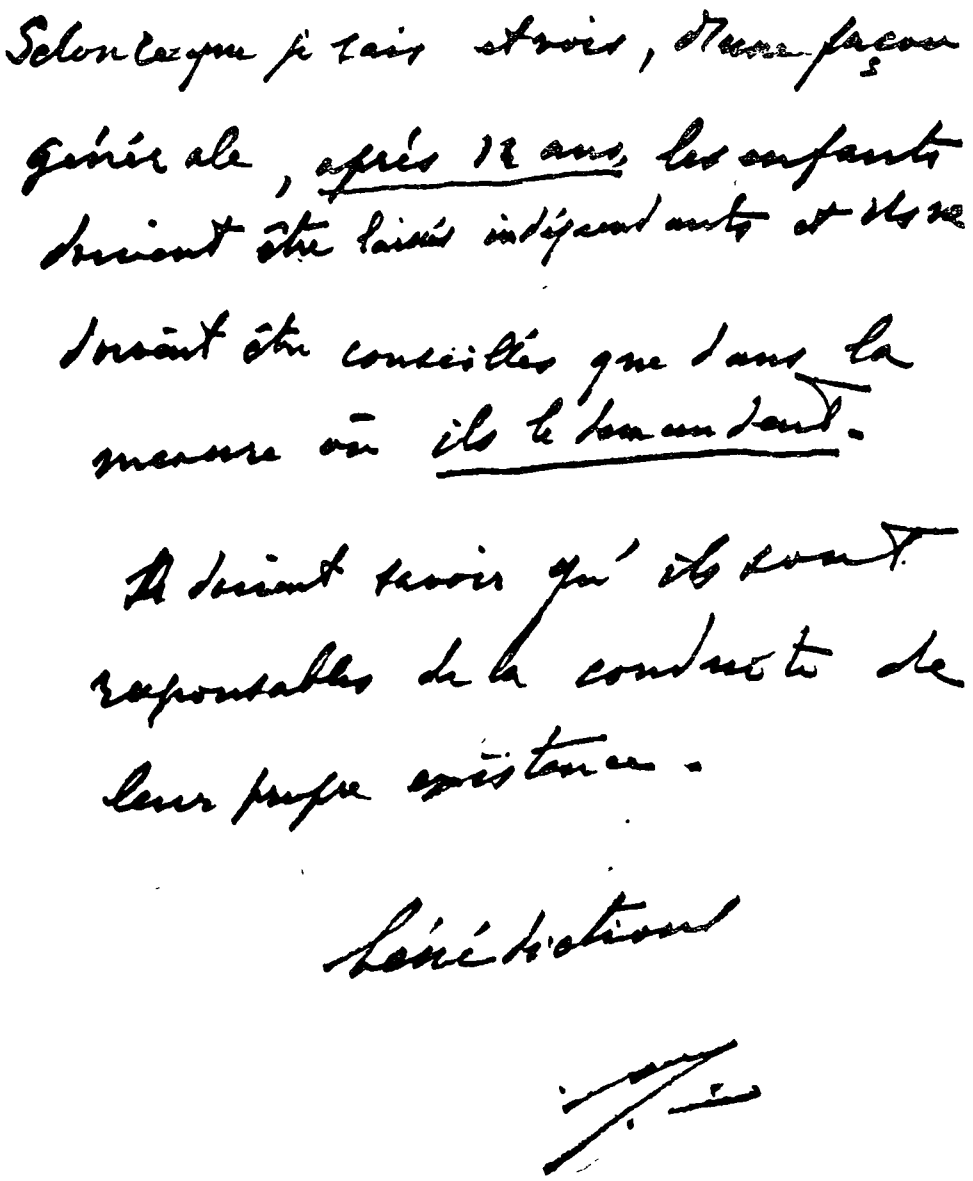
Vol. XX No. 6

"Great is Truth and it shall prevail"

CONTENTS

STUDENTS' SECTION

A MESSAGE OF THE MOTHER



SELON ce que je sais et vois, d'une façon générale, *après 14 ans*, les enfants doivent être laissés indépendants et ils ne doivent être conseillés que dans la mesure où *ils le demandent.*

Ils doivent savoir qu'ils sont responsables de la conduite de leur propre existence.

According to what I know and see, in a general way, *after 14 years*, children should be left independent and they should be advised only to the extent that *they ask for it.*

They should know that they are responsible for the conduct of their own existence.

THE MOTHER ON THE ASHRAM AND AUROVILLE

Q. Quelle est la différence entre l'Ashram et Auroville ?

L'Ashram gardera son rôle de pionnier, d'inspirateur et de guide. Auroville sera une tentative de réalisation collective.

Juin 1968

Q. What is the difference between the Ashram and Auroville ?

The Ashram will keep its role as pioneer, inspirer and guide. Auroville will be an experiment in collective realisation.

June 1968

THE MOTHER ON MONEY FOR AUROVILLE

Q. Firstly, is there something specific being done which is impeding the flow of money to Auroville ?

It is the lack of push towards the future that impedes the flow of money.

Q. Secondly, is there something specific which should be done to increase the flow of money to Auroville ?

A confident certitude in the inevitable future can break this mistake.

17-5-68

WORDS OF THE MOTHER

IN the physical the joy of being is the best expression of gratitude towards the Divine.

16.6.1941

Your attitude towards work is the right one and I see no changes to suggest. The work done through love and because of love is surely the most powerful.

8.6.1942

From the physical point of view, it is obviously better to eat quietly and without hurry, and I am quite sure that most often one can manage to get time for it. It is all a question of organisation.

27.9.1943

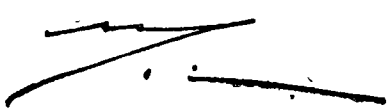
HOSTILE FORCES AND SEXUAL DESIRE

AN UNPUBLISHED LETTER BY THE MOTHER

(Tonight again there is a severe attack of the hostile forces. My sleep has completely vanished. I pray to you with utmost sincerity to liberate me from the clutches of these furies. They attack my abdomen, thighs and knees. Pray, give me the promised advice, so that I may be able to get rid of them completely for ever.)

These adverse forces are connected with sexual desire. They live on the energy wasted when the act takes place. And even a thought, a mental or vital desire is sufficient to let them come in and settle in the atmosphere. Thus it is in the mind itself that the purification must take place. My blessings.

12.9.1950



ON LITERATURE AND LIFE

SOME UNPUBLISHED LETTERS OF SRI AUROBINDO FROM NIRODBARAN'S NOTEBOOKS

(*A great bother and an uninteresting business, this chiselling, I find. But perhaps it is very pleasant to you, as you cast and recast* ad infinitum, *we hear, poetry or prose.*)

Poetry only, not prose. And in poetry only one poem 'Savitri'. My own other poems are written off at once and if any changes are to be made it is done the same day or the next day and very rapidly done. (9.5.1937)

(*You have laid down some special features of overhead poetry, say, greater depth and height of spiritual vision, inner life and experience and character of rhythm and expression. But it won't outshine Shakespeare in poetic excellence, will it?*)

Obviously if properly done it would have a deeper and rarer substance, but would not be necessarily greater in poetic excellence.

(*You say also for the overhead technique that it must be the right word and no other and in the right place, the right sound and no other in a design of sound that cannot be changed even a little. But is that not what is called sheer inevitability, which is the sole criterion of the highest poetry?*)

Yes, but mental and vital poetry can be inevitable also. Only in O.P. there must be a rightness throughout which is not the case elsewhere—for without this inevitability it is no longer fully O.P., while without the sustained inevitability there can be fine mental and vital poetry. But practically that means O.P. comes usually by bits only, not in a mass.

(*Perhaps excellence of poetry is not needed in overhead creation; what is more important is expression of spiritual vision, etc. True, but why can't it be clothed in as fine poetry as, say, creations of the vital plane as in Shakespeare? Should not the highest source of inspiration bring all the characteristics that make the highest poetry?*)

It can, but it is more difficult to get. It can be as fine poetry as Shakespeare's if there is the equal genius, but it need not by the fact of being O.P. be finer.

(*I don't suppose all spiritual poetry comes from the overhead planes.*)

No, it may come from the spiritualised mind or vital. (17.5.1937)

(*Some people don't like expressions like those in my poems—depicting high occult or spiritual realities. X calls them insincere: "A poet-sadhak has no justification for using them."*)

If such poems are put as a claim or vaunted as a personal experience of Yoga, they may be objected to on that ground. But a poet is not bound to confine himself to his personal experiences. A poet writes from inspiration or from imaginative vision. Milton did not need to go to Heaven or Hell or the Garden of Eden before he wrote *Paradise Lost*. Are all X's bhakti poems an exact transcription of his inner state? If so, he must be a wonderful Yogi and bhakta. (16.4.1938)

That is my own method. I put down what comes and deal with it afterwards in the calm light of intuitive reflection. (6.5.1938)

Good Heavens! after a life of sadhana you expect me still to "think" and what is worse think what is right or wrong. I don't think even; I see or I don't see. The difference between intuition and thought is very much like that between seeing a thing and badgering one's brains to find out what the thing can possibly be like. Intuition is truth-sight. The thing seen may not be the truth? Well, in that case it will at least be one of its hundred tails or at least a hair from one of the tails. The very first step in the supramental change is to transform all operations of consciousness from the ordinary mental to the intuitive, only then is there any hope of proceeding farther; not to, but towards the supramental. I must surely have done this long ago, otherwise how could I be catching the tail of the supramental whale? (7.5.1938)

For me Urvasi is the divine beauty in the vital with its intoxication and ecstasy. (19.5.1938)

The word "lonelily" simply doesn't exist, any more than "lovelily" or "sillily" or "wilily". You can say "lonesomely" if you think it worth while, not "lonelily". Harin is no authority for the use of English words. I did not correct his English when I saw his poems—I left the responsibility of his departures to himself except when he himself asked on a particular point. (21.5.1938)

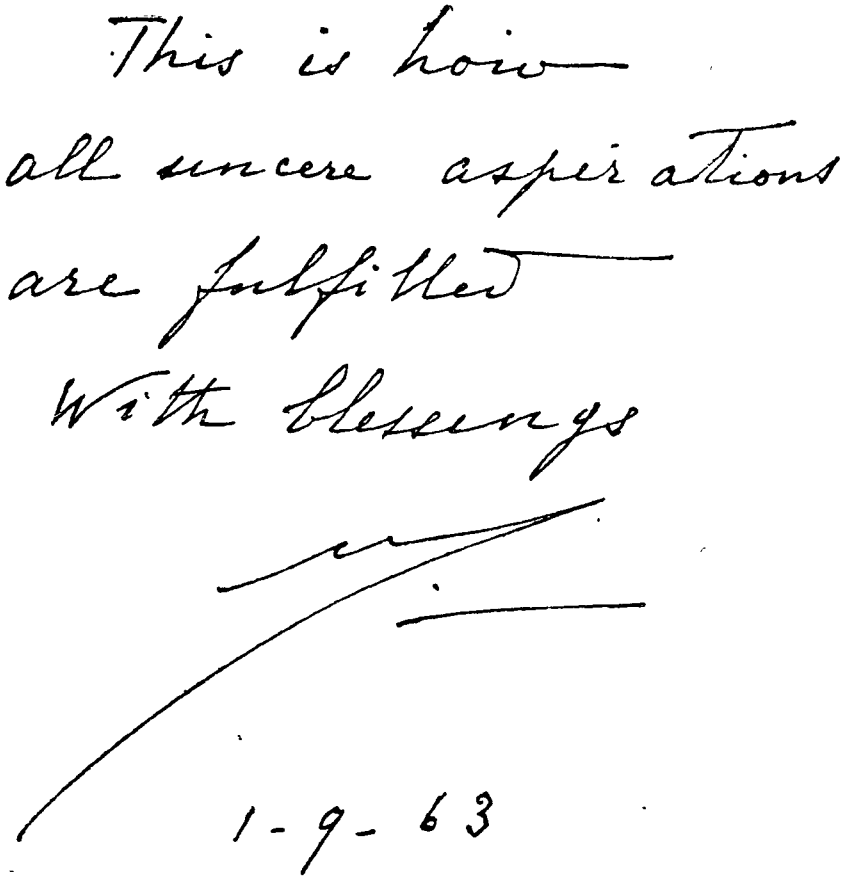
(*I don't understand why Lele told you that because you were a poet sadhana would be easy to you through poetry.*)

Because I told him I wanted to do Yoga in order to get a new inner Yogic consciousness for life and action, not for leaving life. So he said that. A poet writes from an inner source, not from the external mind, he is moved by inspiration to write *i.e.* he writes what a greater Power writes through him. So the Yogi in action has to act from an inner source, to derive his thoughts and movements from a...[1], to be inspired and impelled by a greater Power which acts through him. He never said that sadhana would be easy for me through poetry. What is "through poetry"? Poetry can be done as a part of sadhana and help the sadhana—but sadhana "through poetry" is a quite different matter. (23.5.1938)

[1] Expression illegible (Editor).

SALUTATIONS

(Continued from the June issue)



41

Miwani (Africa), 30-8-1954

Dear Mother,

What shall I tell You? What have You not done to make my life glorious and beautiful? Still I have been unaware, I could not understand You perfectly and I suffered.

The world has misunderstood the frankness of my heart. You are teaching me valuable lessons of life. And that is why I do not depend now on the judgements and misjudgements of human beings. Let them say what they want, they are free to do so.

But now, I have understood and learnt the value of Your precious words. I learnt it when I stumbled.

All praise to You! Keep on giving me such experiences that my life, beaten into shape, may become beautiful and glorious.

In the past I wondered what the benefit is of Silence and what Silence itself is. Now I realise that the meaning of Silence is not to express by mouth any sentiment, not even express the Truth, because by speech grave misunderstandings arise. The sensible becomes nonsensical, the thought-vibrations between people start clashing and, out of it all, something quite different comes up. So it is wise not to give a chance to anyone to make false constructions and untrue statements. The cure for all these ills is: Silence.

Indeed one must speak but speak only the needful—the rest to be buried in the mind. Finally the Truth will shine out.

Besides, in trying to advise one risks being misunderstood. The path of life is so full of dangers and difficulties that at every step one has to take thought and remain conscious.

What have You made me understand, O Mother?

"Trust none. Never, by telling a lie, deceive your own soul. Fear no one. Tell nothing to anyone. Do not care for what others do or say. Keep away from scandal. Keep silence and cling to the Truth alone."

True. But, Mother, I have committed mistakes again and again. Now indeed I think that I shall never be unfaithful to You, I shall never deceive my soul. Give me strength to obey You. I am Your ignorant child. Mould my whole life in such a way that I may be worthy of You and Your Divinity. Save me from all the lowest elements. Protect me. Lead me to the Truth.

42

Miwani (Africa), 30-8-1954

Adored and Beloved in all my births, Sri Aurobindo!

I make innumerable salutations to You. After many years and very late indeed, I came to realise that You alone are my Guru and my All.

But should I call it my misfortune or my fate, or was it all Your wish that I could not have Your *Darshan*?

My Lord, not by Your physical Presence but by Your Spirit's mighty Light illumine my life and, by the same Light, make sun-clear my path. With the utmost calm lead me towards Your magnificent Divinity.

Lord, I pray from my depths that I may be fortunate enough to have Your Divine *Darshan.*

O Lord, may our paths be the same!

43

Miwani (Africa), 1-9-1954

Dear Mother,

Last night You looked at me and gave me something. Is it that I wanted it? No, I do not want rich food, good clothes or worldly things. Whatever I have by Your Grace contents me.

Mother, I have hunger for knowledge; so spread and spread the Divine Truth in every cell of me and, even more than that, I want You. Now, call me to Yourself as soon as possible. Am I not Yours? Will You not accept me?

44

Miwani (Africa), 3-9-1954

My dearest Mother,

What shall I say? Your Grace increases day by day.

This very morning it was as if my heart had bloomed and I had received new inspiration and strength. Now whatever may happen, I must take the Divine Path.

This morning my day became blessed. All Your Grace...

45

Miwani (Africa), 5-9-1954

My dearest Mother,

For two days I have been longing for You. It is as if at night You were appearing by my side.

Now I feel within me that I should lay my head at Your Feet and in Your Lap and tell You inwardly my whole heart's story. Call me to You soon. Do what You think best.

I have the fear: what if circumstances should hinder the fulfilment of my aim? But You have given me the inner answer and I am at peace.

Today I have read Your *Prayers and Meditations* and Sri Aurobindo's book *The Mother*.

Your prayers to the Lord are wonderful. At once I asked within myself: Will not the prayers I have addressed to You get their fulfilment, even as Your own have done? My heart has said, "Yes."

(To be continued)

HUTA

MAN RESISTS

THE Mother's *Prayer* dated September 3, 1919, refers to the age-old resistance of the ignorant human nature to transcending itself, to being transformed, to allowing itself to be divinised. The human being prays and aspires on occasions, but intermittently only. The required urge and constancy are lacking. And when the Lord knocks we do not listen or do not understand or, even having recognised the sound, do not admit and accept Him.

The Mother explains in a talk that what she had prepared was the Feast, the Feast of Transformation, the Divine Life on earth.

"It was not easy to prepare the Feast. I had to bear the full load of the cross and ascend the calvary. Jesus as he mounted to his destiny with the Cross on his back stumbled often and fell and rose again with bruised limbs to begin again the arduous journey. Even so, this being too had to go through many disillusions and deceptions, many painful and brutal experiences. It was not a straight and smooth going, but a tortuous and dangerous ascent."

It is not within the power of man to have the Feast by his own effort or capabilities. The Divine has to descend and bring it down Himself. This is what the Mother did.

"It was a banquet I prepared for men. Instead of a life of misery and suffering, of obscurity and ignorance, I brought to them a life of light and joy and freedom. I took all the pains the task demanded and when it was ready I offered it to mankind to partake of it.

"But man in his foolishness and pig-headedness refused it, did not want it. He preferred to remain in his dark miserable hole."

Such is the obstinate stupidity of human nature. As Sri Aurobindo says in *Savitri*:

> This world is in love with its own ignorance,
> Its darkness turns away from the saviour light,
> It gives the cross in payment for the crown.
> .....
> A Sun has passed, on earth Night's shadow falls.

But infinite are the compassion and patience of the Divine. He waits for another occasion, and again for another. The Mother says:

"But at the end of the tunnel there is always the light. The calvary and the crucifixion culminated in the Resurrection: the divine Passion of Christ flowered into this sweet Recompense. Here too after all the dark and adverse vicissitudes lies the fulfilment of transformation. One must pass through the entire valley of death and rise to the topmost summit to receive and achieve the fullness of the glory. One

must leave behind all the lower ranges of ignorance, the entire domain of human consciousness, come out of the imperfection man is made of; then only will he put on the divine nature as his own body and substance."

The first condition is that man must choose to get out of ignorance, darkness, falsehood, etc. The Mother relates an experience of hers when she first met Sri Aurobindo. She says:

"I was in deep concentration, seeing things in the Supermind, things that were to be but which were somehow not manifesting. I told Sri Aurobindo what I had seen and asked him if they would manifest. He simply said, 'Yes.' And immediately I saw that the Supramental had touched the earth and was beginning to be realised!"

Then what is the reason for so much time being needed for the manifestation of things when the supreme Divine wills it and with such a puissant power of making real what is true?

To take another instance. In 1915 the Mother went to a certain plane and told Sri Aurobindo, "India is free." It was not a prophecy, but a fact which she knew. She even answered to a question of Sri Aurobindo's and said: "There will be no violence, it will be done without a revolution, it is the British people who of themselves will decide to go away, for the place will become untenable for them because of certain circumstances upon the earth." But, between that moment when it was an established fact on that plane, in 1915, and the moment when it was translated in the material world, when it manifested on the earth, when India became free, in 1947, there was a span of thirty-two years.

Why so?

It is the image of the resistance of all that opposes the manifestation. This resistance is a collective fact as well as an individual one.

And the non-choosing by man of his true destiny is also a resistance that counts. Again, why ?

In course of another talk the Mother raises the issue.

"You will say if the truth I bring is supreme and omnipotent, why does it not compel the world to accept it, why can it not break the world's resistance, force man to accept the good he refuses?"

And she answers:

"But that is not the way in which the world was created nor the manner in which it moves and develops. The origin of creation is freedom; it is a free choice in the consciousness that has projected itself as the objective world. This freedom is the very character of its fundamental nature. If the world denies its supreme truth, its highest good, it does so in the delight of its free choice; and if it is to turn back and recognise that truth and that good, it must do so in the same delight of free choice. If the erring world is ordered to turn right and immediately does so, if things are done in a trice, through miracles, there will be then no point in creating a world. Creation means a play of growth: it is a journey, a movement in time and space through graded steps and stages. It is a movement away—away from its source—and a movement towards ;

that is the principle or plan on which it stands. In this plan there is no compulsion on any of the elements composing the world to forswear its natural movement, to obey a dictate from outside: such compulsion would break the rhythm of creation.

