SAINT MANIKKAVASAGAR'S

VERSES OF WISDOM

→ A BIO COSMIC WORLDVIEW --

K.RAVI, M.A., M.Phil., B.L., Advocate, Madras

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ANAND JOTHI

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Invocation

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How can I falter when You are my light? Will I ever fumble when You speak through me? Not by chance I am Your instrument But by Your grace, the Holy Crescent Spread the rays of the Divine Message Unfolding here page by page.

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THE ONE

WHO

INSPIRED, ENCOURAGED AND ENABLED ME TO WRITE THIS BOOK

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I thank my learned professor, Dr. T.N. GANAPATHY, who has not only embellished this book with his scholarly foreward, but also enriched it with his valuable suggestions.

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K. RAVI

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THE SCHEME OF TRANSLITERATION

(Transcription marks for Sanskrit and Tamil terms, which occur in this book).

VOWELS

- a 'u' in 'sun'.
- ā 'a' in 'car'.
- i 'i' in 'sit'.
- ī 'ee' in 'see'.
- u 'u' in 'put'.
- ū 'oo' in 'cool'.
- e 'e' in 'envy'.
- ē 'a' in 'make'.
- ai 'ie' in 'pie'.
- ō 'o' in 'possess'.
- o 'o' in 'pose'.

CONSONANTS

- k 'c' in 'colour'.
- g 'g' in 'gun'.
- c 'ch' in 'challenge'.
- j 'j' in 'jar' (Except when j is followed by ñ).
- ț 't' in 'towel'.
- th 't' suceeded by the sound of 'HA'.
- ď 'd' in 'diagram'.
- dh 'd' suceeded by the sound of 'HA'.
- t 'th' in 'thunder'.

th	't' suceeded by the sound of 'HA'.
d	'th' in 'mother'.
dh	'd' suceeded by the sound of 'HA'.
р	ʻp' in ʻpump'.
ph	'p' suceeded by the sound of 'HA'.
b	'b' in 'bus'.
bh	'b' suceeded by the sound of 'HA'.
у	'you' in 'young'.
r	ʻr' in run.
1	'l' in 'luck'.
Т	1' pronounced with the tip of the tongue touching the middle of the palate.
Ι	peculiar to Tamil language, sounding approximately like the rolled 'r' pronounced by Americans.
v	'v' in 'clever'.
S	's' in 'some'.
s	'sh' in 'shunt'.
S	peculiar to Sanskrit, being a lighter version of 's'.
h	'h' in 'hut'.
r	peculiar to Sanskrit, sounding approximately like 'ry' in 'rythm'.
n	'n' in 'pin'.
n	a stronger 'n' pronounced with the tongue touching the middle of the palate, somewhat like 'n' in 'shunt'.
n	ʻing' in ʻginger'.
ñ	ʻing' in ʻsing'.
jñ	a compound syllable which sounds as if the word 'young' is pronounced topsy turvy, the second syllable 'ng' first and the first syllable 'you' second.

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FOREWORD

With great pleasure I write this foreword to K. Ravi's book, "Saint Manikkavasagar's Verses of Wisdom: A Bio-cosmic Worldview". The fact that Ravi is my old student in his B.A., M.A., and M.Phil., courses in Philosophy at the Ramakrishna Mission Vivekananda College, Chennai and that he has rendered a translation and interpretation of the above work in a brilliant way make me to alter some words of the couplet of Tirukkural in the following way:

ஈன்ற பொழுதிற் பெரிதுவக்கும் தன் மாணவனைச் சான்றோன் எனக்கேட்ட ஆசிரியன்.

Regarding the work (the twelve verses of "jñàna Thalisai") there is controversy among certain scholars about the authorship. There is a strong opinion that the Mànikkavàsagar of Tiruvàsagam is different from the author of this work, since the style and the form of the language are different in the two works. Not only that, the views expressed here in this work are more attuned to the thoughts of the Tamil Siddhas will make the traditional Saivaites to deny the view that the "two" Mànikkavàsagars are "one and the same". Ravi has solved this problem by stating that the twelfth verse discloses the identity of the sage as the one who had earlier lived as Mànikkavasagar. To quote:

...குடியாகிய பதிகண்டவர் அருள்வாதவூ ராரே ஒருவாசக திருவாசகம் புவிமீதில் மகிழ்ந்தே உரைசெய்தனர் தமிழ்த்தாழிசை நெறியின்படி நின்றோர்...

In a unique way he dissolves the problem by stating that the earlier work had been rendered when the sage was in his gross body and the present work when he is in his subtle body, and in all probability "by inspiring another living person who had attuned himself to a certain spiritual frequency; in other words, these verses would have been brought out by the sage through the mediumship of another person". This is a "scientific interpretation" in that this view does not go against the recent modern ideas of the soul and its different Sariras and the doctrines of the science of *yoga*. The fact that Ravi has included this discussion at the end of his work shows that he is not interested in the controversy over the authorship, since the message is more important than who said it.

The translation of the poems is not a literal one but a free translation bringing out the inner sense of the work and the spiritual experiences of the saint. The spirit of the poet is "caught" in the translation though the "literal flesh" os word-by-word translation is judiciously avoided. The translation intuits the poet's vision.

The prologue and the epilogue, with eleven chapters in between, take the reader step by step to understand the spiritual experiences of the saint. The development of the ideas gradually unfolds itself before the reader's eyes, just as the blossoming of the lotus flower. The chapters do not contain any pre-formed conclusions or theories. They are written very systematically using the processes of both description and explanation. Ravi himself states "The approach is scientific, but the point of view is philosophical" (Prologue). This work of Ravi is a scientific and logical approach to the Siddha theory of the yoga of Pranayama. His explanations of desire in chapter 3, and the perceptual process in the same chapter are illuminating. The theory of perception according to the Western philosophers is explained very well, though briefly and succinctly, in the footnote No.9. The work contains many profound statements, which are very appealing and instructive, one example of which is about tautologies being useful. The concept of space as construed by the author of the poem is well brought out in chapter 11. It is the Tamil Siddha conception of "Vettavel'i" translated by Ravi as non-phenomenal sky or inner space. Chapter five delightfully takes the reader to understand the doctrine of Sùksma Sarira, in a scientific way.

Using scientific concepts, the author discusses 174the gross body organized by the subtle body (Chapter 6). The explanation of Akasa Viddhai is illuminating. The interpretation given to the "twice-born" is a corrective check to the biased idea of it among the members of the public. The expression, "transcendental immanence" in understanding the God-principle speaks volume about the "intuitive understanding" of Ravi.

The author, in his eleven chapters of explanation, has used Immanuel Kant's transcendental method and his basic concepts of sensation and perception, Karl Popper's theory of falsification and Einstein's E = MC² n clarifying certain philosophical concepts thereby revealing his indepth knowledge of the scientific and philosophical theories of the West. The translation and explanation of this work endorses the view of T.S. Eliot: "Every generation must translate for itself".

The "Notes" at the end "surpasses" the details given in the main work and are very instructive and useful. The work contains an index (which is invariably missing in most of the works by the Indian authors), a well-organised bibliography and a glossary of terms.

Ravi's work is commendable for many reasons. It uses "intuition" in understanding the basic ideas in the work. The heritage of the Tamil Siddhas is wellmaintained in a suggestive way in the interpretation of concepts and explanation of the verses. The presentation of the ideas, without using much of the philosophical jargon, in simple but effective English, is scholarly. Such books are welcome in the field of philosophy and the public is indebted to Ravi for this spiritual, intuitive venture. May the tribe of such scholars and such books increase!

> Dr. T. N. Ganapathy Director Tamil Yoga Siddha Research Project

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VERSE No. 1 [Tamil Original]

சுழியாகிய முனைகண்டபின் உற்றார்உற வற்றாய் சூதும்பல பொய்பேசிய தொழிலும் பிறர்க் கிட்டாய் வழியாகிய துறைகண்டபின் அனுட்டானுமும் அற்றாய் வழங்கும்பல நூல்கற்றிடு நினைவும்பிறர்க் கிட்டாய் விழியாகிய மலர்கண்டபின் உயர்அர்ச்சனை அற்றாய் மெய்ந்நீரிடு திருமந்திரம் விட்டாய்சிவம் உற்றாய் அழியாப்பதி குடியேறினை அச்சம்பல அற்றாய் யாரொப்பவர் நிலையுற்றவர் அலைவற்றிரு மனமே

VERSE NO. 1 (English Rendering)

The tip of the spiral field, on reaching that summit You discarded all relations, trickery and untruth In that safe harbour you discarded rituals

And also the dependence on knowledge from shelves

No more offerings after the third eye had blossomed No symbols, no chanting, one with the absolute You stepped into the station that's intransitory Fearless and matchless be vibration-free.

VERSE NO. 2 (Tamil)

நெஞ்சிற்பொருள் அடிகண்டபின் நெஞ்சில்பகை அற்றாய் நேசத்தொடு பார்மங்கையர் மேலும்நினை வற்றாய் மிஞ்சிச்சொலும் உரையாண்மையும் வீம்பும்இடும் பற்றாய் விரதங்களும் வேதங்களும் வீணாக மறந்தாய் அஞ்சும்உட லாய்க்கண்டபின் ஆசைத்தொடர் பற்றாய் ஆறாம்*திருக் கோயில்சிவம் அதுவும்தனில் உற்றாய் தஞ்சம்எனும் ஞானக்கடல் மூழ்கும்திற மாகித் தாள்சேர்ந்தனை குறைவேதினி சலியாதிரு மனமே

* In available printed versions¹ of these verses, this phrase is given as "ஆரும்திருக் கோயில்". I have taken the liberty of correcting it as it occurred to me in what I believe to be a moment of inspiration. The corrected form, indicating the SIXTH is not only contextually meaningful, but also more appropriate in juxtaposition with the word FIVE in the previous line. Such corrected readings are justified by what is said at page 123-124 below about the authorship of this work.

VERSE NO. 2 (English)

On realising the substratum, inside your heart You got rid of animosity, affection and lust Vanished are the vices of the argumentative mind And observance of scriptural injunctions blind On seeing the body as a blend of five elements The desire-link is cut off and in the sixth of the shrines You crossed the ocean and reached the shore Rest content, you need nothing any more

VERSE NO. 3 (Tamil)

நாசிநுனி நடுவேதிருக் கூத்தாகிய நடனம் ஞானக்கண் ணால்அதனை நாடிச்செயல் கண்டு சீசீயெனும் உரையற்றனை சினமற்றனை உயிர்கள் செய்யும்அந் நினைவற்றனை நேசத்துடன் கூடிக் கூசிக்குல வரவற்றனை கோளற்றனை பாவக் குடியற்றனை நலமுற்றனை குடியேறினை மேலாம் காசிப்புனல் தனில்மூழ்கினை கயைறினை காட்சி கண்டாய்அரன் கொலுவாகிய சபைமேவினை மனமே

VERSE NO. 3 (English)

Between the eyebrows a cosmic dance You saw this process inwardly in trance No scorn, fury or soul-making thought Passionate return you invited not Touched not by planets or sin you stood Steadfast in that which is the highest good You dived into wisdom and reached the shore Entered the palace, the divine abode

VERSE NO. 4 (Tamil)

வெளிபெற்றிடு சொருபப்பொருள் வெளியாகிய ஒளியில் விளையாகிய நாதத்தொனி விந்தின்செயல் கண்டு களிபெற்றனை தயவுற்றனை பிறவிக்கடல் என்னும் களையற்றனை உலகத்தினில் வரவற்றனை காணா ஒளிபெற்றனை மயலற்றனை ஒழிவற்றனை ஒதும் உரையற்றனை களிபெற்றனை பசியற்றனை ஊறல் குளிபெற்றனை அரன்உற்றிடு கொலுவுற்றனை கோமான் கொடைபெற்றனை அறிவுற்றனை கோளற்றனை மனமே

VERSE NO. 4 (English)

Prana reached the inner sky that's made of light The sprouting of vibrating seeds unfolded in its sight Bliss, benevolence, birthlessness; you attained the three From the dependence on worldly things you became free Discovered the unseen light that dispelled all darkness Without speech and hunger but filled with eternal bliss Nectar and godhood as gifts divine you gained Wisdom and release from the planetary chain you attained

VERSE NO. 5 (Tamil)

பத்தோடிரு கலையாகிய பனிரண்டினில் நாலும் பாழ்போகிட மீண்டேவரும் பதியின்கலை நாலும் பெற்றோடிவந் திங்கேறிய பேர்மைந்தனைக் கண்டு பேசும்நிலை யோடும்உற வாகிப்பிணக் கற்றாய் கற்றோருடன் கற்றோமெனும் வித்தாரமும் அற்றாய் கானற்புனல் லோகப்பிடி மானத்தையும் அற்றாய் சித்தோடிரு சித்தாகிய சிற்றம்பலம் மீதே சேர்ந்தாய்குறை தீர்ந்தாய்இனி வாழ்வாயிரு மனமே

VERSE NO. 5 (English)

Ascending the twelve steps, transcending the four Entered the space and returned with the four Earned in the space, and the nominal mind Ascended again to speak with its kind Without dissension or gymnastic pride Not clinging to the world of the cosmic mirage With consciousness be in that conscious space Nothing to seek, you live in that stage

VERSE NO. 6 (Tamil)

அல்லற்படும் ஒர்ஒன்பது வாசல்பெரு வாசல் ஆரும்அறி வார்கள்அறி யார்கள்ஒரு வாசல் சொல்லப்படு தில்லைச்சிறு வாசற்படி மீதே சூழும்பல கரணாதிகள் வாழும்மணி வாசல் தில்லைப்பதி யருகேஅடை யாளம்என லாகும் சேருங்கனி காணும்பசி தீரும்பறந் தோடும் சொல்லப்படும் அல்லல்பல நூல்கற்றத னாலே சின்னஞ்சிறு வாசல்புக லாமோசொலு மனமே

VERSE NO. 6 (English)

Nine are the gateways to expend one's strength Everyone knows them but not the tenth It leads to the chamber impressed with codes, Organic seeds of sensational modes To merge and not mere longing to see That is the goal where sufferings would flee Nothing you gain from knowledge of books It will not take you into that chamber of bliss

VERSE NO. 7 (Tamil)

விண்டும்ஒரு வா்க்கும்உரை யாடப்பொருள் தானும் பீஜாட்சர வீதித்தெருக் கோடிமுடிந் திடத்தே கண்டும்இருந் தாா்க்குள்இரு பாிபன்னிரு காலால் காணும்அது தானும்பனி ரெண்டங்குலம் பாயும் பிண்டம்புகும் அண்டம்புகும் எங்கும்விளை யாடிப் பீடமெனும் நிலைசோ்ந்திடு பெருமைதனைக் காண்பாய் என்றும்மொழி அற்றாா்பரத் தோடும்உற வாகி ஏதும்உரை யாமல்இருப் பாா்கள்அறி மனமே

VERSE NO. 7 (English)

The one who gets dispersed in speech Even after seeing the ultimate reach Of the path of the ceaseless syllabic seeds Alights the two horses in him and speeds Through the twelve steps, enters the cosmic Micro and macro, and becomes ecstatic Those who're stationed in the transcendental plane Silent and speechless they'd ever remain

VERSE NO. 8 (Tamil)

முப்பாழ்கடந் தப்பால்ஒரு முகப்புண்டதில் நடுவே முச்சந்திகள் கூடும்அது தானும்முதல் பாழாம் அப்பாழ்கடந் தப்பால்ஒரு கணவாய்அதன் பெருமை அருகுநுனி இடமுமென அறிவாா்பெரி யோா்கள் செப்பாதது தானும்அறிந் தப்பால்கடந் திட்டால் சேரும்கலை நாலும்வரு திசையும்அறிந் திட்டால் ஒப்பாா்*இனி இப்பாாினில் ஒப்பாருமே இல்லை ஒன்றைப்பிடி தன்மைப்படும் எண்ணப்படும் மனமே

* The Tamil word output has two meanings: Nonacceptance and match. Since the same word is used twice in the same line, the two occurrences must differ in their meanings. The English translation preserves this feature.

VERSE NO. 8 (English)

Beyond the three spaces there is an arch Converge the three paths inside the arch In the first of the spaces, beyond that There is a subtle and minute inlet If you pass through that into speechlessness, Receive the four and reckon their sources You'll reject this world and be matchless Inextricable and firm in the state of oneness

VERSE NO. 9 (Tamil)

நாதம்எழுந் தெழுந்தோடிவந் துறையும்திருக் கூத்து ஞானக்கண் ணாலுமதை நாடிச்செயல் கண்டு பூதம்எனும் பயம்அற்றனை பொறியற்றனை மெய்யில் பூசும்பரி மளம்அற்றனை பூஅற்றனை லோகம் சூதம்என வரவற்றனை சுசிஅற்றனை எச்சில் சுத்தம்செயும் நினைவற்றனை சுவையற்றனை ஞானப் பாதம்முடி மேல்வைத்தனை பற்றற்றனை உற்று* பதிபெற்றனை இகல்அற்றனை பதையாதிரு மனமே

^{*} The word <code>உற்ற</code> is not appropriate, grammatically or syntactically. <code>உற்ற</code> might be a better reading. Since I did not get an intuitive confirmation on this, I have given it as it is found in the available printed versions.