"And yet there is a compulsion. It is the secret pressure of one's own nature that drives it forward through all vicissitudes back again to its original source. When it is said that the Divine Grace can and should do all, it means nothing more and nothing less than that: the Divine Grace only accelerates the process of return and recognition. But on the side of the journeying element, the soul, there must be awakened a conscious collaboration, and initial consent and a constantly renewed adhesion. It is this that brings out, at least helps, to establish outside on the physical level the force that is already and has always been at work within and on the subtler and higher levels. That is the pattern of the play, the system of conditions under which the game is carried out. The Grace works and incarnates in and through a body of willing and conscious co-operators: these become themselves part and parcel of the Force that works.

"The truth I bring will manifest and will be embodied upon earth; for, it is the earth's and world's inevitable destiny. The question of time is not relevant,. In one respect the truth which I say will be made manifest is already fully manifest, is already realised and established; there is no question of time there. It is in a consciousness timeless or eternally present. There is a process, a play of translation between that timeless poise and the poise in time that we know here below. The measure of that hiatus is very relative, relative to the consciousness that measures, long or short according to the yardstick each one brings. But that is not the essence of the problem: the essence is that the truth is there active, in the process of *materialisation*, only one should have the eye to see it and the soul to greet it."

SHYAM SUNDAR

SRI AUROBINDO AND THE LONGEST SENTENCES IN ENGLISH

THE longest sentence in English prose—659 words—is in Chapter 4, Section 6 of Jeremy Taylor's well-known book *Holy Dying*. Perhaps the next longest—432 words —occurs on pp. 80-81 of the English translation of Proust's *Swann's Way* (Chatto & Windus's Phoenix Library). The longest after this—321 words—comes on p. 624 of *The Life Divine* by Sri Aurobindo (American Edition, 1949). This sentence is the second in the paragraph which starts speaking of "a unity behind diversity and discord" as "the secret of the variety of human religions and philosophies". It runs:

"Whether they see dimly the material world as the body of the Divine, or life as a great pulsation of the breath of Divine Existence, or all things as thoughts of the cosmic Mind, or realise that there is a Spirit which is greater than these things, their subtler and yet more wonderful source and creator,— whether they find God only in the Inconscient or as the one Conscious in inconscient things or as an ineffable superconscious Existence to reach whom we must leave behind our terrestrial being and annul the mind, life and body, or, overcoming division, see that He is all these at once and accept fearlessly the large consequences of that vision—whether they worship Him with universality as the Cosmic Being or limit him and themselves, like the Positivist, in humanity only or, on the contrary, carried away by the vision of the timeless and spaceless Immutable, reject Him in Nature and Cosmos,—whether they adore Him in various strange or beautiful or magnified forms of the human ego or for His perfect possession of the qualities to which man aspires, his Divinity revealed to them as a supreme Power, Love, Beauty, Truth, Righteousness, Wisdom,—whether they perceive Him as the Lord of Nature, Father and Creator, or as Nature herself and the universal Mother, pursue Him as the Lover and attracter of souls or serve Him as the hidden Master of all works, bow down before the one God or the manifold Deity, the one divine Man or the one Divine in all men or, more largely, discover the One whose presence enables us to become unified in consciousness or in works or in life with all beings, unified with all things in Time and Space, unified with Nature and her influences and even her inanimate forces,—the truth behind must ever be the same seeking."

The longest sentence in English poetry—143 words and, if a compound is counted as 2, then 144—is in Sri Aurobindo's *Savitri*, Book IV, Canto III, p. 426 (The Centre of Education Edition). It indicates how on hearing some words from her father Aswapathy, Savitri wakes up to the sense of her true mission:

As when the mantra sinks in Yoga's ear,
Its message enters stirring the blind brain
And keeps in the dim ignorant cells its sound;
The hearer understands a form of words
And, musing on the index thought it holds,
He strives to read it with the labouring mind,
But finds bright hints, not the embodied truth:
Then, falling silent in himself to know
He meets the deeper listening of his soul:
The Word repeats itself in rhythmic strains:
Thought, vision, feeling, sense, the body's self
Are seized unalterably and he endures
An ecstasy and an immortal change;
He feels a Wideness and becomes a Power,
All knowledge rushes on him like a sea:
Transmuted by the white spiritual ray
He walks in naked heavens of joy and calm,
Sees the God-face and hears transcendent speech :
An equal greatness in her life was sown.

Perhaps the next longest—141 words and, if the compounds count each as 2, 144—ends Matthew Arnold's *Scholar Gypsy*, again a sentence composed of a drawn-out simile.

K. D. SETHNA

MYSTIC LIAISON

SENAPATI BAPAT AND SRI AUROBINDO

BETWEEN us and our inner divinities there always is a mystic liaison.

Senapati Bapat never saw Sri Aurobindo eye to physical eye but since the time the former studied the art and cult of the Bomb from a young Russian revolutionary in Paris, somewhere in the first decade of our tumultous century (the Hour of God, can we say?) up to the very time when he received the Sidhhi Darshan message from two erstwhile revolutionaries from the Pondicherry Ashram on 27th November 1967, the last day of his earthly existence, Bapat had been Sri Aurobindo's through and through, neither styled as a devotee nor even a follower but tied nonetheless by cords of a mystic liaison.

For, when somewhere in 1908 Barindrakumar Ghose proferred Bapat the opportunity to meet Dada (Elder brother) in Calcutta, Bapat humbly and quite simply remarked, "Oh! But what have we got as yet to show him? Let us first do something real and concrete and then have the Darshan and blessings of your great Dada."

The Maniktola Bomb ignited the smouldering discontent of the impatient and restive Indian youth and the spark provoked a blast of repression which swept the country. Lokmanya Tilak, 'Father of the Indian unrest' as Sir Valentine Chirol honoured or dubbed him, was sentenced after conviction for sedition for his Marathi article 'Secret of the Bomb' in *Kesari*. He was deported to Mandalay Jail in Burma. Bapat was the 'wanted man' in the Alipore case, but he disappeared and went underground. For six years he remained so, disguising himself sometimes as a cook, sometimes as a sweeper, at times seen as a teacher, at others as a student, now a worker, then a peasant moving from place to place. The murder of the approver in Alipore Jail 'mystically killed by a revolver-shot from the neighbouring cell' as Satprem clinches the import of it all (in his book *Sri Aurobindo or the Adventure of Consciousness*) toned down the tempo of the Alipore Case and thereafter spread over the land a great hush, a portentous lull. The rude shock of the Surat Congress and the Alipore Case were left to sink into the subconscient of the decadent slumbering national being for reviving further efforts which were bound to follow at ending foreign domination, and Sri Aurobindo retired from politics for remodelling the destinies of the Nation from his higher Yogic poise.

His life incognito ended, Bapat continued his activities as intuition prompted him. Thus successively he acquitted himself nobly in the roles of editor of Tilak's *Maratha*, leader of the Mulshi Satyagraha, an unostentatious participant in all the Congress Movements, the leader of the Hyderabad Unarmed Resistence in 1938, the vanguard in the Goa struggle for liberation and so on, and on and on till the completion of his 87th year of life in November 1967. Full sixteen years of his life were spent in

Jail and the rest in humble social service or in imaginative though extremist and shock-administering political agitation. There was much too much of a volcano within him to allow him any rest, repose, respite and recreation, what to speak of accepting office or position under the Congress Raj.

Yet let us hasten to add that there was another side to his nature and character—his swabhava and swadharma could gush forth into an altogether different channel. His intellectual exploits and accomplishments were amazing. At the matriculation examination of the Bombay University, studying in a laughing and joking gaiety he could secure the first position in Sanskrit and bag the coveted Jagannath Shankarsheth Scholarship. He was pursuing his brilliant career in Deccan College, Poona, when he was awarded the Government Scholarship for higher studies in science at Edinburgh University,. There in Britain, he secured one year's military training in the "Queen's Rifles" and then alas! everything seemed to have ended. For, his revolutionary activities were reported against him, the Government discontinued his scholarship and Bapat proceeded to France to meet Shyamji Krishna Varma, Madame Cama and other leaders, harbingers of the Indian national resurgence and renaissance from the European soil, the air breathed by Voltaire and Rousseau.

Nay, everything had not ended. All was not lost for Bapat as an individual. The touch of Sri Aurobindo was there and that was more precious than anything else. The touch was felt ostensibly when someone sent to Bapat in jail very early in life the *Arya* which he eagerly studied. Next of course the touch came late, very late when in 1951 after the passing of Sri Aurobindo someone again put into Bapat's hand *The Life Divine* with a request that Bapat should render it into Marathi. The idea fascinated him as he himself considered that his inward contact with the author was extremely deep, a thing abiding and eternal, a legacy brought down here from innumerable past lives and births.

So he undertook the work. He worked on Sri Aurobindo's *magnum opus* energetically night and day sitting at his desk, at times for eighteen hours a day, and finished the translation. He used to write in simple exercise books provided by somebody and fill page after page obverse and reverse without even once stopping to correct or re-write or even re-read. This novel method of translating *The Life Divine* was really astounding and unheard of, especially taking into account the fact that many a writer of repute feared to meet with shipwreck in attempting to render accurately Sri Aurobindo's high-flown torrential English in vernaculars. All the same it is a simple lucid Marathi that Bapat writes and inevitably therefore his rendering ran into three volumes almost twice the size of the original work. Here Bapat has reached his highest in the level of inspiration because—Karmayogin that he truly was, —he was entirely in tune with the inner divinity, and the language came to him in an incessant flow. It is gripping and is as simple as metaphysics can possibly be. This done, Bapat translated all the major works of Sri Aurobindo except *Savitri*. These manuscripts are now lying awaiting someone's munificence before they can see the

light of day. We call upon the admirers of Senapati including the State Government to bring his legacy to fruition for posterity.

The Mother gave Bapat opportunity to come to the Ashram for the presentation of the first volume of his translation. As destiny would have it a soldier of this penniless Senapati volunteered to escort him all unexpectedly up to Pondicherry and this time coincided with the celebrations of the Day of the Lord, February 29 1960. There was great rejoicing all over.

I distinctly remember those few days in the company of Bapat here in the Ashram. On the evening of 28 February 1960 there was common meditation at the Ashram playground and Senapati Bapat with his associates participated. Immediately after the meditation he recited the verse that came to him in meditation, a Sanskrit stanza which well-nigh expresses the new ideological turn given to his thoughts by Sri Aurobindo in the Ashram atmosphere. The stanza reads:

अतिमनसि विशाला शक्तिरत्यद्भुता या।
अवतरतु जनाना मानसे विश्वशान्त्यै ॥
प्रकटयतु च दिव्यं जीवन सा क्रमेण।
जयतु जयतु नित्यं योगिराजोऽरन्विद· ॥ १ ॥

Translation: "May the marvellous vast power that resides in the supramental regions descend into the mind of humanity for the sake of peace in the world. May it further by stages and degrees manifest the Life Divine. Victory, lo Victory forever to Sri Aurobindo, the King of Yogis."

Analysing this verse *vis-à-vis* the life-history of the flaming patriot scholar that Bapat was, one can envisage how he was directed towards the achievement of two distinct ideals by his undeclared Guru, to wit, by the Divine Descent: i) the establishment of peace on the globe (Auroville ideal), ii) gradual unfolding and manifestation of the Life Divine on earth (Ashram ideal).

May I add that the order in which these ideals sprang forth into Bapat's vision indicates the fibre and texture of his being? Somewhere the Mother has referred to some disciple of Sri Aurobindo who sent her greetings on the 15th of August as marking firstly the day of our achievement of Independence, and then as the birthday of Sri Aurobindo. This was putting the cart before the horse as the Mother clearly indicated. In the present case we are supposed to put first things first, to undertake immediately the tougher task first. For us in the Ashram the ideal would be, first and foremost, the manifestation of the Divine Life and secondly, as the natural consequence and corollary of this accomplishment, the establishment of world-peace.

Sri Aurobindo by his mystic inner touch awakened many a soul from the slumber of the lower maya and gave it a call to great adventures. Here in the floral aroma of the Ashram atmosphere the Mother expects us to display all our heroism to direct the fighting faculties of howsoever daredevil a desperado from amongst us towards the inner conquest in the realm of the subliminal consciousness—the furnace of inner

purification, as she has termed it. She has created here for us a particularly agreeable, joyous and harmonious atmosphere so that our task may not be too arduous. But lest we should forget, it must be recalled that Sri Aurobindo had and has kept so many others outside the Ashram well-appointed to their tasks, pilgrim-souls in the dust and din of the battle, their rafts on the churning turmoil of the cosmic ocean for the ultimate emergence of something, sometime, somewhere, somehow—for the global betterment of humanity. Here our duty simply is to add and insist that this apocalypse be "here and now".

On the 29th February 1960 the Mother put into Bapat's hand the golden medal, insignia of the first anniversary of the Day of the Lord. Bapat then sang two verses in praise of Sri Aurobindo and the Mother in Sanskrit thus:

श्रीअरविन्दं दिव्यविचारं दिव्योच्चारं दिव्याचारम् ॥
दिव्यजीवनप्रवचनकार प्रणमामः शरण गच्छाम. ॥ १ ॥
श्रीअरविन्दाश्रमसस्थाया. संस्थापनसंचालनकर्त्री ॥
श्रीअरविन्दस्नेहभाजनं जयता पूज्यश्रीमाताजिः ॥ २ ॥

Translation: "Let us bow down and surrender ourselves to Sri Aurobindo of divine thought, divine word and divine act—the propounder of the philosophy of Life Divine. Victory to the Divine Mother, founder of Sri Aurobindo Ashram and its director, the vehicle of Sri Aurobindo's grace."

On the 1st March 1960 Bapat filed past the Mother once again, at the Prosperity Darshan. The Secretary formally introduced him to the Mother and the first volume of his Marathi translation of *The Life Divine* was presented by Bapat to the Mother. The Mother lovingly blessed him with her gracious benign smile.

Pandurang Mahadev Bapat is no more. But who ever can doubt that the soul, the psychic being which lived through that flaming—almost blazing—life of ardent self-dedication is bound to evolve from birth to birth through all the various stages by which the Divine Grace will lead him on towards our common goal and ideal —the Supramental Manifestation on earth ? This one 'consummation devoutly to be wished' is implicit in that mystic liaison which brought Bapat to receive from the Mother's hand the golden badge ten years after his unseen Guru had left his glorious body of surcharged light and power to transform the earthly soil and irradiate the ethereal atmosphere of the Ashram.

VINAYAK SHANKAR GHARPUREY

THE MOTHER

SWEET Mother, this morning as I saw Thy Form,
Thy wondrous and immaculate Form, spell-bound
Was I. It was a shape of Light from some
Beyond. It was of brilliant living gold.
The Light was massed and packed and solid, yet
As softly radiant as the yellow rose.
Where now my seventy summers? By Thy Force
Transfigured to the freshness, riches, splendour
Of a thousand springs! What primal Form was here?
What Goddess? Shaped by what Great Artist's hands—
A living golden statue made by God?
I have no words to tell. It was Divine,
Resplendent in the robes of Spirit clothed:
Grandeur and Majesty and Dignity.
I felt the waves of Light, of Love, of Peace
And Strength outflowing from the gracious Mother
To envelop all of me. I stood and stared
Marvelling. O those eyes of luminous deeps
Unfathomed! Many a time in the days gone
I was lost in them, and this new morning, too,
Recovering myself I said: 'Pray, Mother,
Bless me so that I may be Thine forever.'
Thy blessing and Thy smile entrancing, I
Can never forget. Reluctantly I parted
From Thee, but can I from that Vision part?

12.5.1968 V. CHIDANANDAM

YOUNG, YOUNG IS THE SOUL WITHIN

HEAVY are the days,
Pressing the effort,
Numberless the tasks,
Young, young is the soul within.

I feel ten thousand years,
I drag on ageless chains,
I weigh untellable aeons,
Light, light, is the being within.

Not further, I cannot,
Not more, the brim is reached,
Has overflown many a time!
On, on, says the spirit within.

My mind reels and burns,
My heart is sunk with sorrow,
My feelings numb, my body dead,
Stubborn, stubborn, is the push within.

O, why this life I have not wished?
Why this thick load of mind and matter,
Why this arid fevered dispersion in things and people?
Demanding, demanding is the command within.

I have done with these thoughts a thousand times,
I have done with these acts a million times,
I have done with it all, and it tastes of dry death,
God will not let me go within.

He holds and says: "You must go on,"
Holds tight and says: "Do not ask why nor how,
Have faith and walk.
The sun of Truth will explode
One day, inevitably,
Within and above,
And you will know the face of the New World."

SRIMAYI

INCITATUS

("Incitatus" was the name of the Roman Emperor Caligula's favourite horse, whom he kept in a room of his palace, made a senator and planned to make a consul.)

Congratulate the flaming force,
A very strong vitality
Equips and moves the noble horse
To paragonic verve and speed,
A courser of wide liberty
That lifts and all but skims the ground;
Hard, but that tireless heart should prove
A fortunate good friend indeed;
The way being long and seldom found
An easy stretch or safe remove.

To care for him and feed him well
Is only sense and prudent guard,
Against the blows of life that quell
The vigor and mobility;
For many holds and blocks retard
The traveller grown sick and frail
So he may not win through and find
His justly earned tranquillity,
And tests and charges make him quail,
To keep in stall meek and resigned.

Unfailing true to post and bear,
Dependable for path and range,
A steed that loves to yield and fare
In rough and smooth obedient,
He stoutly masters threat and change,
Co-operatively every turn
Accepting takes no jib of thought
Or pride, a false expedient
Not slackening those fires that burn
For life and freedom truly wrought.

Rejection of the rein and curb
Is not the way the gust is fed
To strength and peace no checks disturb;
Refusing weight and discipline

Is slavery to the lustihead
Of pain and darkness, grovelling low,
Though bursting dull on every side;
No idle game it is to win,
With running wild comes overthrow;
Desire of self is not a guide.

O splendid pomp and empery!
Infirm the ruler elevates
To leading state contemptuously
The impetuous darling of his blood;
So in the fact he abdicates,
Intent being absolute control
Of less than calm that seeks the light,
Usurping land the unleashed flood;
So richly famishing the soul
Is drowned, the realm is waste and blight.

The palace and the marble stall,
Becrimsoned bed and trough of gold,
Too long the man endangers all
To indulge a foolish pampering;
The aspiring glow is stricken cold,
Of thought and deed division sways,
Ineptness comes the usual cast,
And still the mice are scampering;
Fastidiousness or sloth his days
Blind art or none lets give the Vast.

A chartless bourne and lucent sea
Forever holds unsatisfied
The heart that scants its mystery;
All poisonous the murky streams,
The downward living thrusts aside
Nobility and tranquil poise,
And quells the flame that should be pure;
But still the call and promise gleams,
The prompting from the strife and noise
To build to heavenly signature.

From narrowness and flatness born
Into the full of sunlit round,

The failure and the sham outworn,
One seated well is union blessed
Creatively to leave the ground,
And from the Source drink worlds made new;
Of spur and harness innocent
And docile to the great behest,
He nimbly bounds for sweep and view
Wide-winged into the firmament.

JESSE ROARK

I LEAVE HER TO YOU

(*In Memory of June* 18, 1961)

I LEAVE her to You!
I will not draw those sweet soft eyes to me
Although that gaze means life-glow to my breast:
My flesh hungers for that gold intimacy.

My arms desire to hold her close,
But wide I open them with a quiet heart.
That precious presence I wilfully release—
With tears that are touched with light I part.

I leave her to you for eternity!
Enthrone her, I pray, in a crystal dome.
Give her within Your deeps of limpid bliss
A deathless diamond-lustred home.

MINNIE N. CANTEENWALLA

THE MYSTERY OF ATLANTIS

THE LATEST SCIENTIFIC VIEW AND THE OLD TRADITIONS

I

ATLANTIS—FACT OR FICTION?
A BROADCAST BY SIR GAVIN DE BEER, F. R. S.

IF you look up the *Oxford Companion to English Literature*, under the heading "Atlantis", you will see it defined as "A fabulous island in the ocean, west of the Pillars of Hercules, a beautiful and prosperous country, the seat of an empire which dominated part of Europe and Africa. But owing to the impiety of its inhabitants, it was swallowed up by the sea." That is roughly all that is generally known about Atlantis, and even distinguished archaeologists are disposed to regard the story as nothing more than a fairy tale. But they may be prepared to revise their opinion when they know about the scientific work of Professor Angelos Galanopoulos, head of the Seismological Institute of the University of Athens, whose researches have accidentally placed in our hands the key to the puzzle of the location of Atlantis.

The story of Atlantis was told by no less a person than Plato in two of his works, the *Timaeus* and the *Critias*, written about 370 B.C., in which he recounted what Solon, the great ruler of Athens, had learnt from the Priests of Sais in Egypt on his visit there about 600 B.C. They told Solon that there had once been a great royal state which sank overnight beneath the waters of the sea, and Solon understood that this had happened 9,000 years before. Further information given about this state was that it consisted of more than one island, one of which was a metropolis or sacred island where the various rulers gathered to worship at a temple of Poseidon, the god of the sea, and the other contained a great plain 3,000 stadia long by 2,000 stadia wide, surrounded by mountains. Without going into the intricate detail which Plato gave, there are two further pieces of information that are of great significance. One is that the inhabitants of this great state had an advanced condition of agriculture, architecture, epigraphy, and made much use of bronze. The other is that on the day of the catastrophe which engulfed it, an army, described as Athenian, was destroyed in the same cataclysm.

The time interval of 9,000 years and the dimensions of thousands of stadia worried Plato, as well they might, because he had a good knowledge of Mediterranean geography, and there was nowhere that a vanished state of this size, 80,000 square miles in area, could be accommodated. But as Solon had a reputation for wisdom, Plato accepted the dimensions he gave, and as there was no room inside the Mediterranean, he placed the state outside the Pillars of Hercules, that is, the Strait of Gibraltar and so out in the Atlantic Ocean, whence the name of Atlantis.

Recent advances in various branches of science all show that such a solution as

this is quite impossible. During the passage of vast geological periods of time, there have been oscillations of the level of land and sea belonging to continents, and the continental shelf which extends a little way away from dry land. There is reason to believe that the melting ice cap in Antarctica, since the last ice age, has resulted in raising the level of the seas by six inches a century, and this has been responsible for the submergence of small regions, such as the forest in Mount's Bay, off Penzance. But there can be no question of a lost continent in the Atlantic Ocean.

The evidence for this is derived from a number of lines of research. Taking first the results of seismology, it is found that the speed at which primary waves travel through the crust after an earthquake is about five kilometres a second near the surface, but jumps to eight kilometres a second at a depth of about forty kilometres beneath the surface of the continents, the depth at which what is called the Mohorovicic discontinuity is assumed to be. I say assumed, because nobody has been down to this depth to sample the materials and the conditions of temperature and pressure that obtain there, but the seismological evidence clearly indicates a discontinuity at that depth. Under the oceans, however, the Mohorovicic discontinuity is only ten kilometres beneath the surface of the sea, and there is therefore a structural difference between continents and ocean floors.

These results agree with those obtained from the measurement of the force of gravity on continents and in oceans; those for the oceans invariably show higher values than would be expected if the ocean floor were a former continent sunk beneath the sea. In one case, there has been direct proof that this has not occurred. The floor of the Indian Ocean between Madagascar and India is the region where a former continent, prematurely called "Lemuria", had been imagined, to explain a resemblance between the lemurs of Madagascar and those of Asia. That this resemblance is very slight, and requires no land connection at all beteween Madagascar and India to explain it, is beside the point here. What is significant is the fact that the basalts dredged up from the bottom of the Indian Ocean were found by Dr. G. D. H. Wiseman of the Natural History Museum to be of a kind that were extruded under water, and quite different from the terrestrial basalts found in India.

The fact is that continents are made of granites, gneisses, and sedimentary rocks, with a specific gravity of about 2.7, whereas the floors of ocean beds are composed of basalts with a specific gravity of 3.2, and even heavier rocks, and the former cannot become converted into the latter. In other words, ocean floors have never been continents. Darwin himself, over a hundred years ago, was quite clear on this point, when he fought those of his friends, who glibly imagined a continent extending over an ocean, in order to explain why a few plants and animals of one continent resembled those of another. "It shocks my philosophy to create land," he said and it made his geologist's blood boil to hear people speculate, as he said, and "make continents as easily as a cook does pancakes."

Wherever Atlantis may have been, it was not a lost land sunk beneath the Atlantic, but this has not exhausted the ingenuity of commentators, who have placed it in

Scandinavia, in Heligoland, or in West Africa. Even if these commentators had no knowledge of science to keep their imaginations within bounds, they might at any rate have paid greater attention to the classical texts which they professed to interpret in geographical terms. The whole land sank beneath the sea in twenty-four hours, and an Athenian army was destroyed in the same catastrophe. These statements should have made them pause to think whether an entire continent can sink without trace in twenty-four hours, and whether an Athenian army, all that time ago, could have been involved in a disaster that took place as far away as Scandinavia, Heligoland, or West Africa. This therefore also puts out of court any possibility that Atlantis might have been the submerged forest in Mount's Bay, which was certainly submerged about 1700 B.C., or the legendary land of Lyonesse with its one hundred and forty parish churches, which some like to imagine stretched between Land's End and the Isles of Scilly, in spite of the fact that that area of savage water was eroded by the sea in geological times far earlier than those of parish churches. Nor is it even clear what diocese these parish churches were in, for it is possible that this legend refers to the old district of Léonois, the diocese of St. Polde-Léon, in Brittany.

I would like now to give you a brief summary of Professor Galanopoulos's contribution to the problem, which has been to provide scientific evidence in support of a theory advanced by K. T. Frost in this country and S. Marinatos in Greece, that the story of Atlantis is a reflection of the destruction of Minoan Crete.

About seventy miles north of Crete is a group of islands called Santorin. They consist of two crescent-shaped fragments that bear the names of Thera and Therasia, surrounding an almost land-locked circular pool which marks the position of the chimney, or caldera, of an ancient volcano that has blown off its head. The circumference of this caldera is about five miles in diameter, and it is formed of abrupt, almost vertical cliffs. The diameter of the outer circumference of the circle represented by Thera and Therasia is about ten miles. Traces of the volcanic eruption of Santorin are found all over these islets where, under 100 feet of pumice, Professor Galanopoulos found ash convering remains of human bones and teeth, ruined walls two metres high, pottery, and calcined barks of trees, all resting directly on the old surface of the ground. Carbon-14 estimations of the age of these remains were made in Columbia University, and worked out at about 1500 B. C. In other words, the opening phases of the Santorin eruption took place not 9,000 but 900 years before Solon's visit to Egypt.

This evidence led Professor Galanopoulos to make one simple hypothesis, namely, that in the translation or transcription of what the Egyptian priests told Solon, into the Greek that Solon wrote, a mistake was made of reading thousands instead of hundreds. Such a mistake would have been easier than the modern equivalent mistake of adding an extra unwanted nought to a figure, because the Egyptian symbol for 100 was like a coiled rope, that for 1,000 was a lotus flower. The symbols were repeated the number of times required. So the error would have been in mistaking one symbol for another, not one of arithmetic.

This correction of 900 years for 9,000 years before Solon's visit to Egypt fits in with all that is known of the conditions of civilization in Egypt and the Mediterranean. In 9600 B.C. it would have been out of the question for any Egyptians to have recorded and transmitted a story of any kind, and the inhabitants of Atlantis would not have used bronze. But in 1500 B.C., when Egyptian civilization was flourishing, and the Mediterranean was in the Bronze Age, these difficulties vanish.

If, then, it is admitted that the figure 900 should be substituted for 9,000, Professor Galanopoulos carries his hypothesis through to its logical conclusion and applies the same correction to the dimensions given for the great plain of Atlantis. Instead of this being 3,000 stadia or 345 miles long, and 2,000 stadia or 230 miles wide, the dimensions of the plain become 34½ miles long and 23 miles wide, and these are just the dimensions of the plain of Messara in Crete. The area of the plain of Atlantis would then be reduced in size a hundred times smaller than what Plato imagined it was, and there would be no necessity to put it outside the Mediterranean on the grounds that there was no room inside it.

The effect of all this is, therefore, to show that if Santorin blew up some time after 1500 B.C., and this would be the earliest date for it, because the shower of ashes covering the remains whose ages have been determined would have preceded the final explosion, the story of the destruction of an Athenian, or, shall we say, Mycenean army, makes sense, because seismic catastrophes do not extend over great distances. There are therefore geological reasons why Atlantis cannot have been far from Greece, and these are additional to those I have already mentioned, which make it impossible to imagine an Athenian army, or any Greek army, operating in 1500 B.C. at a distance from Greece anything like that of the Strait of Gibraltar. But within the Aegean Sea, in the neighbourhood of Greece, such operations were not only possible but probable. Mr. R. A. Higgins of the British Museum has kindly informed me that there is evidence of Mycenean Greeks in Crete shortly before 1400 B.C., based partly on architectural innovations and on pottery. But it must not be assumed that the Athenian army that came to grief was necessarily in Crete, it might have been in Greece itself, which is near enough to Santorin for a side-effect of the catastrophe to have annihilated it. That such an event might occur is further shown by what happened to the city of Helike, on the southern shore of the Gulf of Corinth, in 373 B.C. Mr. Sinclair Hood has reminded me that, as mentioned by Pausanias, it was overwhelmed in one night by the combined effects of an earthquake, landslide, coastal sinking and tidal wave.

Vulcanology has one more word to say. When the volcano of Krakatoa erupted in 1883, the tidal wave that resulted from the consequent displacement of water was so large and powerful that it reached a height of 120 feet on the coasts of Java and Sumatra. Shipping was ruined and some ships were carried bodily half a mile inland. It destroyed 295 towns and killed 36,000 people. The noise of the explosion was heard 3,000 miles away, in Ceylon, Australia, and Rodriguez. Volcanic ash blown into the air fell as far away as Australia, and the dust-cloud turned day into darkness at a distance of 300 miles. It has been calculated from the size of its caldera and the amount

of energy that must have been released that the eruption of Santorin was even more powerful than that of Krakatoa, and as Professor Galanopoulos has said, "The fantastic destruction caused by the Santorin eruption would have given Egyptian scholars the impression that a whole continent had been destroyed." In other words, the disaster of Atlantis would really have been the destruction of the island of Santorin, where, after the eruption, the site of the sacred metropolis lay beneath the sea.

We know that the Cretan state, the empire of Minos, was based on seapower, and that it came to an abrupt end about 1400 B. C. Judging from what happened to shipping after the Krakatoa eruption, is it extravagant to suppose that the collapse of the Minoan empire was a result of the eruption of Santorin?

It might be asked whether excavations at Knossos, capital of the Minoan empire, and elsewhere in Crete, reveal anything of such a disaster as the eruption of Santorin must have been. The answer is yes. Crete has been subjected to many earthquakes with the shocks coming from the north, as may be seen in the houses which Sir Arthur Evans called "the house of the fallen blocks" and "the house of the sacrificial oxen". Mr. R. W. Hutchinson, the author of a fascinating book on ancient Crete, even suggests that the epicentre of the earthquakes was on or near the island of Thera, which is, of course, the remains of Santorin. But in the most devastating earthquake of all, Knossos, Phaistos, and Hagia Triada in the Messara, Nirou Khani, Mallia, and Gournia in the north, and Palaikastro in the east, seem to have been affected. Evans has ascribed the destruction of the palace of Knossos to the floods and the fires that followed this earthquake, and Professor S. Marinatos, agreeing that the destruction was due to natural causes, specifically identified the eruption of Santorin as the agent responsible. The date of this destruction is a matter of acute controversy, so Professor Galanopoulos's researches on the date of this eruption are all the more interesting.

I hope I have said sufficient to show not only that natural science has contributions of value to make towards the solution of historical problems, but also that the story of Atlantis need not be dismissed as a fairy tale.

(*With acknowledgements to* The Listener, *September 15, 1966, pp. 390-91*)

NOTE: Please see back of cover for map.

II

SUPPLEMENT BY THE EDITOR

I

NOTHING of essential importance remains to be added to Sir Gavin de Beer's excellent broadcast. But we may dot some *i*'s and cross some *t*'s, raise a few secondary yet not insignificant points, subjoin whatever scientific information has been available since the summer of 1966 and pick out from history and literature helpful material to confirm his central thesis.

To begin with, there is a bit of discrepancy between the radiocarbon chronology mentioned by Sir Gavin for the Santorin-eruption—*c.* 1500 B.C.—and the date drawn from the same test by Ronald Schiller in his article "Was This the Vanished World of Atlantis?" in the *Readers' Digest* of January this year: *c.* 1400 B.C.[1] Such differences are quite on the cards in the field of Carbon-14 datings and do not really matter. We may safely strike for all practical purposes the mean: *c.* 1450 B.C.

The date generally accepted by archaeologists and historians for the destruction of the Cretan state, the empire of Minos, is, as Sir Gavin himself reports, about 1400 B. C. They have reached it on the strength of datable Egyptian or other objects found at Knossos. But a minority of students have raised an "acute controversy" (Sir Gavin's words) and I. A. Palmer plumps for *c.* 1200. John Chadwick, who is for *c.* 1400, sums up: "there remains considerable doubt about the exact date and some slight adjustment may eventually be necessary; but it would seem impossible to bridge the gap of 200 years."[2] Slight adjustment can be either forward or backward. So, from the side of Cretan studies too, *c.* 1450 can very well stand. Indeed, it has already been entertained. H. B. Parkes writes: "The Cretan city of Knossos, which had apparently been the capital of the Minon empire, was burned about the year 1450..."[3]

Perhaps a few words may be in order here explaining what we mean when we speak of the end of the Cretan or Minoan state. We must not be understood to imply that there was no Cretan or Minoan culture afterwards. The usual division of Crete's history in ancient times is, as Leonard Cottrell informs us:

(1) The Early Minoan Period: *c.* 2800-1800 B.C.
(2) The Middle Minoan Period: *c.* 1800-1550 B.C.
(3) The Late Minoan Period: *c.* 1550-1100 B.C.[4]

[1] P. 103, col. 3.
[2] *The Decipherment of Linear B* (Pelican, Harmondsworth, 1961), p. 107.
[3] *Gods and Men: The Origins of Western Culture* (New York, 1959), p. 153, fn. 1.
[4] *The Bull of Minos* (Pan, London, 1960), pp. 184-6.

And each period itself has three subdivisions. After the fall of Knossos in (by our computation) *c.* 1450 B.C., "Minoan culture still continues," as Cottrell says, "though in a minor key, in the smaller Cretan communities. The palaces, with their ruling class and hive of civil servants, seem to have been destroyed, but at a lower level Cretan civilization continued, until it was absorbed into the common culture of the Aegean."[1] So what we mean is that Crete's typical role in ancient history stopped in *c.* 1450 B.C.

Sir Gavin and Schiller accept the Santorin-cataclysm as the sole cause of the end of the palaces. Sir Arthur Evans, the discoverer of ancient Crete, anticipated them in the sense that, knowing how the Minoan cities had been damaged several times in the past, attributed the end to an earthquake, even if this particular upheaval was perhaps "followed either by foreign invasion, or local insurrection".[2] On the other hand, John Pendlebury, author of *The Archaeology of Crete* which Cottrell regards as, next to *The Palace of Minos* by Evans, "probably the most authoritative and scholarly work yet written on the Minoan civilization," believed "that Knossos was finally sacked by an invading force from the mainland, probably men from the colonial empire of Minos, determined at last to throw off the Minoan yoke."[3] Cottrell opines that Pendlebury's theory has much to support it. Not only at Knossos but also at Phaestos, Hagia Triada, Gournia, Mokhlos, Mallia and Zakros, we see traces of burning as an accompaniment of violent destruction. Pendlebury points out "that in ancient times earthquakes did not necessarily cause fire, as they do in modern towns with gas and electricity mains."[4] Cottrell himself in one place refers to the final disaster as "earthquake or foreign attack, or both".[5] If we could combine the two, as we certainly could, we should have a closer resemblance to the Atlantis-story in Plato: Plato tells us of the Greeks defeating Atlantis in battle before violent earthquakes and floods destroyed it.[6]

Apart from Pendlebury's argument from the traces of fire, we may adduce another. Schiller writes that there was a north-west wind when the Santorin-eruption occurred, for the volcanic fall-out did not cover the shores of Greece to the north of Crete, even though tidal waves battered them.[7] Now, Pendlebury writes: "...on a spring day, when a strong south wind was blowing which carried the flames of the burning beams horizontally northward, Knossos fell."[8] Cottrell too, after examining the "safe-deposit" pits at Knossos, says: "There, unmistakably, on the northern edge, was the work of black, unctuous smoke, almost certainly made by burning oil.

[1] *Ibid.*, p. 188.
[2] *Ibid.*, pp. 186-7.
[3] *Ibid.*, p. 168.
[4] *Ibid.*, p. 187.
[5] *Ibid.*, p. 133.
[6] *The Dialogues of Plato*, translated by B. Jowett (New York, 1937), Vol II, *Timaeus*, 25; p. 10.
[7] *Readers' Digest*, p. 107, col. 1.
[8] Cottrell, *Op. cit.*, p. 186.

Elsewhere I saw many other evidences of fire and always the tell-tale stain showed that the smoke had been blown to the north."[1] Thus we have winds in different directions at the time of the fire and at that of the earthquake-destruction. It would appear that we must distinguish this destruction from the sack of Knossos.

And, if we attend to Schiller's words, it is more likely that the incendiary sack preceded rather than followed the natural cataclysm. Schiller writes: "Excavations indicate that all of the Minoan cities were wiped out at the same time,...their huge building-stones tossed around like matchsticks....The heavy fall-out of volcanic ash filled Crete's fertile valleys, destroyed the crops, and rendered agriculture on the island impossible for decades. Almost the entire Minoan race perished. There were scattered survivors—those who managed to reach the high mountains, those who were on distant voyages at the time. Archaeological evidence indicates that most of these people fled to western Crete, and from there northwards to Mycenae on the near-by shores of Greece."[2] Conditions were hardly favourable for an enemy to carry fire and sword to Knossos after the eruption of Santorin. So all the more we get Crete into line with Atlantis, where the Greek victory came before the final disaster by nature-forces.

And in the case of Crete it is also precisely a Greek victory that would be involved. For it is believed that, if there was a sack, the invaders hailed from near-by Mycenae whose connection with Crete at this period is universally accepted by archaeologists and whose inhabitants are known to have used an archaic form of Greek. Ever since Michael Ventris deciphered Linear B, a script prevalent not only in Mycenae but also in Crete itself from the early fifteenth century B.C.,[3] there has been no doubt that the people who round about 1900 B.C. entered what later came to be called Greece were the first Greeks and the ancestors of the Mycenaeans[4] and that it is from them that Homer's "Achaians", led by King Agamemnon of Mycenae, to besiege Troy in the twelfth century B.C., derived.

Yes, it was the Greeks—the Achaians or Mycenaeans—who defeated the Cretans. And here an observation by Cottrell goes further to suggest that the natural disaster from Santorin did not precede but followed their victory: "They do not seem to have occupied and colonized Crete..."[5]

We can go yet further in tallying Crete's history with the Atlantis-legend. The final fight of Atlantis with "Europe and Asia", as Plato puts it, is preluded thus by Solon's informers: "This power, gathered into one, endeavoured to subdue at a blow our country and yours and the whole region within the straits."[6] Now, it is exactly in the period, before the two catastrophes which visited Crete, that the sea-empire of Minos obtained the widest control of other Aegean islands, at first by peaceful com-

[1] *Ibid.*, p. 160.
[2] *Readers' Digest*, pp. 105-, 107.
[3] Chadwick, *Op. cit.*, p. 163.
[4] *Ibid.*
[5] *Op. cit.*, p. 188.
[6] *Critias*, 119, pp. 83-4.

mercial penetration but ultimately by forcible acquisition[1]—and, what is most striking, this period marks a gathering of Crete into one. Pendlebury records: "the three main divisions of the country began to coalesce. Building methods became so similar that it is clear that Minoan culture is now a unity."[2] Crete seemed ready for the all-out attack such as the priests of Sais speak of. And soon after 1550 B.C. "Crete was a world-power, co-equal with Egypt and the Hittite Empire".[3]

The priests of Sais speak also of war on their country by Atlantis. We have no annals of any attack on Egypt from Crete in the period concerned. We have evidence only of "a lively come-and-go between Crete and Egypt,where Cretans are represented as bringing gifts in vases of typical Cretan shapes".[4] But, not long after, we learn of a different relationship of Egypt with "the peoples of the islands"—a designation which included the Cretans but covered also others from the North, coming across the "Great Green Sea", notably the Mycenaeans. "In 1221 B.C., an invading host moved down on Egypt, led by the King of Libya, but most of the invaders came from the North.... The invasion was unsuccessful, but a generation later a second great wave came down from the North, including a mighty host of the 'sea peoples'. This was the coalition defeated by Rameses III in a land and sea battle....'The Isles,' wrote the Pharaoh's priestly chronicler, 'were in tumult."[5] The priests of Sais may easily have telescoped some events and, jumbling together the Cretans and Mycenaeans and other "Island People," pushed back the conflicts to the age with which we are dealing.

There is also another significant fact to be linked up with these priests. Cottrell, after noting that the ancestors of the Minoans seem to have come from south-west Anatolia and Syria between 4000 and 3000 B.C., observes of the early flowering of civilisation in Crete :

"But although the Neolithic settlers were probably Asiatic, Sir Arthur Evans believed that 'the determining cause of this brilliant development of early civilization is...traceable to the opening out of communication with the Nile Valley across the Libyan Sea'.... The late Professor Percy Newberry, addressing the British Association in 1923, pointed out that at the very beginning of the historic period in Lower Egypt the cult objects of the people of the north-western delta (nearest to Crete) 'included (1) the Harpoon, (2) the Figure-of-Eight Shield with crossed arrows, (3) the Mountain and probably (4) the Double Axe and (5) a Dove or Swallow. With the exception of the Harpoon, all these cult objects are also found in Crete.' And even the Harpoon may have been modified into the familiar Minoan Trident, which appears on the walls of Knossos and Phaestos.