VERSE NO. 9 (English)

The surge of Prana, the up-rise, the dance You saw this also inwardly in trance Fearless of elements and sans sense organs Not seeking a flower or e'en fragrance Not returning to this treacherous world Tasteless and thoughtless of cleansing the throat Set the wisdom-foot upon the ultimate summit No clinging, no conflict, you got stationed in it

VERSE NO. 10 (Tamil)

ஆயும்பல நூல்சாத்திர வேதத்தொடு புராணம் ஆய்வந்திடு வழிகண்டறி யார்கள்அது தானும் பாயும்கலை பனிரெண்டினில் உண்டாகிய பருவம் பாரும்அறி யாதுபனி ரெண்டின்செயல் கண்டு நாயின்கடை கெட்டாய்வழி பாடும்முதல் பெற்றாய் நாள்கோள்பவம் அற்றாய்கொலை களவென்றதும் அற்றாய் வாயும்வல தற்றாய்உயிர் வீடும்நெறி அற்றாய் மண்ணின்வர வற்றாய்இனி பொன்னம்பலம் மனமே

VERSE NO. 10 (English)

Even after reading the scriptures revealed They don't see the path that is shown indeed The metamorphosis while ascending the twelve Is not known but upon seeing the twelve Realised the path of the divine worship Non-temporal, non-ethical, no relationship With breath thus discarding the death-principle Return not to this world from the Golden Temple

VERSE NO. 11 (Tamil)

கலையாகிய பிறவிக்கடல் அலையாமல் உழன்றேன் கற்கும்பல சமயங்களும் தா்க்கங்களும் விட்டேன் நிலையாதெனப் பொருள்செல்வமும் நினைவும்பிறா்க் – கிட்டேன் நித்தம்செயும் நியமங்களும் நேமங்களும் அற்றேன் தொலையாத உறக்கத்தொடு சுகதுக்கமும் அற்றேன் துணையாகிய ஞானக்கடல் மூழ்கும்துறை கண்டேன் அலையாமல் இருக்கும்மனம் அதிலேகுடி கொண்டேன் ஆனந்தம் வெளிப்பட்டபின் நானென்றறி யேனே

VERSE NO. 11 (English)

The dual path that leads to death and birth, I discarded Conditioning religions and logic I transcended I relinquished wealth and thoughts that seldom stay I discarded rituals and the routine of the day Liberated from sleep, joy and distress To plunge into wisdom I discovered the steps I stepped into stillness and took abode there Bliss became the space without identity-smear

VERSE NO. 12 (Tamil)

உருவானது விந்தின்பெயா் குருவானது ஞானம் உடலுக்குயிா் ஈராறதில் ஒருநான்கனுள் முதலும் குருவானது முனைமீதினில் அணுவாகிய வெளியில் குடியாகிய பதிகண்டவா் அருள்வாதவூ ராரே ஒருவாசக திருவாசகம் புவிமீதில் மகிழ்ந்தே உரைசெய்தனா் தமிழ்த்தாழிசை நெறியின்படி நின்றோா் கருவாசலில் அணுகாமலே பிறவாநெறி பெறுவாா் கடவுட்செயல் அறியாதவா் கருவாசலில் புகுவாா்

VERSE NO. 12 (English)

Existence is phenomenal, wisdom guru [Life]Principles are twelve, the first four the clue In the summit inside the unmanifest space The one who got stationed was Manikkavasagar Sage He gave Tiruvasagam when he lived on this earth And later these twelve verses; from the cycle of birth Those who live by these verses are freed Not those ignorant of Almighty's deed.

PROLOGUE

In obedience to his command, the twelve Tamil verses, the collection of which is known as "Jñànàth Thàlisai", handed down by the sage Manikkavâsagar, (also known as Manivasagar), are presented here in English.

Certain mystic terms and phrases in Tamil verses have been so translated that their mysticism is retained and at the same time identity of their potential meanings is not lost.

In the English form, the verses given here may not have the metrical charm² and the perfect in-built rhythm found in the original Tamil verses. However I believe that no injustice has been done to the original verses, since every verse in English surfaced in the calm and tranquility that followed sessions of deep and sincere meditation, that too, in the immediate presence of the Master who not only persuaded me, but also prepared and enabled me to write this. The English translation provided the vital clues in deciphering the deep meaning of the Tamil verses.

This work was commenced and completed in the year 1990 itself. The intuitive persuasion to publish this came only recently. No substantial revision has now been made in the text, except by way of making a few formal corrections and adding footnotes.

What follows is not an exposition of a religious dogma. It explains that which hitherto had been relegated to the realm of dogma. The approach is scientific, but the point of view is philosophical.

If the term "vàsagar" is taken to be of Sanskrit origin, then its pronunciation should be "vàcakar". However, since for several centuries this has been a Tamil name, it is written here as it is pronounced in Tamil.

CHAPTER - 1

The opening words of the very first verse are indicative of the main thesis. In Tamil, they read:

"Suliàgia munai"

"Suli" means spiral; "Munai" means the tip.

Therefore the opening words mean: "the tip of the spiral (field)".

This clinching phrase leads us straight into the core of the thesis presented in this work.

The basic question that has baffled many philosophers and scientists is this: What is the essential difference between a living being and a non-living substance? Many answers have been suggested³. The simplest of them seems to be the nearest to the truth. In every living being, a respiratory process is functional. This cannot be said of non-living things. This is an obvious difference between living beings on the one hand and non-living things, on the other. It is always better to start an enquiry from obvious facts. A deeper study of the respiratory process may suggest an appropriate answer to our question.

It is a verifiable fact that in every human being, except during certain short intermittent periods, only one of the nostrils is active. In other words, during most of the time, air is exhaled mainly through one of the two nostril-openings, either the left or the right.

Certain philosophers, generally known as "Siddhargal" in Tamil language and "Siddhas" in English, have used this obvious and verifiable fact to build a consistent system of philosophy⁴. They have proclaimed that there are three subtle cords, running parallel to or corresponding to the spinal cord, constituting every respiratory system. There are some differences of opinion in fixing the location of these subtle cords, which need not engage our attention now, though this issue will be dealt with later. However, these three subtle cords are generally called "the left" (Idakalai or the lunar cord), "the right" (PINGALAI or the solar cord), and "the middle" (SULU MUNAI). What is normally called in Tamil as "Sulu Munai"⁵ is deliberately called in the opening words of the first verse as "Suli Munai", only to stress the fact that the middle path creates a spiral field.

The first verse propounds the thesis that on reaching the tip of the spiral field, one attains perfection.

With reference to the human body, according to Siddhas, the left and the right cords converge and join with the middle at one point and beyond that point, the middle alone proceeds further up to the centre of the cranium, as it is generally believed. That ultimate apex or summit is said to be the tip of the spiral field, which is the goal to be reached by every aspirant of perfection.

It is easy to understand if I am asked to reach a point located in the world outside the physical frame of my body. However, when I am asked to reach a point located inside my physical body, I am baffled.

Why am I not baffled when I am asked to reach London, or a chair inside a particular room? I understand, in that case, not only what I should reach, but also that which is called upon to reach that place or object: I understand that I should bodily reach such place or chair.

Here I identify myself wholly with my physical body. When I am asked to reach some point said to be located inside my body, I am baffled, because, I cannot bodily reach that point and I do not know what should reach that point. Here I am asked to identify myself with something that could travel inside my body. For this, I should first dispel my notion that I am my body. This is the most difficult of the tasks, which every spiritual aspirant is called upon to perform and has to necessarily perform.

CHAPTER - 2

The task that should be performed by every spiritual aspirant is to reach the tip of the spiral field. Since that point is supposed to be inside one's body, a person cannot reach that point bodily. Hence, one must identify oneself with some entity that can travel inside one's body. At the outset, it can be postulated, that the said entity, must be capable of motion, of its own accord. There is no question of my moving it, since I am called upon to identify myself with that. Whatever it might be, "I am that". An ancient text declares - THAT THOU ART-"TATVAMASI"⁶.

When we speak of motion, it is but natural that we are reminded of "energy". Without going into details, we may, for the present, assume that whatever is expected to reach the tip of the spiral field, should be a form of energy or at least intricately connected with the concept of energy. That it is so can be gathered from these verses.

If we analyse the scheme of these verses, we would find that the first line of the first verse describes the goal of the spiritual journey; the first line of the second verse describes the starting point of such journey; the first line of the third verse indicates the point of transcendence in the path of that onward journey; the first line of the fourth verse describes the entity that undertakes such journey. The meaning of 'transcendence' may be dealt with a little later. Now we are concerned with the nature of the entity that undertakes the spiritual journey and that with which the aspirant is called upon to identify himself. The clue is in the first line of the fourth verse:

"Vel'i Petridu Sorubap Porul"

When translated in English, it means:

"Self-determining substratum that acquires manifestation."

What is implied in this phrase is the existence of the substratum before and after its manifestation, since the substratum is said to "acquire" manifestation. By now, even school students are acquainted with the Einsteinian equation: $E = MC^2$.

This equation suggests that energy and matter are inter-convertible. In other words, we may postulate that energy manifests in and as matter. Then, can it not be said that energy is the substratum, that too, the selfdetermining substratum that acquires manifestation, in and as matter? If we may say so, then whatever has to undertake the journey towards the tip of the spiral field should be somehow intricately connected with the concept of energy. For the present, it is enough to note that the concept of 'Self' implies the concept of 'energy'. A consideration of the first lines of the second and the third verses is deferred, at present, and would be taken up a little later.

In the first chapter we posed the question: What is the essential difference between a living being and a non-living We suggested an answer that while a respiratory process is functional in every living things. being it is not so in the case of non-living things? Hence the concept of self, attributed only to the realm of life, should be explained with reference to the process of respiration.

The exact path through which man inhales air and exhales carbon dioxide is no longer a mystery. There are ducts that bring in air to the lungs, ducts that bring in pure blood from the heart and ducts that carry the digested food. With the help of the oxygen in the air inhaled, the digested food is burnt, converted into energy, thereafter this energy is assimilated into the pure blood, which then circulates throughout the body and then every cell absorbs energy from such blood. The impure blood again reaches the heart and gets purified. This is the process by which the various cells constituting the organic body are energised and kept together. Is this statement correct? The test is simple. Stop this process. The result is disintegration and decay of cells. Hence the process of respiration, along with the other complimentary processes like digestion, blood circulation, purification, etc., maintains the unity of any organic system. This much is obvious. Immediately follows a Yogic declaration that though this is the process by which living beings maintain their respective organic units, in the long run, this process is not effective. In other words, this process fails after some time, resulting in the shattering of the organic unity, which shattering we call the death of the organism.

The normal process fails to maintain the unity of an organic system mainly due to its dependence on certain organs, which themselves depend, in turn, on this process. Moreover, this process depends on extraction of energy from external sources. In acquiring such energy and in converting that into the required form, much energy has to be spent. After a while, the process results in a net loss of energy. Soon the system collapses. How to avoid this catastrophe? We see that much energy is required for the upkeep of processes like respiration, oxidation, digestion, assimilation, bloodcirculation, etc. Without these processes, the energy extracted from external sources cannot be converted into the appropriate form for being assimilated by the cells comprising the organic system. Such cells can assimilate only energy in such appropriate form. We know of several gold mines, which are not exploited since they prove to be uneconomical in the sense, to extract one gram of gold from such mines, more than the value of one gram of gold is required to be spent.

We have to review the whole system. We must find an alternative way of providing just a little quantity of energy to the cells of an organic system, as is required to maintain their unity. The alternative method must not involve complicated organic functions for which more and more energy would be required. The alternative method should, preferably, avoid extraction of energy from sources outside the organic system, so as to enable the system to be independent of external forces and sources. Such an alternative method is propounded in these verses, and such method is clearly implied and introduced by the opening phrase, "the tip of the spiral field". Every term in this phrase is significant. While the term 'field' implies 'energy', the term 'spiral' is suggestive of a process analogous to that of producing current with the aid of an induction coil. The alternative process should somehow resemble the process of induction coil, that is, a spiral field of electricity generated by a central magnet. This thesis, rich in scientific-insight, has been popularly and commonly understood, (not wholly incorrect), to mean a process by which respiration is confined to the central cord of the respiratory system, without involving the two other cords. For the present we too can understand the alternative process this way, though it suffers from the vices of oversimplification and misidentification of essential terms. Where are these cords? Are they perceivable, directly or indirectly?

CHAPTER 3

The opening line of the fifth verse fortifies the view that the concept of the spiral field implies the de-linking of the two other cords from one's respiratory process. It refers to "ten plus two cords". Where are these cords?

While a scientist has the facility of a full-fledged and well-developed terminological network, a spiritualist, despite his having a deeper insight, does not have that facility. So the spiritualist seems less intelligible and, at times, even inconsistent. Terms equivalent to those like "field" and "trajectory" are conspicuously absent in the language employed by the spiritualist. This accounts for the seeming inadequacy.

The question, "Where exactly these subtle cords are located?", could be as misplaced as the question, "Where exactly is an electron or its orbit located in an atom?" When the Yogic hypothesis is presented in scientific terms, the answer to the subject question would involve terms and concepts like trajectories, field, probability and energy-levels. Before we attempt to identify the location of these cords, it is necessary to understand the nature of our physical body. A clue is given in the second verse:

"Seeing the body as a blend of the five elements": ("Anjum udalàik kanda Pin"].

The doctrine of five elements would give us an insight into the constitution of what we call our bodies.

Earth, water, fire, air and space are the five elements recognised by almost all ancient systems of philosophy. Aristotle confined his theory to the first four elements and omitted the last element, "Space"⁷. He had his own reasons for it, which might become intelligible to us at a later stage of this work⁸.

These five elements are not elements in the sense in which oxygen, mercury, sodium, etc. are elements. In fact, the first four of them are either compounds or mixtures. We know that water is a compound of two elements, namely, hydrogen and oxygen. Then how is it that many have declared these five as elements? In what sense are these elements?

These five elements represent, exhaustively, the various forms of existence itself. Earth, water and air represent the classically known three states of material existence, called the solid, liquid and gas. Fire represents the state of transition from one of these three states to another, and thus implies existence in the form of energy. Space, of course, is the very matrix of existence. Nothing can be said to exist except as a piece of matter, in one of the three states, or as energy or as a portion of space. Apart from these, there is no other form in which existence has been apprehended or even postulated. This may be the basis for recognising earth, water, fire, air and space as the five elements constituting the world of existence. We now know that not even atoms, not even sub-atomic particles are elementary, in the sense of being indivisible, ultimate building blocks of matter. Still we continue to call the atoms listed in the periodic table, as elements, for all practical purposes. Similarly, in a different context, the view that earth, water, fire, air and space are the five elements that constitute this existential world has been a workable hypothesis.

In fact, in ancient Tamil and Sanskrit texts, these are called the five 'Bhùthàs'. The term 'Bhùtha' means 'a physical manifestation' or 'materialisation'. It is unfair to freely translate it as 'element' in English and then, on that basis, criticise the doctrine itself. However, we may understand 'Bhùthàs' as states or grounds of physical manifestation and yet continue to call them five elements, just for the sake of convenience.

In the second verse, it is declared that once we realise that the physical body is a blend of five elements, the "desire-link" is cut off. What is this "desire-link"?

While the body of an organism is also a species of matter, it is living, as opposed to material objects that are non-living. It was noted hereinabove that the respiratory process is a distinguishing feature of every living being. If a body, which is otherwise merely material, becomes a living being by the functioning of a respiratory process in it, then such respiratory process is the 'link' between life and the matter in it. If it is a link, it serves as a channel to the five elements. That it is such a channel is an important Yogic declaration, seemingly mysterious, yet surprisingly simple.

At this juncture we must refer to a Yogic hypothesis regarding the respiratory process, which says:

 that during most hours of the day, respiration is substantially through only one of the two nostrils, shifting periodically from the one to the other;

• that at the time of such shift, for a little while, the respiration is equally balanced in and through both the nostrils;

• that when the left is predominantly functional, the breath is said to be oriented in the left cord (Idakalai);

 that when the right is predominantly functional, the breath is said to be oriented in the right cord (Pingalai);

• that when both are equally functional, the breath is said to be oriented in the central cord (Suli Munai);

• that the period during which breath is oriented in the left cord at a stretch, and the period during which breath is oriented in the right cord at a stretch, are almost equal and such periods are further divisible into five parts, not equal in length of time, each of which parts may, for the present, be called a sub-period;

• that each of the five sub-periods represents the predominance of one of the five elements in the respiratory process.

We need not dwell now on the intricacies of this hypothesis, or on the methods of identifying a subperiod and the associated element. The hypothesis clearly implies that the process of respiration establishes the link between life in the body and the universe of substances constituted of the five elements. This link is, at the same time, described as the desire link.

What do we mean by desire? Let us first take the simplest forms of desire. One may have a desire to see a particular painting, or taste a particular fruit, or hear a particular song, or inhale a particular fragrance or touch and fondle a particular thing or person. In its simple manifestations, desire has a direct reference to one of the five sensations.