"There may even have been a landing by small bands of Lower Egyptian refugees

[1] Cottrell, *Op. cit.*, p. 185.
[2] *Ibid.*, p. 185.
[3] *Ibid.*, p. 186.
[4] *Chambers's Encyclopaedia* (London, 1959), Vol. 4., p. 228. col. 1.
[5] Cottrell, *Op. cit.*, p. 189.

after the conquest of Lower Egypt by Menes in 3200 B.C. It is an interesting fact that the capital of the western delta of the Nile in Pre-Dynastic times (before 3200 B.C.) was Sais, whose goddess, Neith, had as her emblem the figure-of-eight shield."[1]

That the priests of Sais, talking with Solon, should make a reference to the Cretan civilisation and to its end would be the most natural thing in view of Crete's indubitable contact with the Lower Nile from extremely early times.

Apropos of this contact we may note in particular two facts. First, the art of making faience (glazed clay), for which the Nile Delta was famous, developed in Crete in just the period ending 1550 B.C.[2] Secondly, there is a curious coincidence in the matter of wall-painting. "The Minoans," says Cottrell, "may have copied this method of decoration from the Egyptians, but in style there is no resemblance between the stiff, hightly conventionalized art of most Egyptian wall-paintings and the refined, fastidious naturalism of the Minoan frescoes. I say 'with *most* Egyptian paintings' advisedly, because there is one—and only one—period of Egyptian art which does show remarkable similarity to that of Crete. This was the famous 'heresy period' under the Pharaoh Akhnaten, when for the first and only time the rigid, hierarchical conventions of Egyptian art suddenly broke down, and the royal artists (it is believed under the direct guidance of Akhnaten) painted human beings, birds, beasts and flowers as they saw them, and not according to an accepted religious tradition. The significance of this departure is that it occurred round about the year 1400 B.C., the generally accepted date on which the final disaster—earthquake or foreign attack, or both—struck the palaces of Crete, including Knossos. It is tempting to believe—though it is by no means proved—that refugee Cretan artists may have fled to Akhnaten's Court round about this period."[3] And they, passing through the Nile Delta— in *c.* 1450, according to us—may have fixed deeper in the mind of Sais the sense of the recent cataclysm which had overwhelmed their island. Then, round about 1400 B.C., the new art they had brought to Egypt may have flowered under Akhnaten's unorthodox rule.

2

Next, we may offer about the Minoan civilisation a few further details than in Sir Gavin's broadcast, which may fill out the historical picture of it and bring it closer in one way or another to the Atlantis-legend.

On the island of Thera (also called Thira), where Professor Galanopoulos had discovered the fire-blackened ruins of a stone house with its tell-tale contents, a team of scientists in mid-1967 dug up a complete Minoan town, the first such town to be uncovered intact, just as the Roman city of Pompeii, buried by a volcanic eruption in

[1] *Ibid.*, pp. 184, 185.
[2] *Ibid.*, p. 183.
[3] *Ibid.*, pp. 132-3.

79 B.C., has been brought to light in its entirety.[1] Thus we know for sure that the Minoans lived not only in a dozen cities on Crete but also in outposts on Santorin (or Santorini, as some writers name it) and other islands. And thus we have evidence at the very epicentre of the earthquake that Minoan civilisation cartastrophically suffered by it—and that the catstrophe meant not just the destruction, on land itself, of Minoan palaces but the swallowing up underground of Minoans and their homes, a fate more directly resembling that of Atlantis.

Sir Gavin has mentioned the Cretan plain of Messara (where the city of Phaestos stood) as answering—when the legendary dimensions are duly corrected in a systematic way—to the great plain surrounded by mountains, of which Plato speaks. He has not mentioned what has been found to answer to that part of the Atlantis-kingdom which was sacred to the sea-god Poseidon. Plato has described this part as having had steam fissures, hot springs and concentric circular canals. According to Galanopoulos, his description "fits perfectly the features, shape and size of the island of Santorini".[2] Galanopoulos adds: "Traces of the canals and harbours are discernible even now on the floor of the caldera, or undersea crater."

Now for some features of Cretan civilisation to show its highly advanced and complex as well as its "impious" side and thus affine it in general to the culture of Atlantis. There were superb vases and ornaments; there were wall-paintings which, as Evans relates, had "a magic and enchantment felt even by our uneducated workers". Evans discovered at Knossos the actual labyrinth which legend attributes to the engineer-architect Daedalus whom King Minos of Crete is said to have employed. The palace at Knossos has been well commented on by C. W. Ceram: "It is not surprising that Evans used the word *modern* to describe what he saw. The palace of Minos was as large as Buckingham Palace. The great structure contained drainage sumps and luxurious bathrooms, ventilation systems, ground-water conduits, and waste-chutes. But the parallel with modernity is even even more strikingly evident in the people themselves, in their manner, clothing, and modes."[3] In general, we may state after Ceram: the people of Knossos "revelled in riches and lived lives of elegant debauchery" and "at the height of their development they had apparently reached a state of sybaritic decadence that contained the seeds of decline."[4] In the decades about 1600 B.C., "the Minoan aesthetic was on the verge of becoming sheer ostentation.... Luxury was becoming a prime consideration in the appointment of habitations, of equal importance with utility. The style of dress was no longer dictated by the needs of protection against the weather and of modesty. On every hand the whims of a refined class made new demands."[5]

But we must note the earlier level from which Crete fell into "impiety". What

[1] *Readers' Digest*, p. 103, col. 2, fn.
[2] *Ibid.*, p. 108. col. 2.
[3] *Gods, Graves and Scholars*: The Story of Archaeology (New York, 1952), p. 61.
[4] *Ibid.*, p. 58.
[5] *Ibid.*, pp. 60-1.

we gather from the legends about Crete is aptly put by Cottrell: "The traditions relating to Minos are various, and in some ways conflicting. All agree that he controlled a mighty fleet which ruled the eastern Mediterranean. In some he was respected as a great law-giver. But there were also traditional memories of Minos the Tyrant, embodied in that most imperishable of legends, the story of Theseus and the Minotaur."[1] Cottrell also quotes Evans apropos of Knossos: "Here the great law-giver (Minos) promulgated his famous institutions, which like those of Moses and Numa Pompilius were derived from a divine source...."[2] All this reminds us of Plato's account of Atlantis. The immensely powerful Atlanteans were not unvirtuous from the start. To quote B. Jowett's marginal pointers: "The virtues of the people of Atlantis were great so long as the divine element lasted in them; but when this grew weaker they degenerated."[3] The divine element made the Atlanteans observe ancient laws given by the god Poseidon who was the founder of Atlantis.[4] Plato's Atlantis is not a fixed type of "impious" civilisation but follows a Cretan curve of decline from a memorable height marked by the observance of God-revealed institutions.

In connection with the "impiety" of Atlantis we may bring out a point often overlooked. There is an important difference between Plato's account and the definition of "Atlantis" in the *Oxford Companion to English Literature*, with which Sir Gavin begins his broadcast. The *Oxford Companion* does not only mention the "impiety": it also links, as crime with punishment, the "impiety" with the sea's swallowing up of the island. Plato, on the other hand, makes no such linkage. In the *Timaeus*[5] we hear that Atlantis, "unprovoked, made an expedition against the whole of Europe and Asia" and that the army of Athens "put an end" to the "mighty power" which Atlantis was. The priests of Sais say to Solon about that Athenian's country: "she defeated and triumphed over the invaders." Then we are told: "But afterwards there occurred violent earthquakes and floods; and in a single day and night of misfortune all your warlike men in a body sank into the earth, and the island of Atlantis in like manner disappeared in the depths of the sea." Here Atlantis gets, as it were, a punishment for its unprovoked attack by suffering defeat at the hands of the Athenians, but the earthquakes and floods carry no moral retributive colour. Indeed, it is the Athenians who are first spoken of as the victims of these natural forces, and thus the unleashing of these forces is looked upon as a "misfortune". The disappearance of Atlantis into the ocean's abyss comes second into the story, and not the slightest bond exists between this fate and the idea of divine retribution.

The *Critias* is a fragment breaking off before reaching the natural disasters. What, however, it leaves us in no doubt of is that the divine punishment to Atlantis for losing its "virtues" and for becoming "full of avarice and unrighteous power" is

[1] *Op. cit.*, p. 111.
[2] *Ibid.*, p. 124.
[3] *Critias*, 119, p. 84.
[4] *Ibid.*, 119, pp. 83—4.
[5] 25. p.10.

the islanders' rash venturing forth to invade Europe and Asia and meeting in the result with a crushing defeat. We learn that the "vast power which the god settled" in Atlantis "he afterwards directed against our land" and the reason for such a divine manoeuvre was "Zeus...perceiving that an honourable race was in woeful plight, and wanting to inflict punishment on them, that they might be chastened and improve...."[1] Obviously, to be destroyed totally by earthquakes and floods could hardly leave an opportunity to improve by being chastened. The punishment intended was, as Jowett puts it in his marginal summary, "the overthrow of Atlantis". "Overthrow" here, in the context of the turning of the power of Atlantis against the Egyptians and Athenians, is an unequivocal term and can refer only to a *débâcle* in war. Zeus drove them to attack "Europe and Asia" in order to give them the humiliating yet salutary experience of total failure in war.

Now, if Plato's earthquakes and floods are divested of all punitive significance and the latter is centred in military action, we align his Atlantis all the more with Crete. For, the war he reports between Atlantis and Greece may immediately be seen to shadow forth the enmity which Greek tradition reports between Crete and Athens. Norma Lore Goodrich may here be cited: "The main task of Minos was to establish Crete as the uncontested naval power of the time.... According to plan he conquered the Cyclades and then the southern shore of Greece, forcing the people of Attica to pay him what Plato called a 'cruel tribute.' "[2] The tribute demanded from Athens each year was, as Apollodorus relates,[3] twelve youths and maidens whom Minos could sacrifice to that monstrous progeny of his nymphomaniac wife Pasiphaë and a bull—the Minotaur which was kept in the king's labyrinth. "Then came the year when the heroic Theseus, son of old Aegeus, lord of Athens, was numbered among those to be sent to Crete."[4] When Theseus had offered himself to accompany the doomed lot, he had cried out: "Blood will be answered with blood, fire with fire, and sword with sword. King Minos himself will be broken and the Minotaur also. I swear it. His power began to wane the day that I was born! I, Theseus, have spoken!"[5] So Theseus's visit to Crete makes a story of retribution. And Pendlebury actually brings in this story to support his theory of an invasion of Crete from the colonial empire of Minos. He writes: "Now there is a name which is always associated with the sack of Knossos, at least with the liberation of its subjects—*Theseus*. Names have a habit of being remembered when the deeds with which they are associated are forgotten or garbled."[6] Theseus is traditionally credited with killing the Minotaur, setting fire to the palace at Knossos, running away with Minos's daughter Ariadne and, with the help of his friends, sinking the Cretan fleet by staving in the bottoms of the

[1] 120-21, p. 84.
[2] *The Ancient Myths* (Mentor, New York, 1960), p. 61.
[3] Cottrell, *Op. cit.*, p. 112.
[4] *Ibid.*, pp. 112-31.
[5] *The Ancient Myths*, p. 76.
[6] Cottrell, *Op. cit.*, p. 168.

wooden galleys:[1] his multiple anti-Minoan role may well represent a Mycenaean-Greek victory such as Pendlebury holds responsible for the destruction of Crete's power.

The Theseus-story at the same time lends credence to Pendlebury's hypothesis and brings Crete's legendary fate of punishment by heroic Athens into tune with Plato's account of the chastening of Atlantis by the Athenian army.

After all this cumulative evidence to connect Atlantis with Crete and with Crete's opposition by the Greeks, a piece of information found in Schiller's article will be very much in place. Plato, as we know, puts Atlantis just outside the Pillars of Hercules marking the Straits of Gibraltar leading to the Atlantic Ocean. Schiller quotes Galanopoulos to the effect that there are two promontories on the coast of Greece near Crete also called "Pillars of Hercules".[2] We get the suggestion: the Pillars of Hercules may have been part of the original testimony of the Egyptian priests but they need not have pointed beyond the Straits of Gibraltar to the Atlantic. By misinterpreting the dimensions and the chronology, Solon may have missed the drift of what was historical and not semi-mythic in the testimony from Egypt: what the priests of Sais told him may have geographically concerned only the Mediterranean region a little to the south of Greece.

Why then, we may ask, the name "Atlantis"? Sir Gavin writes that it is due to Plato's locating the island in the Atlantic. Schiller puts the matter the other way round: Plato's location of the island beyond the Straits of Gibraltar gave the Atlantic Ocean its name.[3] Actually, Plato makes neither name directly responsible for the other: he traces both to the eldest son of Poseidon who founded this island: Atlas, "after whom the whole island and the ocean were called Atlantic".[4] No doubt, this does bring together through Atlas the island and the Atlantic Ocean, but it also implies that, wherever the island might be, even elsewhere than in the western sea, it would be known as Atlantis on account of Poseidon's eldest son. Now, although Atlas is not known to be associated in legend with Crete, Poseidon certainly is;[5] and, just as in Atlantis bulls are said to have been sacrificed to Poseidon,[6] they were sacrificed to him in Crete, as Evans's archaeological findings tend to show.[7]

It may be added that King Minos, according to legend, became after his death, along with his brother Rhadamanthus, a ruler over the dead. And, by his judgment, the innocent dead "were assured an eternity of dreamless bliss, far to the west in the splendid isles of the Blessed, the perfumed Elysian fields of enchantment".[8] Curiously enough, Goodrich here uses the words: "There friends and lovers were eter-

[1] *The Ancient Myths*, p. 84.
[2] *Readers' Digest*, p. 108. col. 1.
[3] *Ibid.*,
[4] *Critias*, 114, p. 78.
[5] *The Ancient Myths*, pp. 66ff.
[6] *Critias*, 119, p. 83.
[7] Cottrell, *Op. cit.*, pp. 151, 155-6
[8] *The Ancient Myths*, p. 61.

nally young, eternally reunited, eternally at peace. On all sides stretched the silver summer sea that languidly lapped the shores of their Atlantis."[1] Thus, through Minos, Crete could be imaginatively drifted far to the west where its king's spirit commanded an Atlantic paradise.

3

Yes, from many sides, some clearer, some vaguer, we can arrive at a *rapprochement* between Atlantis and Crete—and, of course, the strongest argument still remains the Santorin-cataclysm.

But this argument at once raises the question: "If, reducing Plato's 9000 years before Solon's time to 900, we take the priests of Sais to have referred to this cataclysm, may we not expect a historically minded people like the Egyptians to have left us at least some hints of such an event? Egypt is only 445 miles away from Crete and some effects are likely to have been felt there of so great an eruption."

According to Schiller, one papyrus says: "The land is utterly perished... the sun is veiled and shines not"—while another laments: "O that the earth would cease from noise, and tumult be no more! The towns are destroyed... no fruit nor herbs are found... plague is throughout the land."[2]

The effects described are just what would accompany volcanic eruptions. We have only to recall Sir Gavin's statement on the far-reaching sequel to the Krakatoa explosion which was less powerful than that of Santorin. But are Schiller's sources relevant and reliable?

What he has drawn upon—without naming the documents—are, respectively, the Ermitage Papyrus[3] and the Papyrus Ipuwer.[4] Neither of the texts is usually understood to recount an upheaval of nature like the one we are concerned with: they are taken to recount only civil feud, a state of anarchy, a condition of destitution and an invasion by Asiatic barbarians called Amu. Even if we admitted such an upheaval here, it would be impossible to associate it with *c.* 1450 B.C. For, we can easily show the documents to be referring to earlier epochs.

In the Ermitage Papyrus the seer Neferrohu, after picturing the stricken land and the political subjugation of Egypt by the Amu, prophesies its liberation by a king born of a Nubian woman and called Ameny—"the Amu shall fall by his sword"—and then "there shall be built the Wall of the Prince so as not to allow the Amu to go down into Egypt". Now, side by side with this we may cull a piece of information from Werner Keller. After alluding to a campaign by Sesostris III about 1850 B.C., he says:

[1] *Ibid.*

[2] *Readers' Digest*, p. 109, col. 1.

[3] A. H. Gardiner, "New Literary Works from Ancient Egypt," *Journal of Egyptian Archaeology*, 1 (1914), pp. 100-6.

[4] A. H. Gardiner, *The Admonitions of an Egyptian Sage from a Hieratic Papyrus in Leiden* (Leipzig, 1909).

"Thanks to the archaeologists we possess a unique document from this epoch, a gem of ancient literature. The author: a certain Sinuhe of Egypt. Scene: Canaan. Time: between 1971 and 1928 B.C. under Pharaoh Sesostris I.

"Sinuhe, a nobleman in attendance at court, becomes involved in a political intrigue. He fears for his life and emigrates to Canaan.

" 'As I headed north I came to the Prince's Wall, which was built to keep out the Bedouins and crush the Sandramblers...' "[1]

Evidently, "Ameny" of the Ermitage Papyrus, builder of "the Wall of the Prince", is some predecessor of Sesostris I. And we do not have to look long for him. The father of Sesostris I is Amenemmes or Amenemhat I, the founder of the Twelfth Dynasty who by his vigour and skill in statesmanship "furnished Egypt with the stable organization, which enabled her about 2000 B.C. to enter upon her second period of productive development, the Middle Kingdom".[2] J. E. Manchip White has clearly given him his due in defensive measures: "He began by constructing a defence line called the Wall of the Prince across the entire frontier of the Delta."[3] And it is also worth marking that the very form "Ameny" was in vogue in his day: one of his chief officers whose biography is inscribed in his tomb at Benihasan uses it as his name.[4] We do not know whether Amenemmes's mother was Nubian, but he is prominently connected with Nubia: Nubian provinces long independent were annexed by him and he regularly received income from the gold-mines of Nubia.[5] His reign-period is 2000-1970 B.C.—a far cry indeed from *c.* 1450 B.C.

As for the Papyrus Ipuwer, A. H. Gardiner, its best editor, takes it as belonging to the Nineteenth Dynasty (1320-1200 B.C.) but he says it is a copy: "the scribe used a manuscript a few centuries older...[6] The spelling is, on the whole, that of a literary text of the Middle Kingdom, if this term is interpreted in a very liberal way."[7] The Middle Kingdom ends in *c.* 1785 B.C. Interpreted in a very liberal way, it would cover the Hyksos Period which practically intervenes between it and the New Kingdom of 1580-1035. As the text tells both of a civil war and an Asiatic occupation of the Delta, Gardiner opines: "There are two periods which might possibly answer the requirement of the case: the one is the dark age that separates the sixth from the eleventh dynasty; the other is the Hyksos period." The "dark age" spoken of by Gardiner is what is known as the First Intermediate Period (2300-2065 B.C.). Although a philological consideration, says Gardiner, "makes us wish to put back the date of the compo-

[1] *The Bible As History*, trans. from the German by William Neil (London, 1957), p. 75. In a fn. to "Sandramblers" the author writes: " 'Sandramblers' and 'Wilderness-Wanderers' were the favourite nicknames which the Egyptians gave to their eastern and north-eastern neighbours, the nomads. ."

[2] J. H. Breasted, *A History of Egypt* (London, 1921), p. 156.

[3] *Ancient Egypt* (London, 1952), p. 156. The chronology followed in the rest of this section is mostly according to this book.

[4] Breasted, *Op. cit.*, p. 160.

[5] *Ibid.*, pp. 178, 163.

[6] *Op. cit.*, note to 1:8.

[7] *Ibid.*, p. 3.

sition as far as possible", he adds: "The view that our Leiden papyrus contains allusions to the Hyksos has the better support from the historical standpoint." If we grant, as does Gardiner, that "our text may have been composed while the Hyksos were still in the land", what we have in it is a description of the frightful events of *c.* 1730 B.C. within the Second Intermediate Period which lasted up to 1580 B.C. For the theme of the Papyrus *c.* 1730 B.C. is the latest date acceptable: in no case can the date be *c.* 1450 B.C. The impossibility is proved by evidence from Crete itself. On a jar-lid discovered in the palace at Knossos Evans found the name of one of the early Hyksos kings: Khian or Khayana:[1] Khian built up a wide though ephemeral empire in 1650-1600 B.C.[2]

It is interesting to note that even an earthquake can be thrown in for the time when the Hyksos invaded Egypt. Evans observed that the palace at Knossos suffered serious damage not only in the year which ended the civilisation of palaces but also twice before—once in the period between the Middle Minoan and the Late Minoan and, before this, in *c.* 1700 B.C.[3] Also, a phrase in an inscription of the Queen Hatshepsut (1505-1484 B.C.) of the Eighteenth Dynasty provides a suggestion of such an upheaval's effect on Egypt. Referring to the Hyksos-period she says: "The abode of the Mistress of Qes was fallen in ruin, the earth has swallowed her beautiful sanctuary and children played over her temple... I cleared and rebuilt it anew... I restored that which was in ruins, and I completed that which was left unfinished. For there had been Amu in the midst of the Delta and in Hauar (Avaris), and the foreign hordes of their number had destroyed the ancient works; they reigned ignorant of the god Ra." Apropos of the second phrase in this translation by Sir Flinders Petrie[4] we may repeat the query of another translator, Edouard Naville: "I translate, as Golenischeff does, 'the land which had swallowed up the sanctuary.' Does this mean that the temple disappeared in an earthquake?"[5]

What then about *c.* 1450 B.C.? Have we no pointer at all? In *c.* 1450 B.C. Tuthmosis or Thutmose III, who mightily extended the dominions of Egypt, died and was succeeded by his son Amenophis or Amenhotep II, whom he had already appointed joint-ruler a year before.[6] A revolt soon took place in Syria, but he effectively crushed it and punished the ringleaders with exceptional cruelty.[7] There were other campaigns, perhaps not so successful as his inscriptions try to make out[8]—and it is possible that he even lost Syria since his successor Tuthmosis IV is called by his

[1] *Annual of the British School at Athens*, VII, 65, Fig. 21.

[2] W. F. Albright, *From the Stone Age to Christianity* (Anchor, New York, 1957), p. 202.

[3] Cottrell, *The Bull of Minos*, p. 155.

[4] *A History of Egypt in the Seventeenth and Eighteenth Dynasties* (7th Ed., London, 1924), II, p. 19.

[5] "The Life and Monuments of Hatshopsitu" in *The Tomb of Hatshopsitu* by Theodore M. Davis (London, 1906), p. 69.

[6] Manchip White, *Op. cit.* p. 168.

[7] *Ibid.*, pp. 168-9.

[8] Sidney Smith, *Occasional Publications of the British School of Archaeology in Ankara* (London, 1949), I.

nobles "conqueror of Syria".[1] But there is no sign of civil feud, much less of invasion by Asiatics; nor is any natural cataclysm attested in the official records. However, there is an unofficial literary relic which suggests some disturbance of nature. A papyrus written in Greek, the translation of an older Egyptian text, gives the prophecy of a potter under King Amenophis: "The waterless Nile will be filled, the displaced winter will come in its own season. The sun will resume its course and the winds will be restrained. For in the Typhon time the sun is veiled."[2]

This certainly could point to some effect of the Santorin-eruption on distant Egypt. And the pointer becomes especially significant when we consider what Schiller[3] puts before us along with the tale of those two papyri: the Bible's story of the Ten Plagues of Egypt just before the epic migration of the Israelites under the leadership of Moses from Egypt where they had sojourned from the time of Jacob, the grandson of Abraham. As Schiller remarks, the details of this story have been noted by historians as corresponding to "disasters that have accompanied volcanic eruptions". And some of the details answer in general to those in the potter's prophecy. Thus "all the waters that were in the river were turned to blood.... And all the Egyptians digged round about the river for water to drink; for they could not drink of the water of the river" (*Exodus* 7:20, 24). We learn also: "the Lord sent thunder and hail" (*Exodus* 9:23)..."and the Lord brought an east wind upon the land all that day and all that night" (*Exodus* 10:13). Again: "there was a thick darkness in all the land of Egypt three days" (*Exodus* 10:22).

Of course, there are many other details painting a dreadful picture. Although all are explicable in volcanic terms, we do not know how far to credit them. One which Galanopoulos, as quoted by Schiller,[4] explains excellently in such terms—a tidal wave in this case, created when the cone of Santorin dropped into the sea—is related to the *yam suf*, which Galanopoulos translates along with several scholars as "Reed Sea" instead of "Red Sea" and identifies with Sirbenis Lake, a brackish body of water separated from the Mediterranean by a narrow piece of land. "He believes that the Israelites fled across this dry bridge, with the waters 'on their right hand and on their left,' during the interval when the sea was drawn back towards the Aegean, and that the Egyptians were caught in the huge returning tidal wave. The interval would have been about 20 minutes." The Bible (*Exodus* 14: 17-28) narrates that the Pharaoh pursued the Israelites and drowned in the sea with his army. Schiller[5] writes: "Egyptian inscriptions also refer to this event."

[1] Breasted. *Op. cit.*, p. 328.

[2] Quoted from Immanuel Velikovsky, *Ages in Chaos*, Vol. I (London, 1957), p. 47. Velikovsky writes in fn. 6 on the same page: "Literature on this prophecy is found in G. Manteuffel, *De opusculi Graeci Aegypti* .. (Warsaw, 1930); *Mélanges Maspero*, II (1934), 119-27." Some other pieces of information before and after this have also been drawn from Velikovsky's book.

[3] *Readers' Digest*, p. 108, col. 2.

[4] *Ibid.*, p. 109, cols 1-2.

[5] *Ibid.*, p. 109, col 1,

Actually there is only one inscription that might be cited: a shrine (*naos*) of black granite engraved with hieroglyphics, found in the sixties of the last century.[1] It belongs to the Ptolemaic or Hellenistic age (332-30 B.C.), but purports to relate much earlier history. It speaks of a King Thom or Thoum, called "his majesty of Shou", and a time of "great affliction" on earth, nine days of darkness, during which the children of Apopi, the fierce god of darkness, intruded from the desert and fell upon Egypt. King Thom went to fight them but perished in "the Place of the Whirlpool". A location called "Pi-Kharoti" also comes in. A little later, the King's son Geb sets out and meets with burns.

It has been argued that the Whirlpool is the *yam suf* in storm and "Pi-Kharoti". is the same as the Bible's "Pi-ha-hiroth" (="Pi-ha-Khiroth"), a place by the *yam suf* where the Pharaoh's army overtook the Israelites (*Exodus* 14:9). But surely the Bible depicts the Israelites as residents of Egypt and afterwards fugitives from it, not as invaders. Perhaps the tale of King Thom is quite mythological in its basis: just as Apopi is a supernatural being, Shu is the Egyptian air-god and Geb the earth-god whom Shu begot.[2] Even "Thom" can be equated to the god "Atum", as in the city name "Pithom", "House of Atum"[3]. "Atum or Ra-Atum...was a sky-god, always depicted in human form"[4] and "the sun-priests...firmly established the notion that Ra-Atum was the first king of Egypt."[5] The air god Shu was one of the eight parts of his body.[6] The sun's light itself was also called "Shu".[7]

If there is a historical nucleus, the tale may be brought into rapport with the Hyksos-invasion, especially as the inscription has the phrase: "the foreigners and the Amu." Besides, "Thom" has some affinity to "Timaus", the name of the Egyptian king in the account of the Hyksos overrunning Egypt from the East, which is given by Manetho, the Egyptian priest in the reign of Ptolemy Philadelphus (285-247 B.C.), who is our earliest historian of Egypt and whose work has been preserved in excerpts by Josephus in his *Contra Apion*.[8] But the conquest by the Hyksos occurred in *c.* 1730 B.C., not in *c.* 1450 B.C. Already in 1580 B.C. Ahmosis or Ahmose I, founder of the Eighteenth Dynasty, had cleared the whole country of the Hyksos. And the mummy of every Pharaoh—from 1580 to 1222 B.C.—who has been thought the

[1] F. L. Griffiths, *The Antiquities of Tell el Yahudiyeh and Miscellaneous Work in Lower Egypt during the Years* 1887-1888 (London, 1890) (published with Edouard Naville, *The Mound of the Jew and the City of Onias*). George Goyon, "Les Travaux de Chou et les tribulations de Geb d'après le Naos 2248 d'Ismalia," *Kémi, Revue de philologie et d'archéologie egyptiennes et coptes*, VI (1936), pp. 1-42. Velikovsky, *Op. cit.*, pp. 39-45, deals with the inscription at some length.

[2] Manchip White, *Op. cit.*, p. 44.

[3] Breasted, *Op. cit.*, p. 442.

[4] Manchip White, *Op. cit.*, p. 23.

[5] *Ibid.*, pp. 25-6.

[6] *Ibid.*, p. 23.

[7] M. A. Murray, *The Splendour that was Egypt* (Four Square, London, 1966), p. 236.

[8] *Ibid.*, p. 46.

persecutor and pursuer of the Israelites has been discovered by archaeologists:[1] no Pharaoh possibly concerned was lost in any sea.

There is no inscription referring to the Bible's narrative of the *débâcle* at *yam suf*. And all Egyptology rules out the event. So we must admit a strong element of exaggeration and invention in the Biblical account, but there is no reason to doubt in it some index to unusual natural phenomena—and, if we could connect it with Amenophis II, we should have a confirmation of the potter's prophecy and possess a double testimony—Jewish-Egyptian—to our *rapprochement* between Atlantis and Crete.

There are helpful passages in Manetho. Like a number of things in this historian, they have a streak of fantasy due to popular tradition, anti-Jewish to some extent. But it makes just the connection we need. There are two stories here, which Josephus has mixed up. In the one we hear of the expulsion from Egypt of the Hyksos (etymologically equated by Manetho to "Shepherd Kings"). Josephus relates: "The Kings of Thebes and of other provinces of Egypt made an insurrection against the Shepherds, and a long and mighty war was carried on between them, till the Shepherds were overcome by a king whose name was Alisphragmuthosis, and they were by him driven out of the other parts of Egypt, and hemmed up in a place containing about ten thousand acres, which was called Avaris. All this tract (says Manetho) the Shepherds surrounded with a vast and strong wall. And Thummosis, the son of Alisphragmuthosis, endeavoured to force them by siege, and beleaguered the place; but at the moment when he despaired of reducing them by siege, they agreed on a capitulation, that they would leave Egypt, and should be permitted to go out without molestation wheresoever they pleased. And, according to this stipulation, they departed from Egypt with all their families and effects, and bent their way through the desert to Syria."[2]

The end of this story is thus put by Z. Mayani: "Manetho recounts then that no less than 240,000 Shepherds quitted Egypt and went to Syria where they built in the country 'at present called Judaea', a city to which they gave the name of Jerusalem."[3]

We can well gather from Mayani the second story. "A king, Amenophis, is informed by a prophet that, if he wishes to see the gods, he should first chase away the Lepers from the country. The king collects 80,000 of them and sends them back to the quarries. Afterwards, they are permitted to go and live in the deserted city of Avaris. There they get for themselves as chief a priest of Heliopolis, Osarseph. According to the text, he could be none else than Moses. He promulgates laws to them: not to worship the gods any more, not to abstain any more from eating sacred meat. There follows a war. The Unclean Ones, that is to say, the Egyptian lepers, summon to their rescue the Shepherds, in other words, the descendants of the Hyksos settled at Jerusalem..."[4]

[1] Cottrell, *The Lost Pharaohs* (Pan, London, 1964), pp. 141-2.
[2] Murray, *Op. cit.*, p. 48.
[3] *Les Hyksos et le monde de la bible* (Payot, Paris, 1956), p. 196. The English translation is mine
[4] *Ibid.*

Drawing upon both *Le Drame d'Avaris* (1941) and *Tanis* (1942) of P. Montet, Mayani provides us with the continuation of the story: "200,000 Shepherds were allied to the people of Avaris. King Amenophis sent his son to Ethiopia and collected 300,000 well-trained soldiers, but suffered a cruel defeat and had to seek refuge in Ethiopia.... The Unclean Ones and their allies spread themselves in the whole land and gave themselves up to excesses which far exceeded those which the Hyksos had committed at another time... 13 years later, Amenophis returned to chastise and drive out the Unclean Ones."[1]

We may conclude in Manetho's own words, as reproduced by Josephus: "Amenophis returned from Ethiopia with a great force, and Rampses too, his son, with other forces, and encountering the Shepherds and the unclean people, they defeated them and slew multitudes of them, and pursued them to the bounds of Syria."[2]

Immanuel Velikovsky, without mentioning Amenophis, gives the same two stories and says that though Manetho assigned the second to a later epoch Josephus did not separate it from the first.[3] Velikovsky ends by saying that the lepers' chief, "Osarsiph, adopted the name of Moses and led them to Palestine when they were expelled."

Now, the two epochs of Manetho cannot be wide apart. Alisphragumthosis and Thummosis are reminiscent of two of the four kings each named Tuthmosis, three of whom formed part of the early career of the Eighteenth Dynasty founded by Ahmosis the conqueror of the Hyksos. Thummosis seems to stand for the greatest of them, Tuthmosis III, and the siege of Avaris in Manetho reflects in general the happenings at the siege of Megiddo where a group of Hyksos whose ancestors had been expelled from Egypt appear to have been finally concentrated after Tuthmosis had discomfited them at Kadesh earlier in the war. Breasted writes: "the beleaguered town,...after sustaining the siege for some weeks, at length surrendered."[4] He follows up with quotations from the official records: "Those Asiatics who are in the wretched Megiddo... came forth to the fame of Thutmose III, who is given life, saying, 'Give us a chance, that we may present to thy majesty our impost.' Then they came, bringing that which belonged to them....Then...my majesty commanded to give them the breath of life."[5] Breasted comments: "it is evident that he treated them with the utmost leniency."

If Thummosis is Tuthmosis III, Amenophis who is mentioned after him must be the latter's son Amenophis II, though the next name "Rampses" is out of place, since the son of Amenophis II was Tuthmosis IV—unless it was the son's name before he ascended the throne. And the two identifications gain extra colour from the Hyksos-awareness we can show in these kings of the Eighteenth Dynasty with the help of their own inscriptions. After his campaign Tuthmosis built, at an advanced point of his march, a fortress "which he called 'Thutmose-is-the-Binder-of-the-

[1] *Ibid.*, pp. 199-200.
[2] Murray, *Op. cit.*, p. 48.
[3] *Op. cit.*, p. 5, fn. 1.
[4] *Op. cit.*, p. 291.
[5] *Ibid.*, pp. 291-2.

Barbarians,' using the same rare word for 'barbarian' which Hatshepsut applies to the Hyksos."[1] He even speaks in general of being victorious over the "Hyksos" of Syria and Palestine"[2]. Amenophis II brings a still greater precision and particularity to the name by distinguishing, among those who could not bend his royal bow, the princes of the Hyksos from those of Retenu (Palestine) and from the Egyptians.[3]

With Amenophis II in the picture the strange apparition of Osarseph *alias* Moses from Manetho is highly suggestive to us. The introduction of lepers is fantastic, but if the Jews were there in Egypt under Amenophis II they are likely to have been regarded—in spite of their Egyptianisation—with great suspicion on account of the Semitic connections of the Hyksos and because of the wide-spread rebellion in Syria and Palestine Amenophis II was called upon to quell almost at the very start of his reign.

On the Hyksos' Semitism Breasted observes apropos of their empire and of Manetho's surmise that they were Arabians or Phoenicians: "That it was a Semitic empire we cannot doubt, in view of the Manethonian tradition and the subsequent conditions in Syria-Palestine. Moreover the scarabs of a Pharaoh who evidently belonged to the Hyksos time, gave his name as Jacob-her or possibly Jacob-El, and it is not impossible that some chief of the Jacob-tribes of Israel for a time gained the leadership in this obscure age. Such an incident would account surprisingly well for the entrance of these tribes into Egypt, which on any hypothesis must have taken place at this age; and in that case the Hebrews in Egypt will have been but a part of the Beduin allies of the Kadesh or Hyksos empire, whose presence there brought into the tradition the partially true belief that the Hyksos were shepherds, and led Manetho to his untenable etymology of the second part of the word. Likewise the naive assumption of Josephus, who identifies the Hyksos with the Hebrews, may thus contain a kernel of truth, however accidental."[4]

Here we may recall the end of a famous hymn in praise of Tuthmosis III, which the priests of Amon put into the mouth of their god:

> I have come, giving thee to smite those who are nigh thy border,
> Thou hast smitten the Sand-Dwellers as living captives;
> I have made them see thy majesty as a southern jackal,
> Swift-footed, stealthy-going, who roves the Two Lands.[5]

It is extremely probable that Tuthmosis III, fighting vehemently against the remanants of the Hyksos immediately outside Egypt, placed the Jews within his kingdom under some constraint. Actually, we learn from Mayani, quoting G. Posener

[1] Breasted, *Op. cit.*, p. 293.
[2] Mayani, *Op. cit.*, p. 103.
[3] *Ibid.*
[4] *Ibid.*, p. 220. Perhaps Breasted overstates his case. For, the Hyksos' ethnology and culture seem rather complex. But a striking Semitic constituent and *penchant* are undeniable.
[5] *Ibid.*, p. 319.

Syria, 1937), that forced labour of the Semitics begins under Tuthmosis III who gave 1158 Syrian captives to the temple of Amon at Thebes: "these captives were employed as weavers, artisans, farmers and masons."[1] Even Breasted, who never dreamt of Tuthmosis III as "the Pharaoh of the oppression," is yet reminded by the captive "Semitic foreigners"—depicted as "bricklayers" on the tomb of Tuthmosis' vizier Rekhmire—of "what was...exacted of the Hebrews."[2] It is probable also that Amenophis II believed he had good reasons to increase the constraint on the Jews. Suspecting them of "fifth-column" activities he may have rendered conditions so difficult for them that, taking advantage of natural disturbances and the nation-wide nerve-taxing threat of provinces in revolt, they may have resorted to flight under Moses. Through Manetho's curious accounts we are helped to link with the time of Amenophis II (1450-1425 B. C.) the exodus of the Jews after the "Ten Plagues".

And what clinches the linkage is the clear-cut chronological clue the Bible itself supplies us. The clue is in reference to the commencement of Solomon's grand undertaking, the Temple: "And it came to pass in the four hundred and eightieth year after the children of Israel were come out of the land of Egypt, in the fourth year of Solomom's reign over Israel, in the month of Zif, which is the second month, that he began to build the house of the Lord" (*I Kings* 6:1). Solomon, as Schiller citing part of this verse tells us,[3] reigned 970-930 B.C. His fourth year would be 966. Counting back 480 years we reach 1446 B.C. for the migration out of Egypt. Then we are right in the reign of Amenophis II—in fact, in the very time of the Syria-Palestine revolt—and whatever natural disturbance we can deduce from the account of the "Ten Plagues" would as good as synchronise with the Santorin cataclysm and the prophecy of the potter under King Amenophis be automatically seen to refer to the misfortunes of Egypt due to the same event.[4]

"How is it then," we may be asked, "that the official documents are silent?" Well, at no time in Egyptian history do we have an official record of the long sojourn of the Israelites in Egypt, their near-slavery towards the end and their flight to freedom under the Egypt-born Moses who is said to have offended the Pharaoh earlier. But Albright says:"With our present knowledge of the topography of the eastern Delta the accouunt of the start of the Exodus given in Ex. 12:37 and 13:20 ff. is perfectly sound topographically... Many additional pieces of evidence for the substantial historicity of the account of the Exodus and the wandering in the regions of Sinai, Midian and Kadesh can easily be given, thanks to our greatly increased knowledge of topography and archaeology."[5]

[1] *Op. cit.*, p. 127.

[2] *Ancient Records of Egypt (Chicago* 1906-7), Vol. II, Sec. 756.

[3] *Op. cit.*, p. 109, col. 1.

[4] Solomon's accession is also dated to 965 and 961 B.C. The variations make no difference to our point that the exodus falls within the reign of Amenophis II. Instead of our 1446 B.C. we would have 1441 and 1437 B.C. respectively. That is all.

[5] *Op. cit.*, p. 255.

Further, Keller tells us that "Moses" is "a typical Egyptian name" and he adds: "The Egyptian word MS (standing for 'Mosu,' the hieroglyphics using no vowels) means simply 'boy, son.' A number of Pharaohs are called Ahmose, Amasis, Thutmose. And Thutmose was the name of the famous sculptor, among whose masterpieces the incomparably beautiful head of Nofretete [wife of Akhnaton, *alias* Amenophis IV] is still the admiration of the world."[1] Except for "Amasis" which is Herodotus's version (IV. 159) of "Ahmose" or "Ahmosis" and is the name of a Pharaoh who reigned *c.* 568-525 B.C., all the rest with the suffix identical with "Moses", are people of the Eighteenth-Dynasty period. In fact, as we gather from Breasted,[2] the suffix was so much in vogue that between *c.* 1580 and *c.* 1411 B.C. we have nine prominent persons with it: King Kemose, Ahmose I, his friends and fellow-fighters Ahmose Pen-Nekhbet and Ahmose Son of Ebana, Thutmose I, Thutmose II, Thutmose III, Thutmose IV and the wife of Thutmose I called Ahmose. And that a sculptor of about 1380 B.C. could have it too shows it to have been popular even among commoners. Its wide use in the epoch having *c.* 1450 B.C. close to its centre may perhaps render that epoch the fittest setting for the occurrence of "Moses" as the designation of the Israelites' leader out of Egypt soon after the eruption of Santorin and a little before the fulfilment of the potter's prophecy with the return of things to normal.

Fairly striking in their sum-total are the signs available to show that the Greek papyrus constitutes in broad terms ancient Egypt's historical sense of the natural upheaval of *c.* 1450 B.C.

But we may aver that even without these signs the name "Amenophis" in the papyrus coupled with those terms can justify on our part an inference of the historical sense we are looking for.

4

Suppose the Greek papyrus itself has for some reason or other to be ignored. Still the case for Crete=Atlantis would not seriously suffer. We may simply assume that Egypt escaped the drastic effects of the Santorin-eruption and therefore left no pronouncement on it.

Yes, the case for Crete is strong enough owing to many major aspects of Plato's reference to Atlantis plus the observations of Sir Gavin and Schiller. And it is a piece of unconscious verbal prophecy that the discoverer of Crete's civilisation, Evans, who knew his Plato no less than his Homer and Hesiod and other Classical sources of stories about Crete, should have employed, in connection with the need to prop up and preserve the "Grand Staircase" in the palace at Knossos, the expression: "In the early days of the excavation the Architect, Mr. Christian Doll,...manfully grappled with his Atlantean task."[3]

[1] *Op. cit.*, p. 122. More correctly, according to modern opinion, "Moses" is an adaptation of the Egyptian verb *msj*, "to bring forth".