What are sensations? Are they not the impressions caused in an organism by a stimulus that it comes into contact with? Every organism is exposed to innumerable stimuli at any given point of time. However the organism does not receive and respond to every stimulus. It selects just a few out of the innumerable stimuli, receive and respond only to such selected stimuli. On what basis, such selection is made? If every desire, as stated above, has a direct reference to one of the five sensations, then a desire is the pattern of preference exercised by an organism with reference to various stimuli it confronts at a given spatio-temporal point. The word 'preference' may suggest a process of conscious deliberation. however, at an elementary level, such a process is not manifest. For instance, when I say that I prefer potato to brinjal, I need not have an explanation for this preference, beyond the fact that potato appeals to my sensation of taste more than brinjal. Only at a complex level, the process of deliberation comes into play. For instance, I may prefer the company of X to that of Y. I may be able to give a reason for such preference: probably I find in X more things agreeable to me than What I find in Y. Then the question may arise: why should I prefer the company of the person having many things agreeable to me to a person having less of such agreeable things? I can say that I simply like that. Here reasoning breaks down. In a given situation when I am offered ice-cream or coffee, I may choose coffee and still may declare that I always like ice cream more than coffee. Is it a contradiction? No. A further probe would reveal that my desire not to have cold or fever, is stronger than my desire to have a cup of ice cream. Further probe would ultimately lead to a confrontation with a set of values implying a peaceful, healthy life on the one scale, and having a cup of ice cream on the other scale. Here again it is a matter of taste that one of these should weigh more than the other for me. Thus every complicated desire can be analysed into an elementary one, which seems to have no logical explanation. Should there not be an explanation for a person preferring potatoes to brinjals and an organism preferring light to darkness? It is not as if there is no explanation at all. The explanation lies in the very structure of the biological entity concerned. The proportion of the blend of the five elements constituting an organism may provide an explanation. The predominance of one element at any particular point of time in the respiratory process does influence the preferences then exhibited by an organism. It was

stated above that though our sense organs are exposed to innumerable stimuli at any given point of time, we perceive only some of them. We perceive only what we want to perceive. If one perceives every stimulus, one is liable to collapse, at least mentally, within a short while. Selective perception is a boon. The point is that such selection is influenced by the element that dominates one's respiratory process at a given time. Thus there is a certain link between the respiratory process and the perceptual process.

There are divergent views on the nature of the perceptual process. Some say that we perceive only various attributes of what we call an object and never the substance in which such attributes inhere. Some say that we do see unitary objects first and thereafter analyse their attributes⁹. For example, according to the former, when we see an apple, we see red colour and a spherical shape, we smell a type of fragrance, touch the apple and get a tactile sensation of it and on biting it we get a typical sensation of taste. They further say that apart from these sensations, we do not perceive anything, but we infer or construct a unitary object, which we then call an apple. The latter would however say that we just perceive an object and then analyse its various qualities described above. Without attempting to resolve this dispute, it is enough for the present to note that according to the yogic doctrine of perception discussed now, the capacity to perceive sensations is an in-built feature of an organism and the limits of such capacity are determined, therefore, by the very "architectonic" of the organism's faculty of perception. An instrument devised to record impressions only of radiant energy, will not register impressions of sound or mechanical force. If by its very design, were it meant for registering only radiant energy within a certain range of wavelength, it would be blind to other

excluded wavelengths. The same principle applies to the perceptual apparatus of an amoeba, housefly, tiger or a human being. Therefore, the yogic doctrine proceeds to postulate that some seeds of sensation are already in us, to enable us to sense any corresponding sensation. This is almost like and still not the same as saying that cognition is, in fact, re-cognition. Since every unit of existence is constituted by a blend of the five elements, the sensations, or perceptual impressions also get broadly classified into five. There are five and only five categories of sensations, corresponding to the five sense organs. Hence the seeds of sensations are nothing but the five elements, again. A well-knit hypothesis, indeed, is this. Can this be scientifically verified? So far none has demonstrated the existence of a sixth category of sensation. Every account of the phenomenon called 'Extra Sensory Perception' speaks only of either one, some or all of such five sensations, but claims that such sensation was perceived without the aid of any of the five sense organs. There has been no report of anybody having had a sixth type of sensation, totally different from the five normal categories of sensation. An extra sensory perception is not a new type of sensation, not falling under any of the five normal categories. It is "extra sensory" only in the sense that it is experienced without the aid of any of the five sense organs. Therefore the hypothesis that there is a one-to-one correspondence between the five elements on the one hand and the five sensations on the other hand gets fortified. Thus when I perceive an object as a set of stimuli from the world appearing to be outside my body, the elemental seeds in me are acted upon by the elemental seeds constituting the

said object. Thus, it can be said that qualitatively, the entire world, within me and outside me, is weaved of the same fabric. Only this qualitative identity of the inner and the outer successfully explains the process of perception, establishing a rapport between the otherwise two apparently different worlds.

Now we may turn to the question: Where are the ten plus two cords, referred to in the fifth verse, located? We have just seen:

• that every unit of existence is a blend of the five elements:

• that respiration provides the link between life and matter;

• that this link corresponds to the desire-link and, in turn, to the perceptual link;

• that the perceptual link presupposes the existence of elemental seeds in us.

We may now find out whether the verses, which we now study, refer to the concept of seeds.

The fourth, sixth and the seventh verses speak of seeds. The fourth verse speaks of:

"Vibrating seeds unfolding in the inner sky that is made of light."

The sixth verse speaks of:

"Organic seeds of sensational modes."

The Seventh verse speaks of:

"The ceaseless syllabic seeds."

Of these three references, the import of the one in the sixth verse is immediately clear to us: *Organic seeds of sensational modes*. While the elemental seeds constitute every unit of existence, including the matter, of which a living being's physical body is made, they are not in sensational modes everywhere. Only in living beings they are present in sensational modes. That is the reason for the reference to 'organic seeds'. When an organic seeds sprouts into an organism, the five constituent elements blossom into sensational modes. This statement, of course, may not be scientific, but may be presently useful for the purpose of our understanding a difficult hypothesis initially. Let us recapitulate what we have already stated:-

- that every unit of existence is a blend of the five elements;
- that respiration is the link between life and matter in a living being;
- that this link accounts for perception;

 that perception presupposes the existence of elemental seeds;

 that such elemental seeds are in two modes, elemental and sensational; and that they are in sensational modes only in an organism and are in elemental modes in matter, immediately implying that elemental seeds constituting that which is 'life' in an organism are in 'sensational modes'.

From the above propositions we get nearer to a position suggestive of 'living seeds'. In fact Siddhas and several ancient philosophers have spoken of such living seeds. In certain ancient texts references have been made to subtle bodies that control and operate the gross, physical bodies. The subtle body is called 'Suksma Sarira' in Sanskrit. Can we postulate that the ten plus two cords spoken of earlier are subtle and that they form part of the subtle body?

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CHAPTER 4

At this stage it is better to understand the methodology adopted in this thesis. Without any preformed conclusions or theories, we slowly passed from a certain phrase, namely, "the tip of the spiral field", to certain obvious facts, then gathered clues from certain suggestive phrases, and proceeded to certain hypotheses, without even fully knowing, where they would lead us. We are not trying to prove any theorem; neither the statement nor the proof of any such theorem is attempted here.

What do we understand by the term 'subtle body'? 'Subtle' does not necessarily mean 'small'. In the phrase "subtle humour" it does not mean 'small'. It means something not apparent or not obvious, something that has to be discovered with some effort, not readily comprehensible, and, in a sense, hidden¹⁰. Therefore subtle body is one that is not readily comprehensible, not obvious, but hidden, in contradistinction to the gross body, which is clearly perceivable. To ask where inside the gross body of an organism, its subtle body could be found, is to presume its size and location. In asking this question one presumes that the subtle body is inside the gross body and that the subtle body is smaller in size than the gross body. Without making any such presumption, let us see whether there is any reference in science to subtle entities.

Can we not say that atoms and all sub-atomic particles are subtle entities? Can we not say that light, photons and energy itself are subtle entities?

Without presuming anything about the size and the location of a subtle body, let us postulate that every living being has a subtle body. What can be said of this subtle body? One thing, at least, is clear. Any body, if it should exist, could only be a blend of the five elements. However, we saw that these elements are in two distinct modes. In one of these modes they seem to be receptive, sensitive and hence, almost, alert and in the other mode, they are passive and inert. If this is true, then is it not a basic distinction between matter and life? If it is so, then this difference must obtain at the subtle level and also account for the distinction between the presence and the absence of a respiratory process at the gross level.

If the presence of the respiratory process distinguishes a living organism from a non-living material object, and though both are comprised of the same five elements, if such elements are active in the organism and passive in the object, then can it not be said that the respiratory process accounts for the activity of the elements in the organism? On the cessation of the respiratory process, therefore, the elements cease to be alert and as a direct result of this, what was a living being till then, becomes a conglomeration of mere material units.

Though the respiratory mechanism keeps the elements alert and thereby the body alive, such mechanism, in due course, fails. Therefore an alternative process is required.

We saw earlier tht the alternative process is a process of confining the respiration to the central cord. We have just seen that 'the ten plus two' cords spoken of in the fifth verse, may not be found in the gross body, but may be located in the subtle body. If it were so, it would be meaningless to postulate that 'breath', which is comprised of gross matter-molecules, takes part in any process of the subtle body. Hence there must be a subtle entity, functionally corresponding to 'breath', and moving along the subtle cords of the subtle body. The Indian philosophical literature has assigned the name 'Pràna' to such subtle entity. Therefore, if we accept this position, we must modify our statement of the alternative process: it is the process of confining 'Pràna' to the central cord or 'Suli Munai', without involving the left and the right cords called 'Idakalai' and 'Pingalai'.

Now we are able to comprehend the meaning of the phrase: "Organic seeds of sensational modes", found in the sixth verse. How, then, are we to understand the reference in the fourth verse to, "Vibrating seeds unfolding in the inner sky that is made of light?"

The fourth verse beings with the Tamil words: "Vell' Petridu Sorubap Porul".

A literal translation of this phrase would be:

Vel'i = Space / manifestation

Petridu = Born in / acquiring

Sorubap = Self-formative / self-determining

Porul' = Matter / substratum

In the English form of the verse we have simply assigned the name 'Pràna' to denote that which is denoted by this phrase. Is this correct?

The word 'Pràna' in Sanskrit means the vital lifeprinciple, often treated as the equivalent of 'breath'. Etymologically the word means: "that which is reflected in the minute/small/subtle or in the ego."¹¹.

We just saw that 'Pràna' is the counter-part of

'breath' in the subtle-body. This is in conformity with the etymological meaning of the term 'Pràna'. While breath is the governing principle of the gross body, Pràna is the governing principle of the subtle body. If we understand the Tamil phrase: "Velli Petridu Sorubap Porul" to mean, "The self-determining substratum that acquires manifestation". it means energy, pure and simple. What acquires manifestation as matter is energy, as implied by the equation, $E = MC^2$.

The other meaning of the Tamil phrase: "Velli Petridu Sorubap Porul", is: "The self-formative matter born in space".

In this sense, the phrase refers to the constant emergence of virtual particles and their immediate, or almost-immediate annihilation in the space, as now picturised by the particle physics¹². This also refers to the energetic space or the space that is an ocean of energy, since particles cannot emerge from anything but energy. Hence in using the term 'Prâna', we actually mean energy, pure and simple. This would be correct, if we could postulate that what is called energy in the realm of matter is the same as 'Pràna' in the realm of life. This postulate needs explanation and justification. Now we shall be stepping into the realm of transcendental physics.

CHAPTER 5

What is the distinction between 'physical' and 'non-physical'? By the term 'physical' we mean any unit of existence, which has a magnitude or which is measurable. Though energy is not a unit having definite extensions in space, it is still a measurable commensurable concept and hence physical. However it is not physical in the same sense in which this pen, paper or table is. The latter have spatial extensions, while the former does not have.

One mischievous question: Is an atom solid, liquid or gas? No one would venture to say that an atom of oxygen (O) is not as solid as an atom of iron (Fe). The question is somehow meaningless. Probably we commit a category mistake in asking this question. The error lies in the fact that only at the molecular and multimolecular levels, a substance emerges into substantial existence and may be classified into solid, liquid or gas. Whether a substance is a solid, liquid or gas depends upon the spacing involved in the arrangement of its atoms, ions or molecules. A single atom cannot be classified as a solid, liquid or gas. A substance, in which the distances among the particles are huge and variable, is said to be in a gaseous state: when such distances are small and just slightly variable, it is said to be in a liquid state; when such distances are very small, and fixed, it is said to be in a solid state. In many cases, the state of a substance can be changed.

In any case, it is clearly meaningless to speak of an atom or a sub-atomic particle being a solid, liquid or gas. A substances, as a substance, is not known to exist except in one of these three states. Hence any unit of substantial existence must be in one of these three states. Therefore, substantial existence emerges only above the molecular level.

While discussing the doctrine of the five elements, we saw that any unit of existence must be in one of the five states, namely, solid, liquid, gaseous, energetic and spatial states. Just now we saw that substantial existence in one of the first three states can be attributed only to molecular and macro-molecular objects. Does this mean that existence in the form of energy and existence in the form of space are nonsubstantial? Yes. What is non-substantial existence? May be, it is 'formal' existence¹³. Formal existence is as much existence as substantial existence is. We generally presume that existence necessarily implies substantiality. When something is said to exist, we, at once, look for its shape, size, dimensions, etc.; but existence can also be formal, as opposed to what is substantial.

Can we not go a step further and say that formal existence underlies every instance of substantial existence? In other words, only a formal entity can manifest itself substantially. Only a formal entity can "acquire manifestation". The distinction is between 'form' and 'substance' and not between 'form' and 'matter'.

If a formal entity alone can acquire manifestation, 'Pràna' which so acquires manifestation ought to be a formal entity - that is, Pràna should exist as energy or space, in its pure and simple state, so that it can manifest as solid, liquid or gas when it emerges into substantial existence. We know that every substantial object, down to its molecular level, must occupy 'space' and must have 'mass' however negligible it might be. Having mass is having energy ($E = MC^2$). Therefore every substance is spatial and energetic. This may be a tautology, but, in many cases, tautologies are useful. Can we venture to postulate that sufficiently energised space emerges into or vibrates as a material substance? Are all substances, vibrating portions of the vast space? Is this postulate scientific and can it be verified or falsified?

Finding a material substance, which is either non-energetic or non-spatial would falsify this hypothesis. Hence, the proposition is falsifiable and therefore scientific, at least, according to K.R. Popper¹⁴. Till a material substance could be found to be either non-energetic or non-spatial, we may postulate that space-energy linkage is a condition precedent for the manifestation of any existential unit as a piece of matter or substance.

Sufficiently energised space manifests substantially: this is the proposition with which we are presently concerned. When such space manifests substantially, we analyse the substance practically and theoretically and arrive at certain postulates. Atoms, electrons, protons, neutrons, quarks, etc., are the names we assign to the different levels and forms of energisation of such space. These particles are products of our attempt to explain the process of energisation of space, or of our attempt to analyse the mass-energy relationship in a substance, with reference to space. These particles are not substantial objects as are solids, liquids and gases, which we come across in our daily life. By stating this, we do not deny their existence. These do exist, but not as substances. These exist as formative particles. By calling them 'formative', we do not imply that they have no magnitude. They do have commensurable attributes. We have assigned certain labels to certain distinctions that we are able to intuit.

It appears as if we have deviated much from our main thesis. Let us now see how space-energy linkage

and the concept of 'Pràna' are dealt with, in association with each other, in these verses. The fourth verse, in its English form, opens with these two lines:

"Pràna reached the inner sky that's made of light The sprouting of vibrating seeds unfolded in its sight."

In the original Tamil verse, the Tamil equivalent of the phrase, "the inner sky" is not found. However the introduction of this phrase in the English translation of the verse is justified and warranted by the worldview that unfolds in these twelve verses. Moreover, the usage of the term, "Veli" twice in the first line itself of the fourth verse clearly implies that there are two categories of sky/space, of which, one is called 'the inner', here.

The phrase 'inner sky' presents some difficulty. The sky as we know it, is the infinite spread of space itself. How can infinity be 'inner', that is, inside something?

It is said that the unoccupied space inside an atom can theoretically accommodate infinite number of electrons. Thus infinity is a relative concept. If only it can be postulated that 'soul' or 'Jiva', as the lifeprinciple is often characterised in Indian Philosophical literature, is eternal and that it takes innumerable and successive rebirths, then it becomes readily intelligible that the soul or the Jiva is capable of registering infinite number of impressions.

Thus, the inner sky, means something, which can hold an infinite number of something else, and as between these two things, the former is infinite in relation to the latter. It is further stated that the inner sky is made of light, meaning thereby, vibrations of radiant energy. This radiant energy is said to vibrate as seeds. This last statement requires some further clarification.

We saw earlier that the seeds, referred to in these verses, might be subtle entities, as opposed to the gross objects of the material world. Let us now try to understand more about such subtle entities.

If a molecule, which is the basic unit of a substantial matter particle and a cell, which is the basic unit of a living organism are both made of or comprised of subtle entities, is there any distinction between the subtle entities which constitute molecules, on the one hand, and the subtle entities which constitute cells on the other hand? Are there two categories of subtle entities, giving rise to the traditional dualism of matter and life? There need not be two classes of such entities. We saw earlier that both are elemental seeds constituted by the five elements. However the five elements are inert in molecules, but alert in cells. In the former they are said to be in elemental mode and in the latter they are said to be in sensational mode. What calls for and accounts for this difference? Is there any reason why the otherwise inert elements should become alert while constituting living cells?

Below the molecular level, though physics speaks of particles, such particles are not strictly substantial particles like what we perceive in our day-to-day life. Atoms and sub-atomic particles are more tendential entities rather than substantial entities. They appear to behave like particles, at times, and like waves, at times. They are neither fully particles nor fully waves. They represent a process of transition of energy into matter. Hence we chose to call them formal or formative particles. However a molecule is a fully 'formed' particle with physical and chemical properties. Whenever molecules combine to form a stable substance, only identical molecules combine that way, as in the case of compounds. This is because of the fact that identical molecules, within a short range, attract each other to form a bond. Several molecules of H₂O, brought close enough, would at once manifest as a sheet of water. In Nature, we do not find frequently just one molecule of water, or of any compound for that matter, in isolation. The reason is that all molecules have a tendency to live in group with their likes; gregarious tendency! That is why they are not stable in isolation and soon join a group or get transformed. Though one molecule of a compound may be isolated and even maintained, it is possible to do so only in and as a controlled experiment. The point is that Nature behaves otherwise. Though non-identical molecules do not naturally make a bond, they may be brought together as mixtures. They, however, do not form a stable bond as in the case of the compounds. We at once find that a living cell is a mixture of non-identical molecules, yet forming a considerably stable unit. Unless there is an active agent, keeping such non-identical substances together, a cell cannot have such stability and unity. Since such agent itself cannot be one of those substances, it has to be energy, pure and simple, yet 'active' or 'alert'. We have come very near to an explanation for the five elements being alert in living cells, while being inert in material substances.

Tendencies are, by definition, directional. They are vibrating centres exerting attractive and repulsive forces. According to the laws of their inherent, attractive/ repulsive forces, they form linkages and bonds and materialise into substances or molecules. No active agent need be postulated for such formations. However, once they form into molecules, they become substantial particles, being no longer tendential or vibrative, except exerting among themselves a comparatively very small degree of attraction, that too, only among such of them, which are identical in the constitutive tendencies. They are more or less inert in this sense. To bring such inert matter heterogeneously together, we postulate the need for an active agent, or active energy.

Energy is bundled up in a molecule and hence inert. However, since distinct molecules form a cell, such formation is attended, and indeed brought about by constant visitations of active energy.

We have very quickly passed a very difficult point. Retracting the steps might help at this juncture, so that the idea properly sinks in our mind.

Atoms and sub-atomic particles are vibrative, tendential units. Being tendential and vibrative means, by definition, constantly endeavouring to seek out and make a bond with another, yet not being successful in such endeavour. Any vibration is a momentary displacement or extension, regaining its original position or magnitude at once. On account of being tendential and thus vibrative, atoms and sub-atomic particles never can exist, in nature, to repeat, in nature, as stable, isolated particles, but may become stable only in and as part of a larger system, or unit, which we identify as a molecule. Hence, as isolated particles, atoms and sub-atomic particles continuously exert forces of attraction and repulsion, thus being constantly active. No external agency is needed to group them into and as various molecular systems. However, molecules are not as vibrative or as tendential as what constituted them. The original vibrations and tendencies are almost in arrest in the molecule. Molecules exhibit tendencies only at a minimal level, as is required to bring identical units of them together and group them together. To bring non-identical molecules

together, external agency is required.

Let us now recapitulate the basic propositions postulated and arrived at so far:

- every unit of existence is a blend of the five elements.
- the process of respiration links life and matter in a living organism.
- This link accounts for perception, and the process of perception in turn implies or suggests the presence of elemental seeds in two modes elemental and sensational or in other words, inert and alert.
- While energy is not required to be alert or active in basic matter particles, called molecules, it has to be necessarily alert/active in the basic life-particle, called a cell.

Now it is clear that vibrating seeds, spoken of in the fourth verse, refers to 'organic seeds', spoken of in the sixth verse. We must now find out how these two phrases relate to the phrase, "ceaseless syllabic seeds", occurring in the seventh verse.

Any organisation implies a design or a formula. When 'a' and 'b' are brought together as 'ab' it is in accordance with one design/formula, distinct from another formula which would bring them together as 'ba'. [While a and b, in this example are letters of the English alphabet, 'ab' and 'ba' are syllables.)

We all know the various chemical formulae like H_2O , NaCl, etc., as denoting the constitution of various

substances. Every substance has a formula. However no one writes down any formula for a living cell, though every constituent molecule of a cell has a distinct formula. A cell is certainly not the mere sum total of all the formulae of all the molecules constituting it. This feature is found to be unique to the realm of living organisms. Not having a formula does not imply a lack of design. In the inorganic realm, the design and the formula are the same or are co-extensive. In the realm of living organisms, it is not so. While the design of a cell can be illustrated and explained, its formula cannot be done so. However the fact that every cell has a formula embedded in it is one of the greatest discoveries of the twentieth century¹⁵. The success in mapping its design and thus deriving its formula is a greater achievement, now being accomplished at the dawn of the twenty-first century.

For the present we may defer the discussion of the concept of 'ceaseless syllabic seeds'. Let us now go back to the doctrine of 'Sùksma Sarìra' or 'subtle body' referred to earlier. Let us first have a look at the realm of matter, and then proceed to consider the realm of life.

In the realm of matter, below the molecular level, the units are not substantial, but are formal or tendential. Tendencies are capable of organising themselves in accordance with their own laws of directional forces. Though the formation of matter particles in the space, generally considered to be void, is a random process, it is analysable and explicable in terms of laws of forces, as what physics and chemistry have successfully done. These laws are not pre-ordained or pre-existing laws, preceding the formation of the matter-world, but they are laws deduced by the imposing intelligence of the human mind, from an otherwise chaotic universe. Similarly, identical molecules, coming within a close proximity tend to be attractive of each other and thus huge samples of multi-molecular elements and compounds obtain in nature. However, distinct, nonidentical molecules do not exert any attractive force even when coming close together. In some cases there may be a reaction resulting in realignment of forces and thus replacement of the original molecules with new ones. However, beyond such reactions, non-identical molecules do not naturally tend to come and stay together in and as a single unit, in the inorganic world. When they do come and stay together, they cease to be merely inorganic.

Molecules are not as much 'tendential' as submolecular particles are. Sub-atomic particles are certainly tendential, obeying the laws of probability and the uncertainty principle rather than the classical laws of certainty that apply to substantial objects.

Atoms are on the borderline. They are equally tendential as they are substantial. Molecules are more substantial than tendential and in fact their tendentiality is negligible, and exists only when considered in terms of weak forces postulated by Van Der Walls¹⁶. Non-identical molecules do not naturally form themselves into multi-molecular compounds, except as mixtures, only because they are not as tendential as sub-molecular particles are. Gold and copper may be mixed together, but they can never make a chemical bond and never from such mixture can emerge a new compound, which could be called "Gopper".

Now let us turn our attention to the realm of living organisms. Formation of a living cell appears to be an exception to the proposition set out at the end of the preceding paragraph. The imposing intelligence of the human mind seeks an explanation to this exception and also attempts to discover a pattern in the said exception. It finds at once that every cell is overtly self-active, as is not the case with the material particles. Hence it deduces that whatever brought about the formation of a cell with non-identical molecules accounts for its activity too. One can easily say that energy is a condition precedent for any coming together, formation or activity. Hence where energy becomes active or alert while manifesting substantially, it manifests in and as a living cell, rather than as an inert piece of matter. It is not necessary to consider whether energy becomes active in order to manifest in the realm of life or when it so manifests, it becomes active.

This aspect of energy-manifestation implies, or at least, suggests another aspect of materialisation. While energy manifests as material particles, the very tendencies, which constitute the particles, so constitute immediately. In other words, it is not as if tendencies first combine according to a formula and as if at a wave of a magic wand, the combination materialises after some time into a gross particle. The tendential combination at once either materialises, or due to want of sufficient energy, gets annihilated. In other words in the realm of material substances there is no dual existence as the subtle and as the gross. In the realm of living organisms, the story is different. It is not enough if merely the design or the formula is ready. The necessary matter - molecules, should have already materialised and be available within a short-range-vicinity, so that they may be pulled and collected together to form a living cell, according to the formula and the design. While in the emergence of matter-molecules we may say that the constitutive tendencies materialise, in the emergence of a cell, we should say that the constitutive molecules, are brought together and combined in accordance with a design and a formula, which should be the work of still more tendencies not constitutive of the cell, but which somehow create the cell. The dual existence, one, as the tendencies which actively collect the matterparticles and the other, as the combination of such matter particles is clear in the realm of life.

The tendencies which thus create a cell do not leave the cell, once the cell is created, but continue to act upon the various molecular parts of the cell, in order to constantly maintain the unity and design of the cell and such activity manifests in the multifarious functions of the cell and the cellular parts, as we read in biology. While the constituent molecules of a cell are manifestations of its constituent tendencies, the group of creative tendencies, which activated the formation of the cell manifest only in activity, without themselves materialising. This latter group has an evanescent graphic design, changing its contours every moment, but retaining its identity with the activity undertaken, analogous to a flame or a cloud. In fact such is the subtle body or the Sùksma Sarìra of a cell.

CHAPTER 6

Four propositions stated earlier may be reiterated here for the sake of convenience:

- $\sqrt{}$ every unit of existence is a blend of the five elements.
- $\sqrt{}$ the process of respiration links the life and the matter in a living organism.
- √ this link accounts for perception while the process of perception in turn suggests the presence of the five elements in two modes, elemental or inert and sensational or alert.
- √ Energy is necessarily alert in life-particles (cells), but inert in matter-particles (molecules).

At the end of the preceding chapter we had arrived at a doctrine of Sùksma Sarìra or subtle body. What brought about this big leap?

In the process of arriving at the four propositions stated above, we saw that sub-atomic particles are more aptly tendential units of existence, rather than substantial particles. Tendencies were postulated to emerge into substances. We know that in terms of the Einsteinian equation, $E = MC^2$, it is energy, which manifests in and as matter, since the entire mass of a substance is convertible into pure and simple energy. Therefore tendencies belong to the realm of energy. Hence tendencies ought to be explained only in terms of directions and forces of energy. A study of energy, in turn, is a study of the concept of 'space' itself.

Space is postulated as an infinite spread. We postulated earlier that any existence must be in one of the five elemental categories: the space, energy, solid, liquid and gas, represented by the five traditional elements. Of these five, while solid, liquid and gas represent the substantial states of existence, energy represents the formative state of existence and the space is the pre-formative or the matrix-state of existence. Without going into the finer details of the general theory of relativity and the quantum theory of particle physics, we may try to picturise a hereand-there trembling space as the one presented by the modern science. Wherever it trembles, it is said to be energetic, it vibrates as tendencies, as may be seen in the almost-constant emergence and almostimmediate annihilation of virtual particles. Wherever it is adequately energetic, it manifests as tendential units of real particles, however short-lived they might be. Stronger the tendencies, the greater is the probability of such particles entering into bonds and materialising into stable substantial particles, which may then combine to form gross material objects.

The Einsteinian equation implies that mass is nothing but a store of energy, an energy-packet. In other words, it may be stated that energy is arrested in the mass of every object/particle. From virtual particles to the gross molecules, in the several stages set out in the preceding paragraph, arrest of energy becomes more and more perfect. In virtual particles it is imperfect. Hence the particles get annihilated before getting transformed into real particles. In atoms and molecules the arrest is almost perfect, accounting for the stability of atoms and molecules. Still in atoms, the imperfection is observable. That is why the electrons in the peripheral shell of an atom constantly seek partnership or mating with their kind in other atoms, giving rise to the various bonds making the various molecules. The imperfection in molecules is less than it is in atoms. The arrest is more perfect in molecules. That is why inter-molecular forces are very weak, compared to the intra-molecular forces. Even such weak inter-molecular forces obtain only among identical molecules. That is the exact reason why naturally non-identical molecules do not combine to stay together as one stable unit. However, living cells seem to offer an exception to this principle. They are stable units of non-identical molecules, stable to a great extent at least. Offering an explanation to every seeming exception is the main task of a scientist. Once non-identical molecules combine to form a cellular unit, we know what accounts for their limited stability or persistence in time. The science of biology tells us how energy is constantly supplied to the cell from external sources and the various processes by which the solar energy gets converted into a special form of chemical energy and consumed and stored, by and in the cellular parts. Still, not much light is thrown on the formation of a cell, as to what energy brought about the various non-identical molecules in it together with a particular structural design, and how.

There is a hint in the third verse. It is:

"Soul-making thought": ["Uirgal Seaiyum Anninaivu".]

The implication is that what makes life is 'thought'. Is this not putting the cart before the horse? Are we not accustomed to consider 'thinking' as a process attributable to living beings? If this is true, how can we think of a thought, even before life emerged in the evolutionary stage of existence?

Let us consider what thoughts are. The one thing that strikes our consideration, at the outset, is that thoughts are capable of acting upon and through material substances. We have already noted that the physical body of every living being is a blend of five elements and hence is a conglomeration of material substances. It is a matter of experience that thoughts, emotions, ideas and all such so-called intangible mental processes manifest through the living body. One's mouth articulates sounds to express one's thoughts. When one has erotic dreams, one gets physically stimulated and feels the pulsation in one's sexual organs. In deep and sudden anguish, one's eyes shed tears. Enough.

If thoughts have the capacity to act upon and activate matter particles, would it be unscientific to postulate that thoughts bring together matter molecules and thus constitute living cells?

Another striking feature of thoughts is their speed. Einstein postulated, and we may even say, demonstrated, that nothing can travel faster than light. The reason given is that speed affects the mass of the moving body. As the speed increases, the mass increases. At the speed of light the mass would be infinite and no amount of energy could push or accelerate its speed further. However, thoughts somehow appear to be faster than light. Within a fractioin of a second one may think of a journey to the sun or another galaxy and back. How is this possible? The only logical answer could be that it is possible because a thought is not a material object and it is a mass-less entity. We all know that even photons are postulated to be mass-less particles, which are supposed to radiate as light and other electromagnetic radiations. In other words, they are energy, pure and simple. That they are massless and yet, pure and simple energy has been established experimentally. When 'positron' was discovered in 1932 by C.D. Anderson, the cloud-chamber experiment revealed that cosmic-ray photons get transformed into pairs of electron-positron, both of which do have mass, but have opposite charges. Further experiments have shown that positrons and electrons can annihilate each other, their mass transforming into the energy of photons. Though photons are said to be massless radiations, still, Einstein showed that gravitational pull of a massive object bends their radiant path.

Coming back to thoughts, can we not postulate that thoughts too, are radiations of mass-less particles/ waves? Such a postulate would allow them to travel faster than light. Still it has not been demonstrated scientifically, by means of any controlled experiment, that a thought gets transformed into matter with mass, though, there have been stories and even public demonstrations of adepts materialising, at will, various objects, and also causing objects to disappear, at will.

Even after postulating that thoughts are massless, radiant energy, we still have to understand how thoughts, which are attributable to living beings can 'make' the basic particles of life itself. Can thoughts be postulated to be free vibrations, free of any material body, capable of radiating in the free space? When such vibrations are intense and energetic enough, they tend to gain stability and permanence. If they vibrate in a simple pattern their tendency is successful in becoming stable and permanent. They, then get transformed into gross particles of matter and thus get fully arrested in such particles. Wherever the vibrations are not simple but are in complex patterns, their tendency to become stable and permanent is not immediately successful. Such vibrations and their patterns, if they are intense enough, persist as a set or group of vibrations. During such persistence, already materialised particles might come within the range of their vibrative field. Some of these particles might very nearly correspond to the various simple portions that comprise their complex pattern. By the attractive force of such simple portions, such particles might get arranged and organised into a complex pattern very nearly resembling the still-notmaterialised complex pattern. Now we have here two interacting sets: one set of unmaterialised vibrations, vibrating in a complex pattern; and the other set comprised of materialised particles organised in an almost similar complex pattern.

This is the skeleton of the hypothesis expounded by many Siddhas. The complex group of vibrations, not materialised, is the subtle body. The set of organised particles resembling and resonating to its complex pattern is the gross body. The fourth verse refers to this hypothesis when it speaks of the sprouting of vibrating seeds in the inner sky that is made of light.

This hypothesis implies that the gross body is organised by the subtle body, or, at least, due to the attractive forces of the tendential vibrations that constitute the subtle body. If a group of vibrations, vibrating in a complex pattern, persists on account of the intensity of the vibrations, and if matter particles in adequate number and variety come within the field of their vibrations, if such matter particles consist of particles that individually resemble the various simple patterns that make up the complex pattern of the first-mentioned group, if every one of all such simple patterns finds a corresponding particle in that field, and if the interactions are perfectly timed and strong enough, then a gross body, complex in its pattern roughly resembling the complex pattern of the first-mentioned group, might emerge into existence. So many ifs! That is why, in nature, life is rarer in

comparison to matter in this universe, matter is rarer in comparison to radiant energy, pure and simple, and space alone is infinitely large.

Once a gross body emerges into existence as stated above, then by mutual interactions the complex pattern that has not materialised and the gross body organised by it fortify each other, and thus both enter into a persisting partnership, gaining stability in this process.