[2] *A History of Egypt*, pp. 224-329.

[3] Cottrell, *The Bull of Minos*, p. 162.

However, there is the fundamental query before *our* Atlantean task could be over: "Can the mystery of Atlantis be settled only by viewing Plato in a new manner against the background of Sir Gavin and Schiller?" Even in Plato a few major aspects remain unexplained satisfactorily by Crete: the wholesale sinking of the island and the very name "Atlantis".

Egypt during Solon's visit to Sais—*c.* 590 B. C.—was aware that Crete still existed. This was the time of the Twenty-sixth Egyptian Dynasty, known as the Dynasty of Sais (663-525 B.C.), and in the course of it the Egyptians were in constant touch with the Greek world and all the islands of the Aegean. Amasis is said even to have conquered the island of Cyprus and there were Greek colonies in the Nile Delta. In the very period of Solon's visit to Egypt, when Psammetichus II (594-588 B.C.) ruled, Greek mercenaries are known to have carved their names on one of the colossi of Ramesses II at Abu Simbel.[1] To know of Crete's continuing existence was then inevitable in Sais.

As to the name by which the Egyptians of *c.* 590 B.C. called the people of Crete we may be sure it could never be anything like "Atlanteans." As far back as the beginning of the late Minoan Period—that is to say, in 1550-1450 B.C.—the ambassadors shown in the wall-paintings on Egyptian tombs as carrying typical Cretan vases, rhytons (high funnel-shaped cups), are termed "Keftiu"[2] or—in the spelling of some scholars—"Keftyew." Also, in the great hymn which, before the death of Tuthmosis III in *c.* 1450 B.C., makes Amon speak to him we come across the phrase which leaves us in no doubt of the Egyptians' designation of Crete:

> I have come, giving thee to smite the western land,
> Keftyew and Cyprus are in terror...[3]

Even in the much older Papyrus Ipuwer we read: "What shall we do for cedars for our mummies, with the tribute of which priests are buried; and with the oil of which (princes) are embalmed as far as Keftyew?"[4]

So the reference, in Plato's account from Egypt, to the complete submersion of Atlantis and to the name of the submerged island as quite different from any version of "Keftiu" or "Keftyew" must give us pause.

From outside Plato comes the vision of Atlantis's punishment by total drowning, as distinguished from the Platonic punishment by total defeat. And there is yet one more feature derived from non-Platonic sources: the reputation of the Atlanteans as black magicians on top of being scientifically advanced. Both of these non-Platonic elements stand out in Sri Aurobindo's few allusions to that legendary island. And it is after pondering them as well as considering the unexplained ones in Plato that we may return to our problem and arrive at a firm conclusion.

(To be continued)

K. D. SETHNA

[1] Manchip White, *Op. cit.*, p. 199. [2] Cottrell, *Op. cit.*, p. 180. [3] Breasted, *Op. cit.*, p. 319.
[4] Breasted, *Development of Religion and Thought in Ancient Egypt* (New York, 1959), p. 207.

MY MUSIC IS A FLAME

My music is a flame, a homage I bear
Upwards across thy silent gates to the seas,
The foamless stretches of golden creative hush.
My songs throb to thy eternal passion's surge
Bursting the hidden doors of the sleeping mind,
The beats of ecstasy from sudden spheres,
And moods of wide winging felicity.
My voiceless brush recalls the tide of the stars,
Its opalescent passage into my dreams,
The colours of God's rapid extravagance.
My life and limbs are the palettes of thy light
With music for hues and words for luminous shades,
Where heart is the hidden joy, mind the open form
And all is a cry to thy unborn Namelessness,
A hymn of the soil for the amazing sky.

ROMEN

COME ALL...

May the blue arrows shoot on
Joyful stream-tidings on the white beaches
Catch the ripening sense of a movement's press of time
And wide-winged soaring from the ample heart.
Flow the lines of the rich carved head
On the stark statue of truth
And feel this something breathed—
Swung from the dreaming brow
That shapes the rippled statue of the force.
Come down all the dreamers
Come all who love the work
Come all the snow catchers
All spies of the dense diamond
All those with something nestling
In a strong silent core,
And will the new world
And will the new dawns
Stolen from darkness by the thief of love
And here strive above strife.

STANLEY COWIE

STRANGE ENCOUNTERS IN LIFE AND LITERATURE

PERHAPS the most famous of strange encounters was between two explorers of Africa. Dr. David Livingstone had been missing for months. Sir Henry Morton Stanley set out in search of him from Zanziber. After a long search in wild country where no other European existed, Stanley chanced upon the missing explorer. For a minute he paused in surprise, then said in the most correct English tone, "Dr. Livingstone, I presume?"

***

The Duke of Wellington was once greeted in the street by a stranger with "Mr. Smith, I believe?"

He replied, "Sir, if you believe that, you'll believe anything."

***

Dr. Spooner...went up to a new Fellow of New College. "I want you to come to tea today to meet Mr. Casson."

"But I am Mr. Casson."

"Come all the same."

(From C. M. Bowra's *Memories* 1898-1939.)

***

While a man was walking down a street, another stopped him, greeted him like an old lost friend, and embraced him with affection.

"Isaac! Isaac!" he said. "What has happened to you, Isaac? Look at yourself.

"How you have changed! You used to have a big, fine head of hair, thick like a mop. Now you have a bald head. What a change!

"Isaac, Isaac, what a man you were! You used to be strong, like an ox, with big, powerful shoulders. You remember, Isaac, I used to say: 'There goes a mighty giant.' Look at you now—small and shrunken, a nothing. Isaac, Isaac, what a change!

"And your mustaches, black and big and powerful, shooting out from the sides like two pointed swords. Ah, that was a mustache! And now nothing but plain, bare skin. What a change!

"Isaac, Isaac, what has happened to you, Isaac?"

"But I'm not Isaac."

"Isaac, Isaac, so you have changed your name, too."

(From Samuel Tenenbaum's *The Wise Men of Chelm*)

***

"Doomsday" is a word well-known since Anglo-Saxon times. But in our own time another word has become a part of the English language: "Bloomsday." Bloomsday is the famous June 16, 1904, when Leopold Bloom, on his way to Paddy Dignam's funeral, sighted Stephen Daedalus in a street and started with him his 24-hour Odyssey through "dear dirty Dublin" in the pages of James Joyce's *Ulysses*.

MY FRIEND THE MOON-TROTTER

"WHAT happened?" I asked the Moon-trotter, seeing his head bandaged, one of his arms in a sling.

He answered angrily, "The Voice said, 'If you want to follow Me, shut your eyes.' "

"Lo and behold, you worked it out with diligence..." I roared with laughter.

"Of course I didn't," retorted he. "I made sure that I was rightly guided."

"How?"

"I blinked."

*
**

"They say space is curved," I observed, referring to some scientific theory.

"The prison!" he chuckled. "Never seen mad mankind head over heels running down time into themselves? No escape from one's own...!"

*
**

There was silence as my friend lifted his eyes from the desk to look down upon the learned assembly of the clergy.

"Theology," he began his address and his voice was heavy with tradition, "is the science of God as He has to be!"

*
**

We spoke about the great cycles of world history.

"It is imperative to be history-conscious," I said emphatically.

"Why?" asked he. "I can't see anything in it but an overdone parable of the moment missed."

"You can't see the array of splendid deeds..."

"In a heap of dry leaves erratic insects make great noise."

*
**

On full moon the Moon-trotter told me a joke:

" 'Hey,' cried the drop of water as the sun pulled him up from the pond, 'I am liberated!' and vanished in the sky. What did he know of rain?"

*
**

When the talk turned to ethics someone ejaculated: "Bestowing on man freewill God aristocratised him."

At that the Moon-trotter grew thoughtful, almost sad. In a low voice he was heard to say:

"Old ego labours to the drums of Nature;
My soul, thou dancest to the Flute divine.
Alas the day, so musical a creature
And none to play the sweet old tune of mine."

*
**

Years ago the Moon-trotter took my hand and said, "Come, we go."

"You can't leave your work like that," I argued.

"They paid me some of those coins with two marks, smiling on the obverse, weeping on the reverse."

"That is correct."

"Don't you know they are forged.?"

"What to do?"

"I returned them. They became very indignant. I am never to work for them again."

*
**

By some unimaginable piece of luck I obtained a peep into the Moon-trotter's sanctuary. The fair bare walls of the empty hall were covered with huge letters. Breathlessly I read:

Clapping His mighty Hands the mad Transcendent
Laughs at His own Self dancing in the worlds.

JOBST MÜHLING

AN OLD LEGEND ABOUT JESUS

JESUS did many a miracle—
Cured lepers, turned water into wine,
Brought back to life the dead
Being Son of God.
But when he was asked to change a fool
He opened his eyes in wide dismay
And ran away.

VENKATARANGA

THE CONQUEST OF DEATH

THE VISION AND THE REALISATION IN SRI AUROBINDO'S YOGA

(Continued from the May issue)

CHAPTER VI

THE BASAL IMMORTALITY: THE EVOLUTION OF DEATH

> These glimmerings point to the secret of our birth
> And the hidden miracle of our destiny.
>
> *Savitri*, Book II, Canto II.

> We can resolutely affirm that, in the actual terrestrial conditions of life, the immortality of the cell is an indubitable fact.... And what characterises most a living organism is its potential immortality and not its death.
>
> S. Metalnikov, *Immortalité et Rajeunissement dans la biologie moderne*, pp. 215-216.

IN our search for any biological evolutionary clues in support of the idea and ideal of physical immortality, we are agreeably surprised to find a mass of evidence which suggests that natural death is not to be regarded as an intrinsic necessity—the fate of all life. As a matter of fact, "neither senescence nor natural death is a necessary, inevitable consequence or attribute of life. Natural death is biologically a relatively new thing, which made its appearance only after living organisms had advanced a long way on the path of evolution."[1] The evidence supporting this conclusion is manifold and may be considered under several heads:

(i) Potential immortality of unicellular organisms or protozoa;

(ii) Potential immortality of germ cells in sexually differentiated organisms;

(iii) Potential immortality exhibited by somatic cells in the phenomenon of agamic, or asexual, mode of reproduction;

(iv) Phenomenon of autotomy, regeneration and dedifferentiation pointing to the potential immortality of certain groups of somatic cells;

(v) Experiments on tissue culture *in vitro* showing definitively the essential immortality of all types of somatic cells in a multicellular organism or metazoan.

In the limited span of our essay it is not possible to do adequate justice to the

[1] Raymond Pearl, "Biological Aspects of Death," in *Encyclopaedia Britannica*, Vol. 7, p. 111.

topics enumerated above, nor is it necessary for our present purpose. What interest us most are the results and conclusions that the biologists have arrived at through painstaking researches brilliantly conceived and meticulously carried out in the special fields of senescence and death. Here are the salient results in their bare outline.

We all know that all living organisms, plant or animal, are built up of cells, of a single cell (unicellular organism or protozoan) or of a group of cells (multicellular organism or metazoan).

Now the doctrine of the immortality of protozoa, first enunciated by Ehrenberg and Weismann, has been proved to be a well-attested biological fact, thanks to a series of brilliant investigations conducted in Germany by Woodruff and his pupils, also in Russia by Metalnikov and Caladjief, during the first and second decades of the present century. The essential conclusion of these and similar experiments is that a protozoan or a unicellular organism knows no process of dissolution that can be compared to the phenomenon that we commonly designate as death. As a matter of fact, protozoa, when placed in normally favourable environments, retain indefinitely, through their successive binary fissions, the vital faculty of self-multiplication *ad infinitum*, without ever betraying any trace of permanent fatigue or senescent degeneracy; and this is so even when these cells are deprived of any rejuvenating process like 'conjugation' or 'endomixis', conditions previously held by Maupas, Calkins and others as absolutely essential and obligatory.

It is thus seen that unicellular organisms like the amoeba possess a kind of potential immortality and are exempt from the nemesis of natural death. As it has been picturesquely put by Prof. Mariano Fiallos-Gil, the protozoan we are viewing through our microscope today has had no dead ancestors; it is the direct descendant of the original of its kind. *Omnis cellula ex cellula.*

To avoid a possible misunderstanding it must be pointed out that this does not mean that these protozoa possess a charmed life exempt from all destruction and death. As a matter of fact they are being continuously killed by vicissitudes of all types such as accidents, lack of sufficient nutrition, variability of atmospheric conditions and above all by their natural enemies which devour and destroy them.

But, at the same time, this too is a biological truth that some of these unicellular organisms are totally *exempt from natural death* and possess to a fantastic degree the creative energy of self-multiplication, so much so that Woodruff had calculated that a single cell would give in seven years' time 4473 generations comprising 2^{3340} cells which, in the eventuality of all of them remaining alive, would have a total protoplasmic mass whose volume will exceed that of our planet more than 10,000 times:

Leaving the protozoa behind when we come to consider the sexually differentiated multicellular organisms, we encounter two different types of cells: *germ cells*, carriers of the continuity of the line of the species, and *somatic cells*, cells constituting the body and its tissues.

Do these cells lodged in a metazoan body possess the same gift of potential

immortality as unicellular organisms living in their privileged isolation do? The answer is a Yes and a No.

First, the germ cells. It is a fact of biological experience that germ cells are indeed equally immortal. "Reduced to a formula," as Prof. R. Pearl has observed, "the fertilized ovum (united germ cells) produces a soma and more germ cells. The soma eventually dies. But some of the germ cells prior to that event produce somata and germ cells, and so on in a continuous cycle which has never yet ended since the appearrance of multicellular organisms on the earth."[1]

But what about the somatic cells? Generally speaking they degenerate and perish after some time thus bringing about as a sequel the somatic death of the individual organism. Indeed, as has been pointed out by the evolutionary biologists, with the establishment of a body as distinct from the germ, natural death has entered the scene. The cells which jointly constitute what has been termed the *vegetative* individual eventually perish; only the *reproductive* individuals otherwise known as germ cells maintain continuity between successive generations. Hence the epigram variously expressed albeit in slightly different terms: "Death is the price paid for a body" (Arthur Thomson), or "the penalty paid for a body is death." (Mariano Fiallos-Gil).

But why this strange disability on the part of the somatic cells, especially when all the higher animals have their bodies built up out of cells which individually feed and grow and divide exactly as the unicellular organisms do? Does this mean that in some mysterious way a process of senescent degeneration and the concomitant loss of the power of self-fission have come to inhere in the somatic cells, thus forcing them to lose their potential immortality?

Here too, the biological evidences accruing from different fields of research point to a quite contrary conclusion.

First, some of the lowly-organized groups of metazoa such as the sponges, flatworms and coelenterates (polyps, hydras, jelly-fish, etc.) have retained the power of auto-fission leading to the production of new individuals, and thus managed to escape natural death. This agamic, or asexual, process of reproduction has many different forms such as binary fission, multiple fission, fragmentation, budding, etc.

Binary fission involves an equal, or nearly equal, longitudinal or transverse splitting of the body of the parent into two parts, each of which grows to parental size and form. This method of reproduction is sometimes observed as longitudinal section among metazoans like sea anemones and as transverse fission among planarians. *Multiple fission, schizogony, or sporulation* produces from a single parent not two but several new individuals. This is common among the Sporozoa like the malarial parasite. *Fragmentation* is a form of fission (occurring in some metazoans, especially the Platyhelminthes or flatworms, the Nemertinea or ribbon worms, and the Annelida or segmented worms in which the parent worm breaks up into a number of parts, each of

[1] Raymond Pearl, *op. cit.*

which regenerates missing structures to form a whole organism. Certain starfish, like Linckia, offer a striking example of this process, in which single arms of the parent body may pinch off and regenerate an animal complete in all parts. In *budding* the new individual arises from a relatively small mass of cells that initially forms a growth or bud in the parental body. It is found as external budding among sponges, coelenterates, bryozoans, flatworms and tunicates, and as internal budding among freshwater sponges.[1]

Two significant conclusions emerge from the study of these agamic modes of reproduction. Firstly, there is no place here for natural death for the metazoan concerned (especially in the case of binary fission). For in the passage from one generation to the next no corpse or residue is left behind. Secondly, these asexual reproductive processes demontrate the truth of the fact that somatic cells, as well as germ cells, at least in these lowly-organized metazoa, possess the capacity for continued growth and self-multiplication, thus persisting in life for an indefinite duration of time.

This fact of the possession of potential immortality by some somatic cells is also borne out by the remarkable capacity of regeneration or restorative reconstitution exhibited by certain groups of animals. In this process an organism very readily replaces its missing parts lost through some accident or even if seriously injured. Experiments conducted by Wilson and Muller on sponges, by Davidof on ribbon worms, by E. Schultz on fresh-water hydra and by other investigators on some other metazoa have brought to light the highly significant phenomenon that many of the hydroids, annelids, echinoderms and arthropods can replace major portions of their body. In certain instances a small fragment or even a few cells can reconstitute a completely new individual with all its parts intact. Many species of the Amphibia can regenerate a complete limb, a tail, portions of the eye, the lower jaw, and a number of other highly organized structures. What is all the more startling is the fact that, "under certain circumstances, the somatic cells forming the detached portion of the body not only reconstitute a whole organism but can even produce germ cells".[2]

A comparative study of the different species which manifest this remarkable capacity for regeneration makes it abundantly clear that natural death of the somatic cells, as a distinct physiologial phenomenon, has not intervened all on a sudden in the history of biological evolution. As a matter of fact, death too has passed through a process of evolutionary elaboration. With the gradual loss of the aptitude for self-multiplication and restorative reconstruction, the body-cells have become progressively mortal along the scale of organic evolution. The following table shows clearly this intriguing phenomenon of the development of mortality:

[1] This paragraph is based on the very instructive article "Reproduction" contributed by Prof. Albert Tyler to *McGraw-Hill Encyclopedia of Science and Technology*, Vol. 14, pp. 448-49.

[2] S. Metalnikov, *op. cit.*, p. 110.

	Germ Cells	*Body Cells*
I. Unicellulars	immortal	immortal
II. Coelenterates (hydras, etc.)	immortal	Quasi-total regeneration
III. Inferior worms	immortal	High degree of regeneration
IV. Superior worms	immortal	High degree of regeneration
V. Echinoderms	immortal	Limited regeneration
VI. Molluscs	immortal	Feeble regeneration
VII. Insects	immortal	Feeble regeneration
VIII. Vertebrates	immortal	Very feeble regeneration
IX. Higher vertebrakes	immortal	Regenerative capacity lost.

The phenomena we have been studying so far, purporting to show the potential immortality even of somatic cells, are observed only among the lowly-organised organisms. What about the somatic cells constituting the body of complexly organised and highly evolved multicellular organisms including man?

Here too the conclusions arising out of recent biological researches are quite revealing. For a series of experiments on the culture *in vitro* of cells and tissues, starting with those of Haberland and Harrison and culminating in the epoch-making researches of Carrel and Ebeling, has demonstratively shown that senescence and natural death are in no sense necessary concomitants of cellular life. Indeed the consensus of opinion held by the biologists is that all the essential tissue elements of the metazoan body, including the most highly differentiated and specialized in function, such as nerve cells, muscle cells, heart muscle cells, spleen cells, connective tissue cells, epithelial cells from various locations of the body, kidney cells and others, are potentially immortal and can be made to grow indefinitely when placed and cultured outside the body of the organism in some nutrient medium from where the deleterious products of cell metabolism are regularly removed.

A momentous question arises here in connection with the problem of immortality: How is it that a multicellular body falls a prey to natural somatic death although constituent cells are potentialy immortal? Considered from an external point of view the answer lies, according to recent biological findings, in the process of differentiation and specialisation of function of these cells and tissues in the body as a whole so much so that any individual part does not find the conditions necessary for its continued existence. As Prof. Raymond Pearl has remarked, in the metazoan body any part is dependent for the necessaries of its existence upon the *organization of the body as a whole.* "It is the differentiation and specialisation of function of the mutually dependent aggregate of cells and tissues which constitute the metazoan body, that brings about death and *not any inherent or inevitable mortal process in the individual cells themselves.* When cells show characteristic senescent changes it is perhaps because they are reflecting, in their morphology and physiology, a consequence of their mutually dependent association in the body as a whole, and not any necessary regressive process

inherent in themselves."[1] In other words, in the light of present knowledge, we can assert that individual cells never grow old; they are eternally young and potentially immortal, and "the natural death suffered by the somatic cells is by *no means an intrinsic necessity but rather a fortuitous circumstance.* ...As a matter of fact what most characterizes a living organism is its immortality and not its death."[2] (Italics ours)

Thus we come back to the assertion made in the beginning of our essay that the persistent urge of the human race not to accept death as the ineluctable end of man's life and its repeated attempts to conquer it are not such irrational and vain propositions as they might at first sight appear to an uninformed critic. These are rather based upon the subconscious awareness, by the race, of some fundamental truth of embodied life.