Hence a subtle body is a complex group of vibrations waiting to assemble particles corresponding to its various constitutive and vibrating patterns. On finding such particles, the complex group brings them together, strives to keep them together, as though such particles constitute a gross body for the said group.

If this hypothesis is true, then matter and life have both emerged from a single source, namely energetic, vibrating space: "the inner sky that is made of light". Not only have they emerged from such energetic vibrations, but also they are constituted by such vibrations. Could this be the basis of the various idealistic doctrines, which proclaim that ideas constitute material objects? It is so proclaimed since vibrations are the precursors of what are known as ideas in the higher plane of human existence.

Even after the formation of the gross body, the corresponding subtle body or the complex group of vibrations persist and constantly act upon the gross body. That is the reason why this complex group of vibrations is necessarily active unlike the simpler ones that got materialised, arrested and inert. We already saw how thoughts, ideas, feelings, dreams and yearnings act upon and through the material body. Thus the subtle body is the ideational counterpart of the gross body.

The thesis stated above postulates that matter and life have both emerged from a single source, namely energetic, vibrating space. It further postulates that not only have they emerged from such energetic vibrations, but also they are constituted by such vibrations. This justifies the label, "A Bio-cosmic Worldview", assigned to this thesis.

CHAPTER 7

It seems that we started with some physical facts, but have ultimately landed in a maze of metaphysics. However, we can still maintain that so far in this thesis we have been mainly concerned only with physical entities like molecules, cells and energy that constitute both the fields. Hence whatever so far appeared to be metaphysics¹⁷ may be called "transcendental physics".

We must be clear by now that we have so far projected certain postulates, without insisting on verification or proof of such postulates. Our present concern, as already explained, is not to prove any particular theory or theorem, but only to discover the basic hypothesis or the worldview that is presented in these twelve verses and, if possible, to see whether it is scientific, or at least whether it is not unscientific.

From the above discussions let us see what could be the true essence or self of a living being. It is nothing but a portion of the ocean of the primordial energy. It developed a complex pattern of vibrations that could not materialise due to its own complexity. In this process it got totally occupied, first with the task of organizing a gross, material body, capable of resonating to its pattern, and then acting upon and through such body. As such it is the ocean itself, that is, the primordial energy itself, having just assumed a pattern-oriented, tendential wall around it. Its own tendencies differentiate it from the ocean, though such difference simply vanishes like a dream, when it sheds its tendencies. There is no real difference. Yet there is a seeming difference. This position is in broad agreement with what goes under the name of the "Vedantic philosophy", propounded in the ancient Sanskrit texts of India.¹⁸.

When the fourth verse speaks of the vibrating seeds sprouting in the sky, it refers to this hypothesis. We arrived at this hypothesis starting from the obvious fact of respiration. Let us now recapitulate the essential steps of this hypothesis:

- A) The ultimate substratum of this universe is nothing but space, an infinite space.
- B) The space is ever vibrating, dancing in different rhythms and patterns.
- C) Wherever the vibrations are strong enough and are in simple patterns, particles emerge, virtually, up to a certain limit and really, where the vibrations are stronger.
- D) Wherever the pattern of a certain group of vibrations is complex, such group does not materialize, as such, but may attract already materialized particles corresponding to the simpler patterns comprising the group, may organize such particles into an organic whole corresponding to its complex pattern and may act through and upon such organic whole.
- E) While the complex pattern is called the subtle body, the organic whole into which particles are organized is called the gross body.

One characteristic feature of this hypothesis is its utmost simplicity, flowing from one simple postulate of an infinite spread of vibrating space. This postulate is in tune with the postulate of the modern science. The general theory of relativity postulates space being affected by matter, and speaks of curved space. The universe itself, though postulated to be infinite, is still said to be expanding. Particles constantly emerge, engage with each other, annihilate or get annihilated in the otherwise empty space.

In proposition (E) set out above we assigned the name "the subtle body" to the complex pattern of

vibrations, which has organized a gross body for itself. Such complex pattern itself is never the same, yet identified as one persistent unit. Even the gross body is never the same. About 50 millions cells die in a human body every second and millions emerge anew. The matter that makes up a candle-flame, at any given instant, has completely vanished by the next instant and has been replaced by fresh matter. "What persists in the luminous heart of chemical activity is not the substance, but the form. And the life itself persists in an analogous, although far more complex, fashion"¹⁹.

From the above hypothesis we see that life manifests in an interaction between a portion of space that has not materialized, due to the complex pattern of its vibrations, and a portion of space comprised of materialised particles, organised, as nearly as possible, in such complex pattern. This much is physics, or transcendental physics. As we postulate a distinct soul or Jîva, distinct from the vibrating and the materialized space, and constituting life, we would be entering the field of metaphysics, as called in the traditional systems of philosophy. We have another option. We may postulate that the vibrating space itself is the soul or Jîva, its pattern of vibrations is its subtle body and the materialized space is the gross body. We will still be in the realm of transcendental physics, then.

The second option seems to be more economical. In that option, every Jîva or soul and the entire space, materialized and unmaterialized, form just one continuum. Every individual soul is just an assumed individuality, the assumption of a distinct pattern of vibrations by a portion of the space. The illusion of individuality disappears with the disappearance of the assumed, distinct pattern of vibrations. This description is in consonance with all major non-theistic schools of philosophy like Advaita, some schools of Buddhism and Taoism²⁰.

We have arrived at a grand, yet simple, hypothesis, unfolding a world-view, starting from some clinching phrases like:

• the tip of the spiral field;

• on seeing the body as a blend of five elements, the desire link is cut off;

- life-making thoughts;
- the sprouting of vibrating seeds in the (inner) sky that is made of light;
- organic seeds of sensational modes.

Now let us see the overall implications of these twelve verses with reference to such a world-view.

The aim of this life-process, as stated in almost all systems of philosophy, is to attain total liberation, called 'Mukti' in Sanskrit and 'Vidu' in Tamil. In terms of the world-view presented above, we may understand liberation only in the sense of a particular portion of the vibrating space becoming free of its unique, complex pattern of vibrations and realizing its unity and identity with the entire continuum itself. Traditional doctrines explain this as the Jiva getting released from its tendential cage of complex vibrations and merging in the ocean of infinity.

CHAPTER 8

Now, let us consider, in some detail, the concept of 'liberation'. At the end of the previous chapter, it was suggested that liberation is the vibrating space becoming free of its unique, complex pattern of vibrations and realizing its unity and identity with the entire continuum of the endless space. In other words, liberation is release of energy from its manifestations and vibrative indulgence.

We also saw that energy is inert when it gets arrested in material manifestations, but is necessarily alert when it builds a gross body with a group of material particles, which alertness gradually evolves into what we call consciousness at the human level.

Two questions arise at this stage. The first is whether upon liberation or release of energy from its tendential cage, it retains its consciousness/alertness. The second is whether release of inert energy from a matter particle is also liberation as envisaged above. The answer to the first question seems to be 'yes' and the answer to the second question seems to be 'no'.

The fifth verse says:

"With consciousness be in that conscious space."

The whole process of evolution implied by the thesis may be stated thus: The originally alert and conscious energy, assumes a virtual wall on account of the attractive and repulsive forces of its various vibrations/ tendencies, assumes to be arrested within such tendencies and assumes itself to be inert. Where the vibrations are strong enough and the assumed arrest is almost perfect, it emerges into a 'real' particle, as we now call in physics. From the emergence of such a 'real' particle, we can then trace out the further evolution of the world of matter, of 'substances'. However, where the pattern of the constitutive vibrations is so complex, that it is unable to materialize as such, though the vibrations are strong, such a complex pattern seeks out and gathers, whenever and wherever possible, already materialized particles and builds a gross body, as we saw earlier. Initially on account of such seeking out, and later on account of maintaining an external gross body, it has to necessarily remain active and alert. In more complicated situations, gradually such alertness matures into awareness and fully blossoms into consciousness. It is said that in its original state too it was conscious, though it was not bothered with any task, much less the task of maintaining any complicated system. It lost its consciousness when it got arrested in and as a material particle. However, at a higher level, when its pattern became complex and it organised and started acting upon a gross body, it regained the consciousness, but now burdened with the task of tackling the constant struggle involved in maintaining its link with the gross body.

The one beneficial effect in the rediscovery of consciousness is that such rediscovered consciousness carries with it, intimations of "immortality, eternity and infinity". Along with consciousness it regains a vague remembrance of its original state of being immortal, eternal and infinite. While in its original state it was immortal, eternal and infinite, it cannot be postulated that it was, in that state, aware of such attributes, since the opposites, namely, mortality, temporality and finitude had not yet been experienced. Now, having had the taste of such opposites, it is specifically aware of its immortality, eternality and infinity. The strife it has undergone has given its worth. However, the vague remembrance of its original state gained at the lower level of evolution, instills in it a primordial fear, worse even than the fear of the five elements. Such fear leads to the path of ritualism. The fear is due to remembering an infinite, immortal, omnipotent state, without at the same time identifying itself with such state. Once the sense of such identity develops, fear gets transformed into a longing. Ritualism blossoms into a sort of devotion, expressed in terms of a yearning to regain the lost glory. Gradually, this longing blossoms into determination, called "Vairâgya" in Sanskrit, which is a determination to reject all limiting factors that never originally belonged to oneself. It is characterised as wisdom or Jñànà.

Thus what was pure consciousness, "Pour Soi" in Sartre's words²¹, not conscious of anything specifically, not even of itself, since there was no differentiation as yet, suddenly became oblivious of such consciousness and after a great struggle rediscovers such consciousness, now being self-conscious, conscious of its existence and its own consciousness. Such self-consciousness, when relieved of the need to be conscious of "the other", of the struggle to maintain its 'particularity', then it is said to be in a state of "Bliss".

Why at all should this happen? No answer to this question is proposed here. We have taken just one step ahead of a skeptical position, which declares total ignorance of the purpose of the cosmic process. How significant or insignificant a step it is, cannot be estimated at present.

In contradistinction to what we have stated above, release of energy from a matter particle can never result in liberation from the cosmic process. Such release of energy is not even alert. It is far from being conscious. At the earliest opportunity, it tends to act upon and tends to react with the spatio-temporal objects, seeking conservation within such spatio-temporal system. It has not shed its tendential garb.

The process narrated above is suggested in the very first verse. It declares that a being, which has discovered the path of transcendence, is "relieved of rituals". Such a being has "no symbols, no chanting" and has attained "Godhood". There would be no fear in such state.

The fifth verse explicitly states:

"With consciousness be in that conscious space."

The last line of the eleventh verse says:

"Bliss became the space without identity-smear."

Though, we have freely used the term "evolution" in the above passages, the process is more akin to an assumption or getting locked up in an illusion and then getting out of such assumption or illusion. That is the reason why in certain texts of an Indian School of philosophy, called Advaitic Vèdànta, the theory of evolution is criticised and the theory of illusion is sought to be established²².

CHAPTER 9

From our earlier discussions, we may conclude that liberation is attainable only after a portion of energy has evolved up to human level, since it becomes conscious only at that level and since liberation is possible only after rediscovery of consciousness. Even at that level, merely getting released from the gross body is not liberation. After death, as we would call it, the subtle tendential cage, made of a complex group of tendencies, so intense that they are reckoned as desires, persists. This subtle cage repeats the historic process of organising a new gross body for itself. Therefore, unless the tendencies constituting the subtle body are annihilated, there is no liberation. It further appears that the task of annihilation of desires should be accomplished, while one is still in the gross body. This is so, because, once the subtle cage leaves the gross body, but continues to retain its tendential pattern, the vibrations of the tendencies would be totally preoccupied with, and only with, reorganising another gross body for themselves. The calm and relaxation necessary to accomplish the task of neutralising and ironing out the tendencies would be absent. That is the reason why scriptures insist that one must attain liberation, that is, release from tendencies, even while one operates in and upon the gross human body.

The next question that arises is how to annihilate tendencies.

What were mere tendencies at the lowest level of evolution, have assumed such complexity at the conscious level of human beings, that we have chosen to call them "desires". At the human level, one has to first transcend desires and then annihilate one's innate tendencies. How to perform this task? We already saw the relationship between desires or emotions, generally, on the one hand and the respiratory process on the other hand. We even said that the desire link is the same as the respiratory link. The respiratory link is the link between the life and the material constituents of an organism. We already saw how desires are patterns of preference exercised by an organism in selecting a few from a multiplicity of stimuli. Even at an elementary level of a mere tendency, this explanation seems to be right. A tendency implies a choice, a freedom, which would, in turn, imply the existence or possibility of at least two situations. If I can be in one and only one situation, I cannot speak of any freedom. Only when there is an alternative, I am free to do this or that.

We also attempted to explain the factor on which the pattern of such preference depends. We postulated the inherence of elemental seeds in every unit of matter and in every unit of life, so that there can be a relationship of correspondence between the otherwise two distinct worlds. Respiration links these two. We said that while in matter, such seeds are in elemental modes, in the subtle bodies that exhibit life, such seeds are in sensational modes. This feature accounts for perception. Without perception, the more complex processes of desires, emotions, etc. are not possible.

Thus according to this thesis, desires and all emotional processes depend on the respiratory link. Wherever breath is equally balanced vis a vis both the nostril openings of a developed respiratory system, the emotional processes of the organism in which the system is functional would be very dull and almost quiet. This can be tested and detected. This happens, though imperfectly, during very small intervals when the shift in breathing occurs from one nostril to the other. This also happens during what is called the deep-sleep state.

In the waking state²³, the intellectual and the emotional aspects are operative. In dream, the intellect ceases to be operative. That is why in dreams, emotions act upon the mental data and even upon those stored in the deeper recesses of the sub-conscious without the guidance and control of the intellect, resulting in experiences, which lack coherence, continuity and clarity, resembling a school class-room, without a teacher.

In the deep-sleep state both, the intellectual and the emotional processes come to rest. It is another demonstrable fact that in deep-sleep state, breathing is equally distributed and balanced between both the nostrils; in other words, the respiratory process gets polarised centrally. Thus it may be said that the emotional process itself is made possible only by an active respiratory process, seeking to establish contact with a world of stimuli. The respiratory process establishes such contact only when it is functional in the left or the right cord. When it is polarised centrally, it attains, gradually, a sort of dormancy and slowly loses its contact with the so-called outer world. When it is perfectly polarised in the middle, as it happens in the perfect deep-sleep state, the subject-object and the inner-outer dichotomies vanish.

The link between emotions and the respiratory process is an observable and demonstrable fact²⁴. The changes in the rate of the respiratory process and the corresponding changes in the emotional states are even

commensurable. Though these facts are known to and even made use of by scientists, the further implications of these facts have not been worked out in detail, to form the basis of a scientific theory.

In the deep-sleep state, though total liberation from emotions is achieved, the very valuable consciousness is temporarily lost. This state, there fore, does not prove to be of any use. In order to be useful, it is necessary that even while one attains freedom from emotions, one should retain one's consciousness. One's ability to manipulate one's respiratory process and keep it confined perfectly and totally in the central cord, even while one is awake, can make this possible. Such a state has been spoken of as "sleepless sleep" or "conscious sleep" by Siddhas.

CHAPTER 10

We already noted that Pràna is not breath25. Functinally, what breath is to the gross body, Pràna is to the subtle body. Pràna is energy, pure and simple Every piece of matter has energy. In fact, according to this theory, matter is just a substantial manifestation of energy. Whereover energy manifests as matter, it is inert. It is alert, in the realm of matter, only in the process of manifestation and in the process of change of states, such alertness persists always only for a short duration. Inside a molecule, inside an atom and inside the atomic nucleus, restless activity still persists. However, such activity is highly momentary in the sense that, the nucleus, the atom and the molecule remain stable for a fairly long period, practically unaffected by such moemntary internal activity. As already stated, once a molecule is formed, the intermolecular activity is negligible and the molecule is not affected appreciably by the intra-molecular activity.

Only when life emerges by tendencies forming complex patterns, energy is alert and active for longer durations, the reason for this being the incapacity of such complex patterns to materialise as such. In fact, they never materialise. However, when they acquire stability and do not dissipate, they continuously seek out for material units corresponding to their component-tendences, find them, bring them together and struggle to maintain them in tand as a composite, organic whole, quenching their thirst for manifestation by acting upon and through such units. While the almost-inert energy in the realm of matter is called energy, the ever-alert energy in the realm of organisms is called Pràna or vital energy or 'elan vital'. Breath comprises of molecules of gas and as such belongs to the realm of matter. It cannot be what we mean by the word Pràna must belong to the realm of the

subtle bodies, which in turn construct and maintain the gross bodies of organisms. Somehow, breath and Pràna are inter-related. We shall see the nature of this relationship later. For the represent, it would suffice to note that by manipulating breath, Prâna is correspondingly manipulated. When breath is polarised centrally and thus balanced between the two nostril openings, we may presume that Pràna is also polarised in the central cord of the subtle- system.