(To be continued)

JUGAL KISHORE MUKHERJI

[1] Raymond Pearl, *op. cit.*, p. 112.
[2] S. Metalnikov, *op. cit.*

SRI KRISHNA IN HINDU TRADITION

ACCORDING to Hindu tradition, Sri Krishna was born on 19th (20th) July, 3228 B.C. When he played with the Gopis at Brindavan he was 7 years old. He took part in the Bharata War of 3138 B.C. at the age of 90. His death occurred in his 126th year on 18th February, 3102 B.C. With his passing started the Kaliyuga.

CAN THE EXISTENCE OF GOD BE PROVED?

(Continued from the issue of June)

(This is a discussion between three philosophers: (1) *an Anselmian* (A) *who believes that the existence of God can be rationally and strictly demonstrated;* (2) *a Kantian (K) who holds that all arguments that claim to demonstrate God's existence are fallacious; and (3) a Critical Philosopher (C) who agrees with K, but at the same time holds that the proposition 'God exists' is self-evident to the wise.)*

K. We are meeting for the fifth time to resume our discussion of the same problem, but I believe I am speaking for all of us when I say that we have made a lot of progress and have become much clearer in our minds about the many issues that A's argument has raised.

C. Yes indeed, and apart from the final outcome of the discussion, if any, that in itself is a major again.

A. I confess that our discussion has shown that a great deal more serious and patient brooding on the argument was necessary than I first thought it required. And this alone has made our discussion very much worth-while for me.

K. Last time we were discussing what A called the time-honoured dogma that existence is not a predicate. A wanted to show that it is not applicable to the Divine existence. He said, in 'God exists' existence may and, indeed, should be regarded as a predicative expression provided we don't interpret the proposition to mean either that 'existence' is a defining characteristic of God or that it extends the concept of God in the way in which 'green' extends the concept of grass.

C. A's view was that all true statements about God merely define the essence of God in some deeper sense of the word 'definition'; and this applies also to the statement 'God exists'.

K. But towards the end we were led to discuss the hypothetical proposition 'If God is Love, He is necessarily Love.' A wasn't too comfortable about C's defence of this proposition, but let us not forget that A's purpose in questioning the universal validity of the principle 'Existence is not a predicate' was to answer a criticism by C against his argument to prove the existence of God. Could we go back to this central issue of our discussion?

C. I had criticized A's argument that the concept of God as existing contingently is self-contradictory on the grounds that we cannot have a concept of anything as existing or non-existing, and this, because existence is not a predicate.

K. Now what is A's reply to that?

A. The importance, for my argument, of holding that, in the case of God, existence is

a predicative expression is to show that in the case of God 'existence' can form part of the concept of essence and hence we can have a concept of God as existing, which is not, or not necessarily, an assertion that God exists.

K. What follows from this?

A. I have shown that if God's existence is admitted to be possible it cannot then be denied, for the denial would entail that God, if He exists, exists only contingently, and my point is that the concept of God as existing contingently is self-contradictory.

C. This, of course, depends on the acceptance of the Superiority Principle. I had argued that the Superiority Principle cannot be used without begging the question, *i.e.*, without first assuming that God exists. A said he could counter this objection, but he has yet to do it.

A. I shall counter the objection by showing that we can refer directly to the ontological modal characteristic of God, but I claim that in the above argument I have simply bypassed your objection. That is, I have shown that the Superiority Principle, whether valid or not, can be used without begging the question.

C. Let us see if you have done it successfully. Your argument now is that the concept of God as existing contingently (and this, you say, is a concept, not necessarily an assertion) is inadmissible and hence we can only conceive of God as existing necessarily. Hence God necessarily exists. Is that what you want to say?

A. Yes, that is the sum and substance of my argument.

C. I don't think your argument is now in a better case. You have said that the concept of God as existing contingently is to be rejected because it is self-contradictory; but I think what you mean is that it contradicts the Superiority Principle.

A. Yes, that is so.

C. My objection is against both the Superiority Principle and the alleged concept of God as existing contingently.

A. Your objection against the Superiority Principle is another matter. We can discuss that separately.

C. The two objections are closely related. In fact the last time I conceded too much when I said that I would provisionally grant the propositon that necessary existence is superior existence, only objecting to its being used as a premiss. I now think that the Superiority Principle is unintelligible if it is put forward as something which can be entertained without our committing ourselves to the question whether God exists or not.

A. You must explain why your attitude has hardened and spell it out more clearly.

C. What does it mean to say that that which exists necessarily exists in a superior manner? This can only mean that if concerning something we can logically prove that its non-existence is inconceivable, then we must say it enjoys a superior mode of existence; which means that the principle is, 'that which is shown to exist necessarily must be regarded as existing in a superior manner.' In this form the principle would be of no use to A's argument.

K. This in fact is the same point you made when you said that ontological modality can only be determined or intelligibly referred to through logical modality.

C. Yes, I think that is the basic objection to A's argument.

K. But do you accept A's contention that we can have a concept of God as existing contingently which is a mere concept and not an assertion?

C. No, because A's argument has only shown that *if God exists*, His existence and essence are one. To a theist, therefore, 'God as existing' could be either a concept or an assertion or both. But if the question of God's existence is still open then the concept of God as existing (contingently or necessarily) must be treated as an assertion. Besides, to say that we have a concept of something as existing contingently is really to say that we are thinking of something which we say exists but which is such that its non-existence is conceivable. This is an assertion and here again the ontological modality is determined through the logical modality.

A. It seems then that your whole case against my argument rests on the objection that we cannot directly refer to the ontological modal characteristic of a thing and hence the Superiority Principle on which my argument relies cannot be used as a premiss and further (this is what you now say) cannot even be intelligibly stated without presupposing the existence of God.

C. Yes, but that applies to the first form of your argument. To its second form, where it tries to treat the concept of God as existing contingently as a mere concept, my objection still is that we cannot do so. I would grant what you have said about existence being a predicative expression when applied to God, but not all the implications that you draw from it. I accept the view that if we assert that God exists then 'existence' must be treated as a predicative expression, in which case 'God as existing' could be regarded as either a concept or an assertion or both. In any case there can be no concept of God as existing unless there is implied an assertion that God exists. Your argument tries to pass from the impossibility of the alleged concept of God as existing contingently to the assertion that God exists.

K. But your objection (and, I may say, mine) to the alleged concept of God as existing contingently was on the ground that 'existence' is not a predicate, but A claims to have shown that in the case of God it is.

C. Let me then put it this way: 'existence' can be admitted to be a predicate only as an implication of the assertion 'God exists,' but not if is one is uncommitted, even provisionally, on the question whether God exists.

A. But this won't do. In 'God exists' you admit 'existence' is a predicative expression; but I would go further and say that this implies that in the case of God we must use 'existence' as a predicate or not a all. The concept of God as existing contingently would then be self-contradictory.

C. Yes, I think you are right. I stated my point rather badly. 'Existence', I agree, can never be used as a non-predicative expression in the case of God. I also agree that for this reason the concept of God as existing contingently is self-contradictory. But I wonder if A realizes that his argument now appears in a totally diffe-

rent form. Previously A rejected the concept of God as existing contingently on the grounds that it contradicted the Superiority Principle, and I have shown that this Principle does not help the argument at all. Now A is suggesting that the concept of God as existing contingently is self-contradictory on the quite different grounds that it contradicts the principle that 'existence' in the case of God is necessarily a predicative expression.

A. Yes, I realize there has been a change in my argument.[1] In fact I may describe the change as, in a sense, radical. I had all along thought that my argument required the support of the Superiority Principle. C thinks he has undermined this support altogether by his contention that our reference to the ontological modal characteristic is always oblique. As I said earlier, I believe I can show that this contention is not valid; but now a new situation has arisen. Even if I drop the Superiority Principle I believe I can arrive at the same conclusion by relying on the proposition that 'existence is always to be understood as a predicative expression in the case of God'.

C. I think you will find that there is still one obstacle to the successful termination of your argument. You, no doubt, intend to argue that both God's necessary non-existence and His contingent non-existence can be ruled out; the latter on the ground that it implies the possibility of God's existence only as a contingent fact, and this possibility is self-contradictory. But both K and I hold that the concept God's contingent non-existence need not imply the possibility of God's contingent existence only. It merely implies the possibility of God's existence, and, as an alternative to God's non-existence, God's existence could and, in fact, must be necessary existence. I see no contradiction in saying, 'Either God contingently does not exist or He necessarily exists.' And this leaves open the possibility of God's non-existence, which, therefore, invalidates your argument.

K. Aren't you using the term 'necessary existence' to refer to the ontological modal characteristic of God ?

C. No, no! I repeat: my contention is that if we say that God does not exist but might have existed (*i.e.*, He is contingently non-existent) we do not imply that if He existed we should say of Him that He might not have existed. The assertion of God's non-existence is compatible with our recognizing that if He existed we then could not say of Him that He might not have existed. This refers to logical modality, for it follows logically from A's argument that, in the case of God, 'existence' is a predicative expression. I am grateful to A for pointing this out to me, though unfortunately it does not help his argument!

A. So now your criticism of my argument in the form in which it relies on the principle that in the case of God existence is a predicative expression is that contingent non-existence does not necessarily imply the possibility of contingent existence. And this you can say only if you insist that the proposition, 'If God exists, He necessarily exists' is an intelligible alternative.

C. Yes, that is so. But I confess I am not quite happy about the modal hypothetical,

I think a further strenuous attempt must be made to find out what precisely it means. What, for instance, could be meant by the antecedent clause, 'If God exists...'?

A. According to me it means, 'If a contingent condition on which God's existence depends is fulfilled....' That is why I reject the modal hypothetical proposition as self-contradictory, for it amounts to saying, 'If a *condition* on which God's existence depends, and which can be absent, is, as a matter of fact, present, then God exists *unconditionally*.'

C. If that is the only interpretation then I would certainly agree that the hypothetical proposition is modal nonsense.[2] No one would like to put forward a proposition like,'If X exists following the fulfilment of a condition, then it exists unconditionally.'If I may use A's terminology I would put it thus: 'If God exists, He necessarily exists' means 'In God, if He exists, existence is inseparable from essence.' This way of putting it avoids the suggestion that God's existence depends on a condition which may not be fulfilled.

A. But aren't you saying, in the end, that if God exists, His existence is one with His essence and, therefore, the non-existence of God would be inconceivable? How, if we start with an uncertainty about God's existence, could we ever conclude, without the help of any other premiss, that God's existence is certain?

K. May I raise another difficulty? C had said against me that all necessity is unconditional, but now he himself seems to think that the necessity of God's existence is conditional on the fact that He exists.

C. First let me answer A's objection. I shall come back later to the antecedent clause 'If God exists...', recalling here that it merely expresses a doubt concerning God's existence and does not imply that God's existence is dependent existence. Remember why and on what condition we are led to say that the non-existence of God is inconceivable. We say this on the ground that whatever is atttributed to God is one with God's essence and therefore not conceivably separable from it. I suggest that for convenience we call this the GE Principle, from which follows the proposition that existence in the case of God is a predicative expression. Now I think the GE Principle itself makes it clear that the necessity attributed to the proposition contained in the consequent (*e.g.*, God exists) is conditional on some proposition being true, and more specifically it is dependent on the truth of the very proposition which, in the consequent, is declared to be necessarily true. This, let me make it clear, does not mean that God's existence is dependent existence but that our having the right to say God *necessarily* exists depends on our having the right to say God exists. Hence the GE Principle, when properly understood, not only does not lead to the conclusion that God necessarily exists, but, on the contrary, shows that God's existence must first be presupposed in order that we may say that God necessarily exists. To sum up my position: 'If God exists, He necessarily exists' does not mean that existence *becomes* inseparable from God

when some condition is fulfilled, not even the condition that God exists. This, I think, also answers K's objection.

A. When we say 'If P then Q' we mean 'Q *on condition* that P'. How then can you say that the existence of God is not a condition of His necessary existence?

C. The existence of God is a condition only in the sense that it is the *ratio cognoscendi* of the proposition 'God necessarily exists'. Your objection would be valid if I were to treat it as the *ratio essendi* of God's necessary existence. In itself the relation of inseparability between Divine existence and Divine essence is *unconditional*, but that the Divine essence exists need not, for that reason, be asserted as a necessrary proposition.

A. Can it be asserted conditionally?

C. There is an ambiguity in this question. It cannot be asserted conditionally if this means that God's existence depends on the fulfilment of a condition which may not be fulfilled; but it can be asserted conditionally if this means that we can assert that God exists on condition that we have good grounds for doing so.

A. But look here. If, as you say, there are no unfulfilled conditions on whose fulfilment God's existence depends, then does it not follow that God exists unconditionally in the sense that He necessarily exists?

C. If He exists! I think what is in your mind is that if someone says, 'God does not exist', he must imply that something has prevented God from existing, and since nothing can prevent God from existing (God being, by definition, self-existent) it follows that God exists. This is also Spinoza's argument but it is not valid. It is not self-contradictory to say, 'Nothing can, by definition, either prevent God from existing or be the indispensable, but contingent, condition of His existence, and yet, as a matter of fact, God does not exist.' To say that God exists unconditionally is either a mere tautology, a matter of definition, or, if it is more than that, it is disputable.

A. You have admitted that God cannot be conceived as existing contingently. How then can you talk of attributing 'existence' to God contingently?

C. I have pointed out that we are compelled to regard God's existence as inseparable from essence only on condition that God's existence is first asserted. This assertion which, I have said, is the *ratio cognoscendi* of the necessary proposition has to be arrived at by an *independent argument*. This argument may or may not amount to a demonstration. If it does not, the assertion should be regarded as contingent. If it does, then the argument itself suffices to establish 'God exists' as a necessary proposition and there is no need to appeal to the principle that existence, in the case of God, is a predicative expression. My objection to your argument is that you cannot use this principle to establish the necessary existence of God since its use already presupposes the existence of God.

A. I still think you are not facing up to the difficulty in this modal hypothetical proposition. The antecedent expresses uncertainty about God's existence and the

consequent expresses certainty. How can the attitudes of uncertainty and certainty be combined in the same proposition?

C. What about, 'If God is Love, He is necessarily Love'?

A. That is indeed a difficulty for me. I imagine that, consistently with my position, I would have to say that 'God is Love' and indeed all propositions we make about God and believe to be true are necessary propositions and can be strictly demonstrated.

C. That, I think, is not the point. We do not *assert* 'God is Love.' If there is any possible predicate which is not incompatible with the Divine essence we can say of it, without knowing whether it belongs to God or not, that *if it does*, it does so necessarily.

A. In that case my line of defence could be that we can say, 'If God is Love, He is necessarily Love' because this proposition presupposes the existence of God. My objection would then be confined to the necessary existential proposition asserted conditionally.

C. I don't think that in this respect there is any difference in principle between the existential and the attributive proposition. In both cases the objection would be that we are paradoxically asserting a necessity conditionally. But to return to your objection about the combination of the attitudes of uncertainty and certainty in the same poposition, I would say that there is a contradiction only if the hypothetical proposition implies that if we are uncertain, then we are certain.

A. Yes, but there is, to begin with, an expressed or implied uncertainty which is removed on the fulfilment of a condition. My contention is that an uncertainty concerning something can only be removed by the fulfilment of an epistemic condition and never by the fulfilment of a constitutive condition, *e.g.*, the existence of God.

C. But that is precisely what I pointed out myself. I said that the antecedent clause 'If God exists...' refers to a condition which is the *ratio congnoscendi* that the proposition 'God exists' is necessary and not its *ratio essendi*. The condition that must be fulfilled is therefore what you call an epistemic and not a constitutive condition. I would also like to point out that the uncertainty is removed not merely by the fulfilment of the epistemic condition (*i.e.*, our coming to believe in God) but this, combined with the acceptance of the GE principle.

K. I would like to present another consideration which, I think, supports C's point of view. According to Spinoza, everything follows inevitably from the nature of Substance. This means that whatever happens could not but have happened, *i.e.*, it happens necessarily. Now if we accept this principle of determinism which, whether true or not, is not logically self-contradictory, we would, in referring to future events, be compelled to use the modal hypothetical proposition, *e.g.*, If he comes, he will necessarily come.

C. Yes, that's a good point. In this example also it is clear that the alleged necessity is not dependent on the fulfilment of an objective condition. The proposition

does not mean that his coming is a condition of his necessarily coming, but that if we assert he will come then we must assert he will necessarily come. This proposition also leaves open the possibility that he may not come.

A. How do you get round the fact that when we assert a necessary proposition to be true what we are asserting is itself necessary and not conditional?

C. I don't; but my proposition is not 'If God exists then the necessary proposition "God exists" is true,' but 'If God exists then the proposition "God exists" is necessarily true.'

A. What's the difference?

C. Well, I'am not saying that the necessary proposition 'God exists' is conditionally true, but that the assertion of the proposition 'God exists' is the condition for asserting it as necessarily true; and the authority for this is the GE Principle.

K. I think today C has thrown much more light on the intriguing proposition, 'If God exists, He necessarily exists.' Would I be right in saying, C, that your negative analysis consists in showing that the antecedent clause 'If God exists...' does not imply that God's existence is (a) contingent, (b) dependent on a contingent condition and that (c) the condition laid down is not the *ratio essendi* of God's necessary existence.

C. Yes.

K. But how precisely do you distinguish between (a) and (b)?

C. (b) implies that that which is asserted to exist is dependent on something else. God cannot, by definition, be a dependent being. (a) implies that that which we say exists—and it may be a self-existent or independent being—might not have existed, *i.e.*, it exists contingently. This is only not implied by the antecedent clause. It is ruled out only by the GE Principle.

My positive analysis is that the antecedent clause states an epistemic condition or the *ratio cognoscendi* of our belief that God necessarily exists, and the whole proposition is not in the objective but in the epistemic mode of speech.

K. What is the difference between these two modes of speech?

C. The objective mode refers to what is known, *i.e.*, the objects, events and states, whether physical or mental, while the epistemic mode refers directly to the acts of knowing, *i.e.*, the acts of belief or assertion. The modal proposition means: 'If we believe in God we must necessarily believe in God, *i.e.*, believe that "God exists" is a necessary proposition'; but this still leaves the question of God's existence open. In this connection I would like to point out that the disjunctive proposition 'Either God contingently does not exist or He necessarily exists' can be stated in the hypothetical form in two ways. Either (a) If not (contingently non-existent) then necessarily existent, or (b) If existent then necessarily existent. The antecedent clause of (a) is in the objective mode of speech and it will be seen that, stated in this form, it does not lay down any condition on whose fulfilment God's necessary existence depends. The antecedent clause of (b) does lay down a condition, but it is in the epistemic mode of speech and hence it

does not imply that God's necessary existence is conditional on the fulfilment of any objective or constitutive condition.

K. You further wish to show that the GE Principle cannot be applied to prove that God necessarily exists because, in its application, it presupposes the existence of God!

C. Yes, the Principle is necessarily hypothetical and presupposes the truth of the very proposition which it asserts, in the consequent, to be necessarily true.

K. I am satisfied by your reasoning that A's argument has failed to prove the existence of God. What does A say?

A. I shall have to think about it. In the meantime I could fall back on the Superiority Principle and counter C's argument about the logical priority of the logical over the ontological modality. But I think this would be a good point at which to adjourn our discussion.

(To be continued)

J. N. CHUBB

NOTES

[1] As far as I know, the ontological argument has not been supported by showing (against Kant) that, in the case of God, existence *is* a predicate. I think that this approach developed in this and the previous Dialogue is more fruitful and more difficult to counter than the argument based on the Superiority Principle, which is the Anselmian argument.

[2] This is Hartshorne's view. It will be worthwhile quoting Hartshorne on this point so that the reader may see what precisely the view is against which C is arguing: ' "If God exists, He exists noncontingently" I regard as self-contradictory; for the "if" can only mean that someting which could be lacking is required for the existence, while "noncontingently" means that nothing required for the existence could possibly fail, or have failed to obtain. "If" refers to a condition, but we are speaking of unconditioned existence. Thus "if" and "necessary" do not properly combine in the manner proposed. That a necessary proposition is true is itself necessary.'

BOOKS IN THE BALANCE

Life in Sri Aurobindo Ashram *by Narayan Prasad.* Publishers: Sri Aurobindo Ashram, Pondicherry. Pages: 400. Price: Rs. 15.

IT is heartening to have before us the revised and enlarged edition of Narayan Prasad's *Life in Sri Aurobindo Ashram* whose first edition sold out rather quickly.

Who can afford to remain ignorant of the soul-awakening and power-infusing 'breath of the Spirit' blowing out of the Ashram and ever-widening its circles of divine life, light and love? That Narayan Prasad took upon himself the noble task of putting before the common reader the multifarious aspects of the Ashram's many-sided movements is greatly welcome.

We have here a panoramic view of many informative incidents, processes of the Yoga of Transformation in its various aspects, events of world-importance even in the outward sense. We get light-bursts of Sri Aurobindo's growing work, glimpses of the Mother's untiring and painstaking care of her children, insights into the solid patient preparation of background for silently revolutionary changes that are to usher in a new golden phase of history, the quiet laying down of strong foundations for the great superstructures of the promised divine life of harmony, peace, love and happiness. In fact we have at least a taste of all that we can wish to know of the spirituality in action under the ever-awake Eyes of Sri Aurobindo and the Mother.