We may now recapitulate, even at the cost of being repetitive, a difficult point stated above. Prâna is energy in a complex pattern, unable to materialise, as such, due to the very complexity of its pattern. Not being able to materialise, as such, it still tends to materialise, and struggles to persist in and as such complex pattern, without getting dissipated. In many cases, its struggle fails and the complex pattern dissipates. In a few cases the pattern persists. During such persistence, its vibrations attract matter-particles corresponding to the simpler patterns constituting its complex-pattern. Where it could attract enough particles successfully, a group of particles, grouped in a certain complex pattern, emerges into existence, whose complex pattern exhibits a rough correspondence to the complex pattern, which attracted such particles. The original energy vibrating in the original complex pattern thus constructs a material body, quenching its thirst for materialisation, though it does not materialise, as such. It establishes contact and a relationship with the material body so constructed and actively maintains such body. Only at this level we have chosen to assign the name Pràna to it. Therefore we may say that while release of Pràna from its subtle body is liberation, release of mere energy from an inanimate object is not. In saying so, we must not presume that Pràna is different from its subtle body. The subtle body is nothing but the tendential pattern assumed by Pràna. The process of release of Pràna from its pattern is like a moving object losing its motion and not like the escape of a chick from an egg. The formation and dissipation of a subtle body, as understood here, is at a sub-material level. Terms applicable to and derived from an analysis of the material level cannot be applied to the level of subtle bodies.

It was stated above that energy vibrating in a complex pattern, after successfully constructing a material pattern that approximately corresponds to its complex pattern, establishes contact and a relationship with such material pattern and actively maintains such pattern. How does it establish such a contact?

The process of respiration offers a clue. It was stated at the outset that the presence of a process of respiration is a clear, distinctive mark of life. Can it not be said that only through the aid of air inhaled and exhaled by a living being, its Pràna establishes contact with the five elements? In order to bring together the necessary molecules, varied in composition, to build a heterogeneous body with such molecules, and in order to keep such molecules bound together, the various tendencies comprising the heterogeneous pattern of energy, which is here called the subtle body, have to constantly seek out, search for, draw in and expel the necessary elements. This need has devised the respiratory process in living beings. Breath acts as the vehicle of such tendencies which is the basis of the vogic doctrine that from the pattern of air exhaled by a living being at a given time one may ascertain the element which is predominantly active in that being at that particular point of time.

Though such a respiratory process is established by the necessity of the situation, still the process is not effective in the long run. We already saw that such process gradually leads to a net loss and ultimately fails in its task of maintaining the constructed body. Hence it was suggested that an alternative process should be discovered. Such an alternative process was even explained earlier as being analogous to the process involved in an induction coil. By awakening the Prâna and taking it up along a spiral path, a central magnetic field is created. This is the concept of 'Suli Munai'. Such a magnetic field, by its inherent forces, keeps the cells of the gross body together, not needing any external aid, like food, air, etc. and the same process gets activated simultaneously inside and in respect of every cell that constitutes the gross body and maintains the internal structure and coherence of the cell intact.

This alternative process is called "Prànàyàma" in Sanskrit. This process may be briefly described thus:

 Pràna must learn mobility, independent of breath. It must dispel its assumed inertness, realize its forgotten alertness, cease to depend on the respiratory process and thus snap its connection with the world of five elements.

 Upon regaining alertness, Prâna, flows by itself, through the path called the Suli Munai and creates an energy field.

 Once this flow reaches the tip of the spiral field, then without the aid of air, food and blood, the biological cells of the gross bodies stay together and the system would be conscious, yet sans emotions and sans all other psyschological processes. It would thus be a self-sustaining system, a perpetual-motion machine. How is this performed? The Siddhas have suggested the method of regulation of breath. The exercise suggested has many variations. In one of the forms it is a conscious attempt to stop inhalation and exhalation through nostrils and to pull upwards an air-like vital force from the naval region towards and into the cranium, and again to push the same force downwards to its origin and to repeat this process rhythmically.

It is said that the physical exercise, when practiced regularly over a long period, attended by the necessary psychological aspects of determination and proper imagination²⁶ would result in realization of alertness by Pràna, upon which realisation it is induced to move along the path of 'Suli Munai', thus creating a spiral field and all this at the level of the subtle body as stated above.

How a physical exercise can manipulate the tendencies constituting the subtle body? This important question may be taken up for consideration a little later.

What happens to the biological system when Pràna constituting its subtle-body reaches the tip of the spiral field referred to above? It ceases to depend upon air and food for its sustenance. It can remain so for a considerable duration. In this state, sometimes called a "cataleptic state", the system is fully conscious, though biologically and overtly, the gross body might appear to be in deep sleep or trance. In this state there is no link between the awakened Pràna and the world of five elements. It is free from emotions. There would be no process of deliberation. Bereft of emotions and intellect, the pure consciousness retains only its faculty of will, which is pure, since it has no need to act upon or together with the data and processes of emotion and intellect. At its will, it may choose to re-establish contact with the elemental world, restart its respiratory and other biological processes and operate them within a minimal range. At its will it may resume its cataleptic state. At its will, it may secure total release from its gross and subtle bodies and merge in the infinite space. That would be total liberation. Only a person who wills to help others would choose to stay for a while in the gross body or, at least, in the subtle body alone, even after total liberation becomes immediately possible for him. Such a will to help others is called 'compassion'. The liberated who still chooses to stav in or retain contact with the subtle body, is said to be in "Jìva Samàdhi", a Sanskrit technical term. We need not atempt to understand the full implications of the esoteric doctrine denoted by this technical term.

CHAPTER 11

Now let us examine the verses under consideration and see how they speak of the doctrine of liberation explained in the preceding chapter. The very first verse states that upon reaching the summit or the tip of the path that creates a spiral field, called "Suli Munai", the self is freed from relations, untruth and trickery. In other words, on Pràna reaching such summit, it snaps its relationship with the elemental world, understands that what it had been hitherto toying with, namely, the phenomenal world of the five elements, is simply not there and is simply not true. It realizes that by assuming to be true, what never was true, it had been a victim of a positive trickery²⁷. The first verse adds that the self realizes the path of the spiral field to be its safe harbour. In other words, it realizes that by confining itself to the spiral field, it can sustain its bodies - both the gross and the subtle - without having to lose hold of them eventually. The path of the spiral field is the safe harbour for its continued phenomenal existence, even after the myth of phenomenal existence explodes. Apart from consciously confining oneself in the middle of the three subtle cords, no other ritualistic practice is recommended or is necessary. No special knowledge is required. After the respiratory link with the elemental world is cut off, the selfregains its original state of pure consciousness and would thus be able to have all perceptions, as though a third eye had blossomed in it. In that state, it is omnipotent. That is a state of godly existence.

The second verse declares that upon the Prâna reaching the tip of the spiral field and confining itself to the small tubular path between the eyebrows, leading to the centre of the cranium, the processes and faculties of emotion and intellect are done away with, the theory of the five elements is realized and the respiratory link is cut off. The point between the eyebrows is described as the sixth of the shrines. This refers to the doctrine of six chakras. In yogic literature, these centres or shrines are called:

- A) Mùlàdhàram.
- B) Svàdhisthànam.
- C) Manipùrakam.
- D) Anàhatam.
- E) Vis' uddhi.
- F) Ajñà.

Without going into the finer details of this vogic doctrine, we may just add a rider here, that these six centres are not merely points in the gross, physical body, but are six points of interaction between the subtle body and the gross body. We already saw that a complex pattern of tendencies may attract gross molecules that resonate to the simpler patterns comprising it, may build a gross body with such molecules and may act upon and through such gross body. The six chakras are the points of interaction between the complex pattern and the gross body. The first five, from Mùlàdhàram. to Vis'uddhi are elemental points, while the sixth or the Ajñâ is the transcendental point. In other words, each of the first five points represents one of the five elements and the sixth is a point of transcendence, where all the five elements are transcended. The sixth is the point where the original pure consciousness, as pure will, starts its descent into and through the world of five elements. It is the point where there is not yet any interaction between the subtle and the gross bodies, but that the subtle and the gross are simply linked together and made ready for interaction. From there, Pràna descends further, encountering the five elemental points. This does not imply that in its descent, Pràna creates, one by one, the five elemental aspects, from the Space down to the Earth. The descent is just the mode of establishing, step-by-step, relationship with the already-existing elemental world. It is thus an epistemological process. It is not a metaphysical process of creation.

The third verse speaks of a cosmic vision, which unfolds inside the biological system, especially localized in the region between the eyebrows, which was described as the sixth of the shrines. The unfolding of a cosmic vision is an event in the ascent of Pràna from the sixth transcendental point. This theory of cosmic vision is explained in the fourth verse.

The fourth verse opens with a reference to the inner sky. Though the concept of inner sky was dealt with earlier, its full import was not brought out then. The very phrase "inner sky", implies that it is distinct from the sky perceived, in our normal experience, as the outer. In the sixth point, that is, in the transcendental point stated to lie in between eyebrows, "Pràna" starts its descent into the phenomenal world. On approaching Vis'uddhi, which is an elemental point, representing the element space, and stated to be in the thoracic region, it encounters the sky. In other words, it establishes contact with what it then experiences as the sky - the outer sky, as we know it. As it descends further, it establishes contact with the other four elements, one by one, up to the Earth, represented in the center called the Mùlàdharam stated to be at the bottom of the spinal cord and just above the rectum.

In contradistinction to this process, when Pràna ascends upwards, from the sixth transcendental point, it enters what is called in the yogic literature, "the inner sky".

Space is the matrix of the entire phenomenal world. Every object of the phenomenal world is necessarily in space. No part of the phenomenal world can ever be imagined to lie outside space. This is true of all incidents of phenomenal existence. The term "phenomenal" means "perceivable through sense organs"²⁸. If this definition is given to the term "phenomenal", then the outer sky, explained above, is the phenomenal sky or phenomenal space, which is a necessary condition and ground for the existence of any phenomenal object, whatsoever. On the other hand, the inner sky is the non-phenomenal space. The non-phenomenal is that which cannot be experienced by or through any of the five sense organs. This is a necessary implication of the doctrine of five elements. Each of the five lower centres represents one of the five elements, and in turn, one of the sense organs. When these five centres are transcended, none of the five sense organs could be of any use and none of the five elements would be present. Therefore the inner sky or the non-phenomenal sky, by its very nature, is not perceivable through any of the five sense organs. The inner sky is not elemental. We know now that the five elements are the five forms of phenomenal appearance of one underlying principle, which we may choose to call the primordial energy. The inner sky transcends the five elements and is therefore just an ocean of primordial energy, which is not manifest in any of the forms known to the phenomenal world. The primordial energy cannot be described²⁹ in any of the terms applicable to the phenomenal world and it is not one of the five elements, which we called "energy". The primordial energy manifests as space, which, in turn, vibrates as energy, thus forming virtual and real particles, which are not yet substantial, but are merely formative. Such vibrating formative particles emerge into substantial existence. In the simplest mode, they appear here and there as solids, liquids and gases. In more complex situations, they appear as units, at once comprised of all the five elements, thus giving rise to

life or the realm of organisms. The primordial energy is thus the seed of all manifestations. The inner sky or the non-phenomenal sky is just an ocean of such primordial energy. The term "ocean" may suggest a magnitude, a spread. However, since the inner sky is unmanifest, it cannot have any magnitude. The necessity to use some term, at least, to denote what is indescribable, excuses such errors.

This non-phenomenal sky, however, is not, and need not be, non-sensible. This may seem paradoxical. It is not so. Earlier, it was suggested that an extrasensory perception is either one of the five sensations or a combination of the five sensations, though not presented through the medium of any of the five sense organs. The fourth verse declares that the inner sky is made of light. It also adds that in the inner sky "sprouting of vibrating seeds unfolded in its sight". These statements suggest that the inner sky is "sensible", though non-phenomenal. In other words, the suggestion is that the inner sky is perceivable as an extra-sensory perception, that is, not through any of the sense organs ("sans sense organs"). It might seem outrageous to suggest that sensations are more fundamental than even the five elements. Unless the sensations are fundamentally present in the five elements, no phenomenal perception would become possible, as it was explained earlier. Thus it is logically possible that sensations are more fundamental than the five elements.

When it is said that the inner sky is perceivable, though, not through any of the sense organs, it is implied that its non-perceivability through the sense organs is on account of the inherent limitations of the sense organs. We all know that the sense organs have threshold-barriers. For instance the human eyes can perceive colours only within the range, popularly known as the VIBGYOR - the spectrum of seven colours, Violet to Red. We know of ultra-violet rays and infrared rays, which are perceived only through sophisticated apparatus. The sensations presented by the inner sky are much beyond the range of our sense organs, limited by their threshold-barriers. Such sensations, however, are only five, corresponding to the five elements. Our thesis does not accommodate a sixth type of sensation. In the transcendental state of Pràna, direct intuition dispenses with the need to perceive only through sense organs. The limiting factors are absent in that state. What lie beyond the normal threshold-barriers are perceived directly and without the mediation of the sense organs. It is quite natural that such beatific vision leads to the three-fold state of bliss, benevolence and birthlessness. The need to draw in from the phenomenal world is totally absent in that state. Such a beatific, non-phenomenal vision is described in the fourth verse as "the unseen light that dispelled all darkness". In that state, it is said, that there would be no planetary aura, the meaning of which can be discussed a little later.

The fifth verse speaks of a process, which cannot be easily understood. It speaks of the process of ascent. It states that Pràna has to climb through twelve steps before it reaches the fifth centre. We already saw that twelve is a significant number, denoting the two subtle cords supposed to run on either side of the spinal cord and the ten diversions into which these two branch off. That is the specific reason why they are referred to as "the ten plus two" cords in the Tamil verse.

The process spoken of in the fifth verse is in fact the yogic exercise sometimes called "Brahma Viddhai" and sometimes called "Akàsa Viddhai" in Tamil. The Tamil term "Viddhai", is generally considered to be a colloquial version of the Sanskrit term "Vidyå". However, the Tamil term "Viddhai" has a wider connotation, as it means 'a lesson' or 'knowledge' at times and 'technique' at times. In the phrase, "Brahma Viddhai" or "Akàsa Viddhai", both meanings are appropriate, as we would soon see. In this exercise, the aspirant is called upon to imagine:-

- a) that a powerful force, like a lightning, strikes the center point of his head, and enters into his body;
- b) that two sparks of light radiate from the two eyes and merge with the lightning that so entered, such merger taking place in or near the spot called the sixth centre or "Ajña chakrà", said to be located in the forehead

region, in between the eyebrows:

- c) that after such merger, the unified light force descends down through the other five centres;
- d) that such descent comprises of twelve steps an that at every step one of the inherent faculties of the human physiological model is conquered or buried;
 - e) that when the light reaches the first centre called Mùladharam, it emits two hooks, picks up a seed-like entity (called "Kundali" or "Kundalini" in Indian literature, supposed to lie dormant in the region corresponding to Mùlàdhàram) with such hooks, and ascends thereafter, carrying such seed;
 - f) that the ascent is through a glowing tube, running vertically parallel to and behind the spinal column;

- g) that such ascent also is through twelve steps;
- h) that during such ascent, Pråna gets settled in the central spiral field, called "Suli Munai";
- that when it reaches the region behind the eyebrows, the seed is dropped, which falls down rapidly back to its original location;
- *j*) that the light force quickly follows the seed, repeats the process of picking up the seed with its hooks and once again ascends up to the sixth centre;
- k) that, at this stage, the seed unfurls into a fibrous light, and ties the mind ("Manas" in Sanskrit), that now appears to be like a ball;
- that, within a moment, a cosmic vision unfolds, with the sun and the moon on either sides and myriad stars all around;
- *m)* that at once an invisible hand guillotines the aspirant's head, and places it by his side;
- n) that now the aspirant is one with the cosmos, pervading and permeating the entire cosmic spread or Âkàsa.³⁰

The whole process is stated to be imagined by the aspirant. Here the word "imagination" is not used to denote any fanciful or wishful thinking; it means "forming an image", a mental image, of course. Every mental image causes a specific set of ripples or vibrations at the subtle level of the organism. Thus the technique of manipulating the core tendency with the aid of imagination or image-formation is recommended here. Coming back to the fifth verse, we now understand the phrases like:

- A) "ascending the twelve steps";
- B) "entered the space";
- C) "a nominal mind";
- D) "ascended again".

These phrases denote the different stages of the exercise narrated above. However, in the same verse, there are three more phrases, which require further scrutiny. Those phrases are:

- E) "transcending the four";
- F) "returned with the four earned in the space";
- G) "to speak with its kind".

The phrase, "transcending the four" suggests that by the process of this exercise, the four elements, namely earth, water, fire and air are transcended. What about the fifth element, "space"? It cannot be easily transcended while one retains one's phenomenal, that is, bodily existence. The transcendence of the four elements is accomplished in the process of ascent. After such ascent, it is said that it "returned with the four earned in the space". What are these four, which are earned in the space? Again, these are the same four elements, namely, earth, water, fire and air. While the four elements transcended in the ascent were experienced through the respiratory link only, "the four" earned in the space, means the same four realms, however experienced through the spatial link. The statement seems to be obscure, complicated and esoteric. However this doctrine has been indicated occasionally, by great Siddhas. Now let us try to understand this difficult doctrine in simple terms.

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Let us now recollect the doctrine of the respiratory link, associated with what is stated to be the desirelink. In that doctrine, it was suggested that at any given point of time, the respiratory process of a biological system is dominated by one of the five elements. For the sake of clarity it may be reiterated that the process of respiration keeps shifting from one nostril to the other at regular intervals, that the time during which it is oriented in one of the nostrils may be divided into five unequal sub-periods, and that during each such subperiod one of the five elements governs the respiratory process. May be, the element earth governs the system during the first sub-period, water the next sub-period, fire the next sub-period, air the next sub-period and space the last sub-period. The fifth sub-period is unique. It does not conform to the pattern of the above-mentioned arrangement. During that period the experiencing system is more or less dormant or at least vague and hazy. It is as if one sleeps with eyes wide opened and other sense organs apparently functioning. That is the period during which the respiratory process itself is at the minimum, and balanced between both nostrils. The reason for this would become clear soon.

The esoteric doctrine suggested is briefly this:

- 1. Up to the level of life, what accounts for the cosmic linkage of substances is any one of the first three elements, namely, earth, water and fire.
 - 2. The characteristic feature of living beings is that the fourth element, "air" accounts for their cosmic linkage; In other words, living beings are linked with the cosmic spread via respiratory link.
 - 3. Even at the human level the linkage is respiratory.

4. Though there are five sensations corresponding to the five elements, we normally experience through such five sensations, only four of the five elements. We never experience space or Akàsa, as such. We do experience "spatiality" of objects, but not the space itself. Space still remains an abstraction to us. Thus our experience is limited to the four realms of earth, water, fire and air, as stated above. Could this be the basis for the Aristotelean doctrine of four elements?

5. It is better to be reminded here that our four-some experience of earth, water, fire and air is exclusively through the respiratory link. In other words, our foursome experience is through the fourth element.

6. To expand the four-some experience into a whole-some experience is the aim of the yogic exercise described above. In order to become a system of whole-some experience, one has to cross two stages. The first stage is to shift the locus of experience from the arena of air to the arena of space. To be precise, one must first learn to get into space-linkage and experience earth, water, fire and air through space-linkage, instead of and apart from experiencing them through air-linkage. After the first ascent described in the exercise, such a shift in the linkage is stated to occur. After this stage the aspirant experiences, still only the four realms fo the first four elements but now through the two linkages provided by the fourth and the fifth elements,

shifting the locus at his will. In other words, upon one transcending the first four elements, one descends again, however after having earned the capacity to experience the usual four elemental realms through what may be called the spatial or Akàsic link, which ought to be different from the ordinary experience obtained through the respiratory link. The second stage of expansion is to experience space itself, as such, and expand the hitherto four-some experience into a five-some or whole-some system. It is stated that this expansion is achieved only in the process of the re-ascent and that too, after transcending the fifth element space, i.e., the phenomenal space. Such a whole-some experience encompasses all the five elements, as such. One who experiences this no longer needs the respiratory link, which again is the same as the desire-link. The phrases in the second verse suggest this doctrine, and imply that upon experiencing all the five elements, physically, the desire-link is cut off.

Immanuel Kant, after a process of strenuous dialectics, asserted that every system is limited by its own constitution and that any attempt to transgress the limits prescribed by such constitution leads only to illusions and fallacies. However, he failed to appreciate the possibility of an evolutionary leap accomplished in borderline cases. Human biological system is one such borderline case, where not just one evolutionary leap but two such leaps are stated to be possible, as we just saw in the previous paragraph.

One rider is added to this doctrine. The yogic science says that it is extremely difficult and even almost impossible for any human being to accomplish both the evolutionary leaps within the limited span of one's normal life-time. After the aspirants transcend the four elements and take the first evolutionary leap, they are not straight away liberated. Such aspirants, after leaving their gross, mortal frames, still retain their subtle, tendential cages and as such manifest as higher, evolved beings, named differently in different religious systems, in the realm of space or Akàsà, still phenomenal. After some time, may be even in terms of life-spans, when they become more and more ready to give up their core tendencies, they are once again pushed down to the grosser plane, destined to be born as human beings. Only in this birth, they may perform the most difficult task of cutting across the final barrier, transcending the fifth element, namely the phenomenal sky or space and entering the transcendental or what was earlier called the "inner sky".

The persons so re-born for the purpose of accomplishing the final yogic task, are declared "the twice born", by certain Indian scriptures, though this concept has been thoroughly misunderstood and misapplied to persons born in a particular caste. it is not at all necessary that such persons be born in any particular caste. It is equally incorrect to assume that every person born in a particular caste is a twice-born. One more clarification is necessary. The twice born is not a person who has taken birth just two times; not even one who has taken birth as a human being twice. He may be a person who could have taken birth many times, even as a human being. He is a person who, in his evolutionary career, got graduated to manifest in the realm of Akàsà or the phenomenal space, and now who has descended again to the grosser plane, for performing the final task of transcending the phenomenal space and attaining total liberation.

In fact the practice prevalent among a certain sect of Indians, of doing 'Brahmopadèsà' to the children and conferring on them the title of 'the twice born' implies the esoteric doctrine stated above, though this practice stems from two misconceptions, namely, that the concept of the twice born is inter-linked with the caste system and that only male members are considered to be the twice born. Both are erroneous. The twice born need not be one who is born in any particular caste. The twice born may be a male or a female. For our purposes it is enough to note that scriptures rightly recommended 'Brahmopadèsà' or initiation into 'Bramha Vidyà' only to the twice born.

Coming back to the mainstream of our thesis, let

us see what the exercise called "the Brahma Viddhai" implies. The exercise indicates that the vital, lifeforce is awakened from its slumber and taken up. It gradually transcends the first four elements, one by one, then enters the realm of the fifth element, that is, the phenomenal space, then again gets pushed down to its point of origin, then once again it is taken up and now made to transcend all the five elements, even the phenomenal space, and finally initiated into the transcendental space, all set for attaining total liberation. Thus this exercise is just a reminder to one who is the twice born; it is a reminder of the task that has to be performed by him/her. Therefore, this exercise has to be taught, only to those who are unmistakably identified as the twice born. That is why the scriptures say that this exercise should be learnt only from an adept or Master, called "the Guru". The exercise may not be of any use to one who has not even accomplished the first task of transcending the first four elements, even if such a person practices this exercise regularly. This exercise is meant only for the person, who, after successfully having accomplished the first task of transcending the first four elements, got graduated as a higher, spatial being, called differently in different religions, privileged to have experiences through spatial linkage, and has now once again taken birth for the second time; when such a person practices this exercise, he gets reminded of his already having transcended the twelve faculties and the four-some existence of an air-dominated respiratory system of 'ten plus two cords', his having entered the realm of the phenomenal space and his having born again in and as a four-some system, however, capable of expanding into a whole-some system.

There is no use of the intellect learning the secrets of life and birth. Such secrets must be learnt by that which persists through successive lives and deaths. Hence any lesson relating to the process of attaining liberation should be addressed to the vital force, which ultimately sheds off its tendential garb to attain liberation. We are familiar with the clinical practice of repeatedly re-creating a memorable event that had happened in the life of a patient, who is suffering from amnesia, in order to rekindle memories of that event in the patient, and thus to bring the submerged memories from the depths of his sub-conscious to his surfaceconsciousness. The yogic exercise of Brahma Vidva also repeatedly recreates a memorable event in the past history of a twice-born aspirant, to make him realize his task in this second birth. The exercise reminds him of his having already transcended the twelve faculties; of his having expanded his experiential capacity so as to intuit sensations through space linkage also, apart from the normal experiences through the respiratory link, thus having cut through the barrier imposed by his four-some constitution determined by an air-dominated system of 'ten plus two cords'; of his having entered the realm of the phenomenal space; of his manifesting there as a highly evolved spatial

being; of his now having born again as a human being, again constituted by an air-dominated system of 'ten plus two cords', only in order to realize his past achievement; and, of his task now to take the final step towards transcending even the phenomenal space and becoming a wholesome experiential system ready to merge with the cosmic spread of the transcendental space, earlier referred to as the inner sky.

In the course of the fifth verse, a suggestion is made that during the process of re-ascent undertaken in the second birth there would be no conflict between the will or the core-personality and the articulating mind. This position is indicated by the phrase "without dissension". It is also stated that no "gymnastic pride" would be present in this stage. Absence of dissension and gymnastic pride are thus stated to be the characteristic features of the twice born. Since such aspirants had already ascended once, but fell down only to retrace the same path now, he does it or should do it with utmost humility, without any sense of pride. It is not correct to assume that these characteristic features would be present in a twice born, right from his/her birth. Even in such birth, only after that person gets back the memory of the earlier ascent and the fall, such person would exhibit such characteristic features. This may happen sooner or later, after such person takes such second birth. This may be the reason why many of those who came to be recognized as holy men, had been ordinary persons till a particular turning point came about in their lives.

The phrase, "to speak with its kind", implies that one who takes such second birth, regains one's space linkage, after the turning point in one's life and after one has started the re-ascent; such space-linkage gives that person the capacity to experience the "subtler beings" of the phenomenal space and to communicate with such beings. In fact, between his last birth as a human being in this world and the present second birth, he himself had been such a being in the subtler realms of the phenomenal sky. This probably accounts for deeds that are called "miracles".

Now we may proceed to analyse implications of the sixth verse. It speaks of the nine gateways to the human physiological system, as known to everyone the two eyes, the two ears, the two nostrils, the mouth, the anus and the urethra. It also speaks of "the tenth gateway", not known to many. It is said to be the minute opening that leads into the passage, which is supposed to run between the sixth centre and the ultimate summit. Thus, it belongs to the subtle body, since the sixth centre is the point where the subtle and the gross bodies are just linked together and made ready, that is, paralleled, for further interactions.

The tenth subtle point is said to have a counterpart or point of reference in the gross bodies. It is at times identified with the lower tip of uvula, which is a small tongue-like structure, hanging down from the inner, hind portion of the upper jaw, inside the mouth. Some others identify the tenth opening with the lower tip of the pituitary gland, while some others identify this with the pineal gland itself³¹. Whatever and wherever it might be, it is here stated to be the one leading to the chamber impressed with codes, which are "organic seeds of sensational modes".

We already saw, how a complex group of vibrations, though unable to materialise as such, builds a gross body by attracting vibrations, which correspond to its simpler parts, and which have already materialized. It then acts upon and through such gross body. Such complex group of vibrations or the subtle body may or may not be successful in this process. Yet their persistence is independent of the success or failure. Thus they are, figuratively, seeds from which gross organic bodies may sprout. Hence they are referred to as "organic seeds". We also saw that though matter and life are both composed of the five elements, such elements are inert in matter and alert in life as organic seeds. In molecules they are in the elemental modes and in organic seeds they are in "sensational modes". This is due to the need for the latter to be alert and active as already explained. The sixth verse, further suggests that the aim and goal of life is total release of the "conscious energy" from the subtle form that it has assumed in and as an organic seed, and its merger with the primordial ocean of the undifferentiated energy, which is referred to as the transcendental space are Akcsa.

The seventh verse, in its original Tamil version, appears very complicated in its structure and phraseology. In general, it deals with the virtue of speechlessness and the vice of verbalism. In common parlance, the term "speech" denotes only meaningful, communicative sound. However, in yogic literature, the term, generally, has a wider sense. It includes all forms of verbalism: verbal formation of ideas, thoughts and imaginations. In many cases, formation of an idea, thought or imagination is a result of or is at least accompanied by a silent, verbal speech of the mind, as if it gives to itself some suggestions. When one is asked to imagine a golden mountain, one would find that the formation of such a mental image is either preceded by or brought about by or accompanied by a silent recital of words known to one as denoting gold and mountain. Even when an aspirant sits for meditation with the resolve not to have any thought or idea, he would soon discover that he has been silently and repeatedly suggesting to himself verbally, "I should have no thought, etc.". It is very difficult to avoid verbalism. One way to avoid verbalism is to produce meaningless and non-emotive sounds. In other words, one should

produce a sound, which does not bring about or which is not accompanied by, any image or feeling. Such sound should thus be contentless, without any denotative, connotative, communicative, emotive or expressive content. The yogic literature identifies some such sounds and even correlates them to the five elemental centres. They are called seminal syllables or seed-syllables, called "Bijaksara" in Sanskrit. For instance, "Lam, Vam, Ram, Yam, Ham" are indicated as five such seed-syllables, corresponding respectively to the centres called Mùlàdhàram, Svàdhisthànam, Manipùrakam, Anàhatam and Visuddhi, representing in turn, earth, water, fire, air and space, respectively. That they are seed-syllables is an important aspect of this esoteric doctrine. We already saw what the term "seed" means or implies in the context of the phrase "organic seeds". A seed implies a transition from the subtle level to the gross level. Understood in this sense, a seed-syllable is one that activates one of the centres, and hence produces vibrations in the subtle and the gross bodies at the same time and at a particular level. For instance, we may say that the seed-syllable "Lam" produces vibrations in the subtle and the gross bodies at the level of the element earth. We already saw that the five elemental centres are points of interaction between the subtle and the gross bodies. It is said that by repeatedly and silently chanting a seedsyllable, which acts upon the subtle and the gross at a particular elemental level, one's consciousness can gradually shift from the gross to the subtle through the link at that level. Instead, if an aspirant indulges in verbalism, he can never be stationed in the middle path but he would be operating only through the respiratory link. This is so, even for those who are twice born. This is the implication of the seventh verse.

The eighth verse explicitly reiterates the theory of six centres, the ascent of Pràna and the process of transcendence, which were derived from the suggestive phrases found in the fifth and the sixth verses. It states that when one transcends three "spaces", one finds an entrance where three passages converge, and which is the first "space". The three spaces to be passed through are those between the first four centres - the fourth space between the first and the second (Mùlàdhàram and Svàdhisthànam), the third space between the second and third (Svàdhisthànam and Manipurakam) and the second space between the third and the fourth (Manipurakam and Anahatam). After crossing such three spaces in its ascent, Prana approaches the fifth center, namely, Visuddhi. It is said that at this point three passages converge. Such three passages are the left, the right and the middle respectively known as the Ida, Pingala and Suli Munai. The implication is that after this point there will not be any three-fold division and thereafter there will be only one path. At such convergence and beyond, lies what we earlier chose to call the phenomenal space or the outer sky/space, between the fourth and the fifth [Anahatam and Visuddhi]. This is referred to as the first of the spaces. After reaching this point of convergence, one transcends the element "air", manifests as an evolved being, called differently in different religions and then takes birth again as the "twice born" human being, now to transcend all the five centres, including the phenomenal space, to take the final evolutionary leap into the transcendental space and merge with the ocean of the primordial energy. It appears that while transcending the elemental earth, water and fire and the corresponding there centres, the ascent is through the three-fold path - the Ida, Pingala and the Suli Munai constituting such a three-fold division. It is said that the further ascent to transcend the fourth element air and its corresponding centre is through a unique pathway, not having any three-fold division. This feature accounts for the need to polarise Pràna in the middle path, so that a biological system might transcend its air-dominated, four-some constitution and expand further. The exercise of polarising breath equally in both the nostrils, would in due course bring about the polarization of Prâna in the middle path, at the level of the subtle body, making further evolutionary leap possible for the border-line biological system, namely, a human being.

The eighth verse clearly states that the transcendence of the fourth element is through a singular path, in which the three paths of the left, the right and the middle converge and such transcendence elevates the being to the level of the phenomenal space, called "the first of the spaces" in the verse. Then one has to transcend the phenomenal space too. For such transcendence, Pràna is stated to ascend through a minute inlet, which was earlier referred to as the tenth opening in the sixth verse. Such ascent initiates one into speechlessness or absence of verbalism and establishes the spatial-link, in addition to the normal respiratory link. When Pràna settles down in such a singular path, discarding the three-fold system, it is stated to have achieved a one-pointed consciousness.

The ninth and the tenth verses describe the state of the being that has transcended the phenomenal space. Such a being is said to be in a state known in yogic literature as "Samàdhi". In that state, one experiences the very space itself as an ocean of vibrations, figuratively stated to be the uprise, surge and dance of Pràna or the primordial energy. There is no longer any fear of elements. The experience is immediate and not through the mediation of the sense organs. The phrases in the middle portion of the ninth verse suggests that in this state, one's experience would be comprised of only two out of the five sensations, being the sensations of sight and sound, the other three, namely, olfactory, tactile and taste sensations not being present distinctly. The complicated phrases suggest only this esoteric doctrine and they do not convey any simpler meaning. Of course, when we consider that the experience at that transcended stage is a direct intuition of the space itself, which is the spread or an ocean of energy dancing/vibrating rhythmically, the doctrine that such intuition is comprised of light and sound alone seems perfectly all right. Such light and sound, not being intuited through organs limited by the threshold-barriers, include very high frequency and very low frequency vibrations, not ordinarily experienced by us. In Sanskrit scriptures there are references which imply a certain correspondence between the five elements on the one hand and the five sensations on the other hand, suggesting that the element earth is linked to the olfactory sensation, water to taste, fire to tactile, air to auditory and space to visual. This seemingly esoteric doctrine implied by the ninth verse just suggests that in the transcended stage, the first three sensations corresponding to the first three elements are absent. The fourth sensation remains till the exalted being retains its physical body with its respiratory system. After total liberation and release from the gross body, the subtle-cage already having been dismantled, Pràna is just "light" merged in the ocean of the vibrating energy, without even the dichotomy of the experiencing system and the experienced sensation. The tenth verse declares that in spite of the truth being revealed in scriptures, the people are ignorant of the truth. They fail to see the spiritual path beckoned by the scriptures. This is so, because one whose Pràna is still lingering in the 'ten

plus two cords' of the subtle system, does not see the real path, and does not experience the metamorphosis which occurs in transcending the routine twelve cords. Only when Pràna transcends the routine path and gets settled in the middle path, as stated above, one understands what real worship means. Till then, one misunderstands the spiritual prescriptions and indulges only in empty ritualism. Only after transcendence, one realizes that real worship is channelizing Pràna in the middle path. After such transcendence, one is free of "time", "planets" and "plurality". Such a person stands outside the process of time, having seen and attained the state of permanence. Such a person is not affected by planetary influences. The suggestion is that only so long as one maintains the respiratory link between oneself and the universe of the five elements, one is subject to the influences of the planets, as detailed in the science of Astrology. The planets can have no effect on a person who has cut off such link. To such a person the plurality of appearances is only a deceit. Having seen the identity of everything and having settled in "eternity" or "timelessness", such a person stands above the ethical polarities of the good and the bad. Such a person, who has cut off the respiratory link, has at once discarded the way, which leads to the cycle of death and birth. A person who in his "second birth", in the sense explained above, accomplishes the final yogic task of transcending the sixth centre, does not come back to the phenomenal world once again after leaving his gross body.