Apart from dealing with subjects like activities and services of the Ashram, the Mother's programmes and activities and interviews, celebration of events, discipline, children, divine conquest of money power, industry, trade, Sri Aurobindo's and the Mother's crucial help during World War II, India's Independence, growth of World Culture, we have now a fresh addition of chapters on Yoga in Action in various walks of life, "All Life is Yoga," "Work is Worship", what Surrender is in its many aspects, and last but not least the welcome chapter giving a round-up of all available information on Auroville, the international politics-free city on the basis of harmony, unity and peace, an experimental extension of the Ashram way of life.

The author offers a fascinating account of the life in Sri Aurobindo Ashram in a very easy style. There is everywhere a pleasant touch with a fluent narration that is full of condensed information, never tiring, never meandering, but direct and gripping and to the point.

One is nowhere bored. On the contrary such a kindling of interest is left in the reader's mind that one hungers to know more.

We might even say that what is not in this book may be missed with impunity, so far as the necessary informative aspect of the Ashram is concerned.

The author must be commended for having treasured such a mass of information which in many cases would never have come on record, especially in so connected,

well-knit and wholesome a manner but for his painstaking efforts. The account is satisfying even if a person has not had a chance to come in personal contact with those who are on the deeper path.

The book can be recommended by the many centres of Sri Aurobindo Ashram throughout the world to new seekers and to the general public, as also by the Government of India in answer to enquiries from abroad.

Printing, paper and binding are of good quality, and the cover attractive.

HAR KRISHAN SINGH

Students' Section

THE NEW AGE ASSOCIATION

THIRTEENTH SEMINAR

26TH NOVEMBER 1967

THE NEW OUTLOOK ON EDUCATION

(*Continued from the June issue*)

I

THE passages from Sri Aurobindo's writings read at this Seminar are given below. The first was read by Manoj at the beginning and the next two by Kishor Gandhi at the end of the Seminar.

(1)

There are two kinds of knowledge, that which seeks to understand the apparent phenomenon of existence externally, by an approach from outside, through the intellect,—this is the lower knowledge, the knowledge of the apparent world; secondly, the knowledge which seeks to know the truth of existence from within, in its source and reality, by spiritual realisation. Ordinarily, a sharp distinction is drawn between the two, and it is supposed that when we get to the higher knowledge, the God-knowledge, then the rest, the world-knowledge, becomes of no concern to us: but in reality they are two sides of one seeking. All knowledge is ultimately the knowledge of God, through himself, through Nature, through her works. Mankind has first to seek this knowledge through the external life; for until its mentality is sufficiently developed, spiritual knowledge is not really possible, and in proportion as it is developed, the possibilities of spiritual knowledge become richer and fuller.

Science, art, philosophy, ethics, psychology, the knowledge of man and his past, action itself are means by which we arrive at the knowledge of the workings of God through Nature and through life. At first it is the workings of life and forms of Nature which occupy us, but as we go deeper and deeper and get a completer view and experience, each of these lines brings us face to face with God. Science at its limits, even physical Science, is compelled to perceive in the end the infinite, the universal, the spirit, the divine intelligence and will in the material universe. Still more easily must this be the end with the psychic sciences which deal with the operations of higher and subtler planes and powers of our being and come into contact with the beings and the

phenomena of the worlds behind which are unseen, not sensible by our physical organs, but ascertainable by the subtle mind and senses. Art leads to the same end; the aesthetic human being intensely preoccupied with Nature through aesthetic emotion must in the end arrive at spiritual emotion and perceive not only the infinite life, but the infinite presence within her; preoccupied with beauty in the life of man he must in the end come to see the divine, the universal, the spiritual in humanity. Philosophy dealing with the principles of things must come to perceive the Principle of all these principles and investigate its nature, attributes and essential workings. So ethics must eventually perceive that the law of good which it seeks is the law of God and depends on the being and nature of the Master of the law. Psychology leads from the study of mind and the soul in living beings to the perception of the one soul and one mind in all things and beings. The history and study of man like the history and study of Nature lead towards the perception of the eternal and universal Power and Being whose thought and will work out through the cosmic and human evolution. Action itself forces us into contact with the divine Power which works through, uses, overrules our actions. The intellect begins to perceive and understand, the emotions to feel and desire and revere, the will to turn itself to the service of the Divine without whom Nature and man cannot exist or move and by conscious knowledge of whom alone we can arrive at our highest possibilities.

It is here that Yoga steps in. It begins by using knowledge, emotion and action for the possession of the Divine. For Yoga is the conscious and perfect seeking of union with the Divine towards which all the rest was an ignorant and imperfect moving and seeking. At first, then, Yoga separates itself from the action and method of the lower knowledge. For while this lower knowledge approaches God indirectly from outside and never enters his secret dwelling-place, Yoga calls us within and approaches him directly; while that seeks him through the intellect and becomes conscious of him from behind a veil, Yoga seeks him through realisation, lifts the veil and gets the full vision; where that only feels the presence and the influence, Yoga enters into the presence and fills itself with the influence; where that is only aware of the workings and through them gets some glimpse of the Reality, Yoga identifies our inner being with the Reality and sees from that the workings. Therefore the methods of Yoga are different from the methods of the lower knowledge....

Nevertheless, Yoga does not either in its path or in its attainment exclude and throw away the forms of the lower knowledge, except when it takes the shape of an extreme asceticism or a mysticism altogether intolerant of this other divine mystery of the world-existence. It separates itself from them by the intensity, largeness and height of its objective and the specialisation of its methods to suit its aim; but it not only starts from them, but for a certain part of the way carries them with it and uses them as auxiliaries. Thus it is evident how largely ethical thought and practice,—not so much external as internal conduct,—enter into the preparatory method of Yoga, into its aim at purity. Again the whole method of Yoga is psychological; it might almost be termed the consummate practice of a perfect psychological knowledge. The

data of philosophy are the supports from which it begins in the realisation of God through the principles of his being; only it carries the intelligent understanding which is all philosophy gives, into an intensity which carries it beyond thought into vision and beyond understanding into realisation and possession; what philosophy leaves abstract and remote, it brings into a living nearness and spiritual concreteness. The aesthetic and emotional mind and aesthetic forms are used by Yoga as a support for concentration even in the Yoga of Knowledge and are, sublimated, the whole means of the Yoga of love and delight, as life and action, sublimated, are the whole means of the Yoga of works. Contemplation of God in Nature, contemplation and service of God in man and in the life of man and of the world in its past, present and future, are equally elements of which the Yoga of knowledge can make use to complete the realisation of God in all things. Only, all is directed to the one aim, directed towards God, filled with the idea of the divine, infinite, universal existence so that the outward-going, sensuous, pragmatical preoccupation of the lower knowledge with phenomena and forms is replaced by the one divine preoccupation. After attainment the same character remains. The Yogin continues to know and see God in the finite and be a channel of God-consciousness and God-action in the world; therefore the knowledge of the world and the enlarging and uplifting of all that appertains to life comes within his scope. Only, in all he sees God, sees the supreme reality, and his motive of work is to help mankind towards the knowledge of God and the possession of the supreme reality. He sees God through the data of science, God through the conclusions of philosophy, God through the forms of Beauty and the forms of Good, God in all the activities of life, God in the past of the world and its effects, in the present and its tendencies, in the future and its great progression. Into any or all of these he can bring his illumined vision and his liberated power of the spirit. The lower knowledge has been the step from which he has risen to the higher; the higher illumines for him the lower and makes it part of itself, even if only its lower fringe and most external radiation.

SRI AUROBINDO

(*On Yoga I, The Synthesis of Yoga*, pp. 584-90)

(2)

For all must be done as a sacrifice, all activities must have the One Divine for their object and the heart of their meaning. The Yogin's aim in the sciences that make for knowledge should be to discover and understand the workings of the Divine Consciousness-Puissance in man and creatures and things and forces, her creative significances, her execution of the mysteries, the symbols in which she arranges the manifestation. The Yogin's aim in the practical sciences, whether mental and physical or occult and psychic, should be to enter into the ways of the Divine and his processes, to know the materials and means for the work given to us so that we may use that knowledge for a conscious and faultless expression of the spirit's mastery, joy and self-

fulfilment. The Yogin's aim in the Arts should not be a mere aesthetic, mental or vital gratification, but, seeing the Divine everywhere, worshipping it with a revelation of the meaning of its works, to express that One Divine in gods and men and creatures and objects. The theory that sees an intimate connection between religious aspiration and the truest and greatest Art is in essence right; but we must substitute for the mixed and doubtful religious motive a spiritual aspiration, vision, interpreting experience. For the wider and more comprehensive the seeing, the more it contains in itself the sense of the hidden Divine in humanity and in all things and rises beyond a superficial religiosity into the spiritual life, the more luminous, flexible, deep and powerful will the Art be that springs from the high motive. The Yogin's distinction from other men is this that he lives in a higher and vaster spiritual consciousness; all his work of knowledge of creation must then spring from there: it must not be made in the mind,—for it is a greater truth and vision than mental man's that he has to express or rather that presses to express itself through him and mould his works, not for his personal satisfaction, but for a divine purpose.

SRI AUROBINDO

(*On Yoga I, The Synthesis of Yoga*, pp. 161-62)

(3)

Because man is a mental being, he naturally imagines that mind is the one great leader and actor and creator or the indispensable agent in the universe. But this is an error; even for knowledge mind is not the only or the greatest possible instrument, the one aspirant and discoverer. Mind is a clumsy interlude between Nature's vast and precise subconscient action and the vaster infallible superconscient action of the Godhead.

There is nothing mind can do that cannot be better done in the mind's immobility and thought-free stillness.

When mind is still, then Truth gets her chance to be heard in the purity of the silence.

Truth cannot be attained by the Mind's thought but only by identity and silent vision. Truth lives in the calm wordless Light of the eternal spaces; she does not intervene in the noise and cackle of logical debate.

Thought in the mind can at most be Truth's brilliant and transparent garment; it is not even her body. Look through the robe, not at it and you may see some hint of her form. There can be a thought-body of Truth, but that is the spontaneous supramental Thought and Word that leap fully formed out of the Light, not any difficult mental counterfeit and patchwork. The Supramental Thought is not a means of arriving at Truth, but a way of expressing her; for Truth in the Supermind is self-found or self-existent. It is an arrow from the Light, not a bridge to reach it.

Cease inwardly from thought and word, be motionless within you, look upward into the light and outward into the vast cosmic consciousness that is around you. Be

more and more one with the brightness and the vastness. Then will Truth dawn on you from above and flow in you from all around you.

But only if the mind is no less intense in its purity than its silence. For in an impure mind the silence will soon fill with misleading lights and false voices, the echo or sublimation of its own vain conceits and opinions or the response to its secret pride, vanity, ambition, lust, greed or desire. The Titans and the Demons will speak to it more readily than the divine Voices.

Silence is indispensable, but also there is needed wideness. If the mind is not silent, it cannot receive the lights and voices of the supernal Truth or receiving mixes with them its own flickering tongues and blind pretentious babble. Active, arrogant, noisy it distorts and disfigures what it receives. If it is not wide, it cannot house the effective power and creative force of the Truth. Some light may play there but it becomes narrow, confined and sterile: the Force that is descending is cabined and thwarted and withdraws again to its vast heights from this rebellious foreign plane. Or even if something comes down and remains it is a pearl in the mire; for no change takes place in the nature or else there is formed only a thin intensity that points narrowly upward to the summits, but can hold little and diffuse less upon the world around it.

SRI AUROBINDO

(*The Hour of God*, pp. 64-6)

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At the conclusion of the Seminar, Kishor Gandhi, on behalf of the Association, thanked all who had come to attend the Seminar and also those who had participated in it.

Compiled by KISHOR GANDHI

EYE EDUCATION

PAIN IN THE EYES AND PAIN IN THE HEAD

A REPORT

It happened frequently that I broke the glasses of my father when I was young. I was always scolded and punished. But one thing I used to ask my father, "Could you not do without glasses ?" and my father always replied, "No." But how could my young mind be satisfied with my father's answer? My curiosity grew. I tried to get a satisfactory answer many times but in vain.

I grew older and wiser and I was very strong in mathematics. I was fifteen, hale and hearty, and continued to study hard. But a time came when I could not study, my eyes were strained and I never knew the cause. I realised that the eyes were getting weak. I went to the doctor and he treated me with eye-drops for a few days and I became all right. But the state of comfort could not continue long and the strain in the eyes grew worse. This time I went to Madras and a famous optician prescribed a pair of glasses and said, "Your eyes are in such a state that you must wear glasses if you want to progress well." I gave the least importance to his advice. His instruction revived my past memory and I repeatedly asked myself, "Could I not do without glasses?" I grumbled, "Oh, I am only sixteen and now I have to wear glasses! No, I shall not." And from that day I started hating them. But this did not solve my problem. I suffered a lot.

Many months passed. I studied with pain in the eyes and pain in the head. I grew weaker in mathematics and lost my health, many worries cropped up in my mind. The condition of my mind and eyes became worse and worse. There was unbearable headache and I could not concentrate on my studies at home or school. I could not play either. I had lost my peace of mind. I observed that the pain increased while reading, specially when I was solving the problems of Geometry. It was at this time that I first learnt about Dr. Agarwal. I prayed to the Divine Mother for Her blessings and I got them. Next day at 8 o' clock I went to Dr. Agarwal's Eye Clinic. The doctor gave me a warm welcome. He asked some questions about my trouble and tested my eyesight on the Snellen test card and examined the eyes in the dark room. I observed more the Doctor's great interest in each patient than the process of testing the eyes. He gave me a few eye-exercises to do for three days only. To my great surprise the pain in my eyes was chased away and I was relieved from headache.

Now I know why there was pain in my eyes. I used to read under high-power electric light, so after a short time the glare reflected from the paper used to cause pain in the eyes and head. I realised how soothing and helpful it was to read by candle-light.

The second thing which the Doctor advised me was not to stare at a thing. Formerly I used to stare at my Geometry figures constantly. I always thought that thus I was improving the power of concentration but it was not true. One should always blink gently every couple of seconds while studying or walking or doing anything else. In the beginning one has to do it consciously and wait until it becomes an unconscious habit. Thirdly, one should always be careful of the distance of the book from the eyes. One of my science-teachers told me to keep the book at about eighteen inches from the eyes but Dr. Agarwal instructed me to hold the book within twelve inches and he explained that the teacher must be over forty and so for him the greater distance suited.

Lastly the Doctor opened my eyes to an important point. We all think that we should always read big print and that our eyes will never be spoiled by it. But it is a wrong notion. We must read small print. It is soothing and extremely useful for the eyes. We must blink twice while we read each line. It will relax not only the eyes but also the mind. These little truths were disclosed to me by Dr. Agarwal and now I have a great pleasure in exercising the eyes after five minutes' "palming". Palming refreshes the mind too.

After the third day, I was in a state of serenity and the idea flashed into my mind to share my experience with others through *Mother India*. And now I have convinced my father that one can do without glasses if one knows the right use of the eyes.

May, 1968 INDRA ARYA

SRI AUROBINDO INTERNATIONAL CENTRE OF EDUCATION
DEPARTMENT OF INFORMATION AND RESEARCH

NEWSLETTER

No. 7 JULY 1968

1. *Central Schools' Visit*

Last month we enjoyed an educational experience which is unfortunately all too rare. It was a ten-day visit to our Centre of Education of twelve selected principals of The Central Schools headed by Dr. Newathe. They came with the object of studying, in detail, the methods employed here in our system of education, with the object of carrying something fresh and of educational value to the schools under their charge. On their arrival the principals soon organized themselves into teams of two, each pair taking a particular aspect of the work to be studied and working with concentrated attention on that aspect throughout the day and meeting together in the evening to compare, collate and evaluate their findings, the results of which were made into draft reports compiled by each team. The framework of the studies was exact and formal but the atmosphere and climate of working was delightfully informal. Each team was assigned a guide for the detailed study, a professor or head of a department. These gave themselves wholeheartedly to the work with the result that the work predominated over personalities and a harmonious exchange of experience ensued. It was an especially rewarding experience for our professors to come into conference with professors from various parts of India, all men with a wide and deep knowledge of their subjects, who all had that precious gift of the ideal educator: *'the eternal will to learn.'*

Educators in responsible positions, especially headmasters and principals, should be given frequent opportunity to visit other institutions of learning for many obvious and excellent reasons. For instance, it is very obvious that they should have at first hand an overall picture of how schools and institutions are functioning other than their own. To see how others deal with similar problems is also obviously stimulating, whether it be how not to do it or how best to do it.

The mere fact of similar minds coming together to discuss their problems in a climate of seeking and discovery is in itself an excellent proposition which can only lead to a richness of outlook rather than the hardening of ideas so prevalent in the Victorian age of academic pedantry.

Man never was 'an island unto himself'—even in the time of John Donne—today he is even less so. As his consciousness rises and widens he cannot but communicate that consciousness to the world, to mankind at large. In this ever expanding universe which is man's evolutionary growth towards perfection education has to be restated, its needs and aspirations reassessed. We can no longer confine ourselves

to the cloistered abbeys of learning or the hallowed halls of pedagogy. We are forced to share our learning with a wider congress of seekers because more are seeking and more and more are impatient with ignorance. Not the ignorance of facts but the ignorance of knowledge in depth, the fundamentals of truth and the forces which govern the reality behind the appearances.

Man was meant to evolve beyond the thinking status, to which he claims estate, to an ideal of human unity which would embrace the world. If he is to be true to this ideal, if he is to be faithful to the truth of his nature as a human being, his *swabhāva* and his *swadharma*, then his powers of communication must be commensurate with the ideal.

The Central Schools have realized this truth with vision for the future. The Central Schools are fast growing into the backbone or central structure of a system of national education; the urgent need and importance of which should be obvious to anyone who has the country's ultimate welfare at heart. A nation can be built into a significant world factor only so long as its individuals grow into significant human beings. And those human beings must have the freedom to grow unhampered by the pettyfogging bureaucratic expediencies of government control intent on maintaining a *status quo* in keeping with the outmoded tenets of a learning practice good enough for many of our present day politicians. Central Schools can be the beginning of a new era in education. They have all the past precedents of mistakes to observe made by the Grammar Schools of England, the Lycée and Ecole Normal of France, the Gymnasiums of Germany and the High Schools of America. They can initiate the successes of all the experiments made in modern education—even to the planning for a computerised society and the cybernetic age into which we are fast moving.

Their structure should certainly remain extremely fluid and plastic in order to accommodate the quickly changing needs of the modern society which it is their function to create. A human society of the future can only have any true measure of success if it is built upon the sure foundation of a national system of education which includes all the ideals of a pre-natal education; the organised discipline of a physical education; the free expression of all aspects of a vital education; the highest and widest concepts of a mental education and the ultimate fulfilment of a spiritual education.

Sri Aurobindo tells us that the true basis of education is the study of the human mind, infant, adolescent and adult. Any system of education founded on theories of academic perfection, which ignores the instrument of study, is more likely to hamper and impair intellectual growth than to produce a perfect and perfectly equipped mind.[1] We as educationists have to deal with a living soul, an infinitely sensitive organism. To meet its requirements and deal with it adequately we ourselves have to be aware of the sensitivity of our own being and its higher reaches of consciousness in relation to the growing, blossoming, expanding *consciousness of the child.*

[1] A System of National Education, p. 1.

Education has to be completely reoriented to a changing world and it is extremely difficult to see who is going to take the enormous responsibility for implementing this urgent revolutionary change from the already dead methods of our grandfathers to the ultra sensitive integration of the vast amount of knowledge required of the student and scholar of today.

We have come to the position where a synthesis of knowledge is imperative. As an association of ideas was recognized as an aid to memory so a synthesis of allied subjects has become necessary to the organisation of the overall complexity which is the total 'ensemble' of present day life in an expanding consciousness. So an integrality of learning has become imperative. Man may reach the stars with scientific and technological know-how but higher levels of consciousness and his soul will have to tell him what to do when he gets there.

2. *Thought of the Month*

He who in the growths of earth holds up his greatness, both the progeny born and what is in the mothers, he is knowledge in the house of the Waters, and life universal; the thinkers have measured and constructed him like a mansion.

SRI AUROBINDO: *Hymns to the Mystic Fire* p. 148

NORMAN C. DOWSETT

SWEET LIFE OF MYSTERY

(No 1)

How many men who, having wed,
Have not within themselves thus said,
"Who would think that one dear wife
Could make a world of trouble and strife!"
Don't they know that Socrates
Never felt he lived at ease?—
While that poor man called Abelard
And the dear 'Immortal Bard'
Always blamed their female mate,
When their tempers were irate!
Yet round they go with mournful plea,
"When will she understand poor me?
Perhaps I should have changed my mind
And married quite a different kind,
Who would have been my consolation,
Accepted any situation!"
Will they never realise
That this is but a mere surmise
And just the same would be their fate,
Whomever they chose for married state,
Or picked the object for their nest,
From North or South or East or West?
Dear men, it's time you learned this rule,
In yearning for your 'Ultima Thule.'
Not *Srimati* and not *Sri*, BUT
A Transformation to 'SRIMAT',[1]
OM TAT SAT.

LEENA

[1] Celestial state of neuter gender.