The statements in the eleventh verse are curiously worded in first person. In that verse, the author narrates his experiences when he reached the threshold of total liberation. It describes what happened to him in his "second birth", in the sense explained above, after he had transcended all the six centres, after he had transcended the illusion of his phenomenal existence and when for a while he chose to remain in his physical body. We are given to understand that such a person has discarded the respiratory link and has thus escaped from the cycle of death and birth; he is above religions, rituals, logic, possessions, sleep, pleasure and pain. Such a person rests only in wisdom, which is his real domain. Such a person does not have an oscillating mind. At this stage when the final task is accomplished, "bliss becomes the space without identity-smear". He becomes one with the space, which is an ocean of bliss or ananda and he no longer retains his identity. There is not even a trace of any identity or particularity that he had hitherto assumed.

The final, twelfth verse declares, "Existence is phenomenal". The first phrase in the Tamil form of the verse just means: "the name of a vital drop of energy is its manifestation". This means that a drop in the ocean of primordial energy gets its particularity or identity through its manifestation; or that it gets manifestation on attaining particularity. This was explained in detail above, when we saw how a vibrating pattern either materializes or builds a material body for itself. This is what is implied when it is said that existence is phenomenal. "Phenomenality" means, "capable of being perceived through sense organs". Everything that is in the realm of the manifested is so perceivable, and hence phenomenal. Anything non-phenomenal belongs to the realm of the unmanifest. Existence, as an individual, as a living being or a material body or unit, is phenomenal. In other words, unless a thing or unit is perceivable through at least one of the sense organs, it cannot be stated to exist, substantially, though it may exist formally, as explained above. To this extent, empiricism is true. However the realm of the unmanifest cannot be non-existent. It does exist, though formally, and it is perceivable, though not through any of the sense organs as already explained above.

The next phrase in the twelfth verse states, "wisdom is Guru or the guide". The term "guru" in Sanskrit means, in one of its usages, a master who guides a pupil through the path of spiritualism. In this verse such a concept is depersonalised and the Guru is identified with "wisdom". What the author means by the term "wisdom" is explained in the immediately following phrases:

"Life-principles are twelve. The first of the four, when enshrined in such twelve, wisdom becomes the Guru."

We have already seen that Prana takes ten diversions while being active in the two cords that are the left and the right, at the level of the subtle body. Such ten diversions and the two cords are referred to as the twelve in this verse. The number four denotes the four states, namely the waking, dreaming, deep-sleep and the fourth state. The first of these four states is the waking state where one is fully conscious. The verse suggests that such consciousness of the waking state should be retained while Prana travels in all the twelve paths referred to above. In other words, the fourth state called the state of "conscious sleep" emerges when one's consciousness, which normally becomes vague and dim in the second state and totally absent in the third state, is fully retained throughout. Such consciousness itself becomes the guide or the master, the Guru to oneself. With such guidance from what is reckoned in esoteric literature as the inner spirit, but what is here explained to be the consciousness imbibed in all the states of existence, the great sage Mànikkavàsagar reached the tip of the spiral field and got stationed in the unmanifest space. The verse adds that he is the sage who rendered the great poetic spiritual poems, the collection of which is known as "Tiruvàsagam" in Tamil literature, and that he rendered such poems when he still lived in this world, "bodily". Thus an important clue is given here, suggesting that the twelve verses now under consideration, which do not form part of "Tiruvàsagam" might not have been rendered when the sage was still living in the gross body. The implication is that, in his "second birth", the sage, after regaining the memory of the experiences that he had had upon transcending the four elements in the earlier births, and while he was still in his gross body, rendered the verses that are contained in the collection called "Tiruvàsagam", which verses inspire and guide the multitude and show them the path of pure devotion and surrender. However, after performing the ultimate spiritual task in such second birth, namely, the task of transcending the fifth element of the phenomenal space and after getting stationed in what is called here as "the transcendental space", retaining his subtle body even after discarding the gross, out of compassion, the sage has chosen to give his transcendental experiences in the form of the not-so-popular twelve verses that are dealt with here. The contents of these twelve verses may be useful only to spiritual aspirants. It is declared that the one who understands, realizes and practices the principles set out in these twelve verses, would certainly transcend and escape from the cycle of death and birth. The last line in the verse says that those who do not realise the operation of the transcendental immanence would necessarily take births again. The operation of what is referred to here as the "transcendental immanence" is the secret of one retraining one's gross body for a while, even after one has dismantled, figuratively, one's tendential, subtle garb. In fact, in Tamil language, the ultimate god-principle is denoted by the term, "Kadavul", which means "transcendental immanence".

Now we are able to understand why there is a controversy among certain Tamil scholars about the authorship of the twelve verses now under consideration. The popular and scholarly opinions are that these verses could not have been written by the same Manikkavasagar who wrote the great work, "Tiruvàsagam". It is so argued on the basis of the striking dissimilarities between the style and the form of the language employed in the two works. It is possible that while "Tiruvàsagam" was written by the sage himself at an earlier stage of the spiritual journey, these twelve verses were rendered by him at a later stage; may be after he had attained "Samàdhi", and centuries later, by inspiring another living person who had attuned himself to a certain spiritual frequency. In other words, these twelve verses would have been brought out by the sage through the mediumship of another person. The style and the form of the language are, hence, bound to be different from those adopted by the sage himself at the earlier stage, may be, centuries ago. The possibility of there being slight distortions in the ideas and phrases received, due entirely to the inadequacy of the medium, cannot be ruled out. While the world-view of the sage unfolds in the first ten verses, the eleventh verse carries a personal note where the sage narrates in first person his experiences and the twelfth verse discloses the identity of the sage, as the one who had earlier lived as Manikkavàsagar. This is the scheme of the twelve verses of wisdom.

EPILOGUE

The result of the spiritual journey, as presented above, may in prospect, appear uninteresting, that in order to conquer death one must abandon one's desires and tendencies. One may, in haste, think of the final state as an almost useless, coma-like state of existence. That, of course, like any pre-experiential synthetic judgment, may not be conclusive. Sages who claim to have attained such state, which is called "Anubùthi" in Sanskrit, meaning, approximately, "para-physical", have hailed it as the blissful, sublime and permanent state. There is no ground to suspect their veracity.

Since sense organs and the capacity to intuit sensations through such organs are features peculiar to living beings, any attempt to confine existence only to entities that are capable of being intuited through sense organs may not be correct. Fortunately, the world-view presented above is free from this error. It recognises non-phenomenal existence and transcendental cognition. It reconciles non-theistic absolutism with theistic pluralism. It does contain certain postulates, which have not yet been conclusively established as certain knowledge in the manner science would want them to be established. However none of such postulates can be termed illogical or unscientific. Want of proof can never invalidate a theory. Nothing stated above was a result of an anxiety to justify or defend any dogma or any particular school of thought, though the world-view presented above embraces the substantive propositions postulated in major schools of philosophy. both eastern and western. No proposition in this work appears to be socially counter-productive, though in search of truth that ought not to be a consideration.

One thing is clear from the above discussion. The world-view presented above cannot be ignored or

brushed aside by any serious student of philosophy. This world-view is liable to be subjected to critical evaluation by all those, who would venture to contemplate about the origin of the Universe, the origin of life and the meaning thereof. That it is worthy of being so considered is enough justification for the time and energy spent in writing this book.

I recall, with awe and respect, the one who bade me and made me write this book, and the moments that inspired me to do so. The poetic lines of Mahakavi Bharati reverberate in my mind:

"There were many Siddhas before me

Now as a Siddha I've come to this country."

NOTES

- 1. The verses are given here, mostly in accordance with the available printed versions, namely, "Jnana Thalisai", a commentary by Swami S'ankarananda, published by Swami S'ankarananda,Kutrallam, India, 3rd edition, 1973 and also "Paranjothi Mahan", Paranjothi Jnanaoli PitamTrust, Erode, India, 2002. However, in just a few places, I have made corrections that are warranted by the contex and dictated by my intuition. Such corrections, wherever made, are appropriately indicated in the footnotes on the respective page itself.
- 2. All the twelve Tamil Verses are in the same meter, each verse comprised of eight lines and each line comprised of four words. Among the four words in a line, the first three are similar instress, length and meter, each word comprised of three syllables, of which the third is invariably comprised of two successive short sounds. In other words, each of the first three words in a line can be only in definite pattern resembling English words like *metabolism* or *anthology*. The fourth word of every line is comprised of only two syllables of which the second is invariably one short sound in the pattern resembling English words like *water* or *militant*.
- 3. For the various views on the distinction between life and matter, see: Thomas S. Hall: *Ideas of Life and Matter*, 2 volumes, the University of Chicago, 1969.
- 4. For more information on Tamil Siddhas and their philosophy, see:

Dr. T. N. Ganapathy: The Philosophy

of the Tamil Siddhas, Indian Council of Philosophical Research, New Delhi, 1993.

"In Tamil Siddhas, who came in a line of wandering saints, there is an openness to a wonderful transcendence. This openness has rendered it difficult to put their spiritual and philosophical ideas into a systematic whole. What the philosophy of the Tamil Siddhas is, is to be suggested more by saying what it is not, somewhat as a sculptor reveals an image by the act of removing pieces of stone from a block. In Tamil Siddha poetry we find a medley of views not crystallised into well-defined doctrines. The Siddhas have rummaged the treasure-house of the past to bring out those great ideals which fell into disuse and were forgotten due to barren ritualism and formidable, conformist orthodoxy..." (Page 1 & 2, Ibid.)

"The Tamil Siddhas belonged to a nonconformist, 'counter-tradition'. What is meant by 'counter-tradition' is not 'that which opposes tradition', but the 'tradition which opposes'. The Siddhas challenged many of the accepted beliefs and practices of Hindu society and thought. They denounced idol and ritualistic worship and petitionary prayers as fetters holding back the soul from liberation. Their language was as unconventional as were their lives." (Page 6, Ibid.)

"The term 'Siddha' has different connotations. It is a Sanskrit term meaning 'fulfilled'... He is a completed one, fulfilled and accomplished, a God-realized being alive in the world for the sake of mankind and all living beings."

(Page 13, Ibid.)

"To a Siddha, religion is not a creed or a code but an insight into, and a profound encounter with, the Supreme Reality. The Siddha philosophy with its social attitudes may well constitute the point of departure for a new humanism on a world scale with its fount deeply embedded in the philosophy of the spirit, which is not confined to any notion or nation, religion or community, which indeed is the common spiritual treasuretrove of the entire humanity." (Page 205, Ibid.)

- 5. The Sanskrit equivalent for the term "Suli Munai" is "Susumnà". It is note worthy that the terms "Susumnà" and "Susupti" (the Sanskrit term for deep sleep) spring from the same root.
- 6. The term "Tatvamasi" is one of the great statements, called "Mahàvàkyas", found in Upanisads. This term occurs in Chándogya Upanisad, VI. viii, 7.
- 7. Though, even before Aristotle, Empedocles had propounded the theory of four elements, it was developed into a full-fledged doctrine only by Aristotle.
- 8. The probable basis for the four-element theory is suggested at page 106 of this book.
- 9. The modern era in Western philosophy commenced with Rene Descartes, and developed into a rationalistic philosophy through Leibnitz and Spinoza. In reaction to such rationalism which declared that reason is the supreme instrument in the process of knowledge, John Locke, in England propounded what came to be known as empiricism, declaring that only perception

through sense organs build our knowledge. Next in line came a church father, Bishop Berkeley who declared that we are aware of only the impressions in our sense organs and nothing outside ourselves. This position came to be known as solipsism. This contention was taken to its logical conclusion by David Hume who denied even the reality of mind or self and declared that all that we know are only fleeting impressions from which we construct our knowledge of the outer world and ourselves. This extreme position was called scepticism. Then came a Copernican revolution from Germany through the philosophy of Immanuel Kant, who demonstrated that mere perceptive data cannot give rise to knowledge and they require to be organized by the categories naturally present in the receptacle of the human mind to build an organized body of knowledge and he called the perceptual data as intuitions, and the categories as concepts. In the twentieth century, Bertrand Russell, to a certain extent, revived the scepticism of Hume. The following quotations might give an idea about the short historical development narrated above:

"The table which we see seems to diminish as we remove further from it, but the real table which exists independent of us suffers no alteration: it was therefore nothing but its image which was present to the mind. These are obvious dictates of reason; and no man who reflects ever doubted that the existences which we consider when we say *this house* or *that tree* are nothing but perceptions in the mind and fleeting copies or representations of other existences, which remain uniform and independent." David Hume: Page 152, Enquiry concerning the Human Understanding and Concerning the Principle of Morals, ed. L.A. Selby-Bigge, 2nd Edition, Oxford, 1902.

"If it be perceived by the eyes it must be a colour; if by the ears, a sound; if by the palate, a taste; and so of the other senses. But I believe none will assert, that substance is either a colour, a sound or a taste. The idea of substance must, therefore, be derived from an impression of reflection, if it really exists. But the impressions of reflection resolve themselves into our passions and emotions; none of which can possibly represent a substance."

David Hume: Page 59-60, *A Treatise* of Human Nature, Book 1, ed, D.G.C. Macnabb, Glasgow, 1975.

"The idea of substance... is nothing but a collection of simple ideas, that are united by the imagination, and have a particular name assigned them, by which we are able to recall, either to ourselves or others, that collection."

David Hume: Page 60, *A Treatise of Human Nature*, Book1, ed, D.G.C. Macnab, Glasgow, 1975.

"For my part, when I enter most intimately into what I call myself, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch myself at any time without a perception, and never can observe anything but the perception."

David Hume: Page 301-02, A Treatise of Human Nature, Book 1, ed, D.G.C.

Macnabb, Glasgow, 1975.

"Intuitions without concepts are blind, concepts without intuitions are empty. The understanding can intuit nothing, the senses can think nothing. Only through their union can knowledge arise."

Immanuel Kant: Page 51, first edition (page 75, second edition), *Critique of Pure Reason*, translation by N.K. Smith, Macmillan, London, 2nd impression, 1933.

"It is a fallacy to suppose that a man can see matter. Not even the ablest physicist can perform this feat."

Bertrand Russell: Page 229, Human Knowledge: Its Scope and Limits, London: George Allen & Unwin; New York: Simon and Schuster, 1948.

"When I have the experience called 'seeing the sun' is not the sun but a mental event in me... I do not see the furniture in my room except in a Pickwickian sense... We do not actually see physical objects, any more than we hear electromagnetic waves when we listen to the wireless."

Bertrand Russell: Page 311, *Human Knowledge: Its Scope and Limits*, London: George Allen & Unwin; New York: Simon and Schuster, 1948.

10. In Websters' New Word College Dictionary, 4th Edition, IDG Books India Private Limited, New Delhi, First Reprint, Jan 2010, Page 1428, the meaning of the term 'subtle' is given as:

"fine, thin, precise... not open or direct... not grossly obvious... not easily detected." In WordNet 1.7 Vocabulary Helper:

"Be difficult to detect or grasp by the mind."

Latin, "subtilis": Thin; not dense or gross; rare; as, subtile air; subtile vapor; a subtile medium. Delicately constituted or constructed; nice; fine; delicate; tenuous; finely woven.

"A sotil (subtile) twine's thread." (Chaucer)

- 11. The term Pràna springs from the root "Pra", which, in certain contexts, signifies *reflection*. The other part of the term is "Ana", which is the root of the word "Anav", which means *the ego* in some contexts and *the minute* in ome contexts. It is a noteworthy fact that the term "Pranava", which signifies the primordial sound "AUM", also has the same roots.
- 12. "In quantum physics, the vacuum is not nothing at all, but seethes with activity. Thanks to quantum uncertainty, virtual particles are constantly being produced and disappearing. A good way to think of the vacuum is as a superposition of states for many different kinds of field. To keep things simple, think first of just one kind of field, the electromagnetic field. The different states of the field are like the different notes that can be obtained from a single plucked guitar string. Like the energy levels of an electron in an atom, they form a kind of energy staircase, with the steps spaced out at distances corresponding to the energy of a single photon. When an atom emits a photon, the energy of the corresponding frequency of the vacuum field is increased by one unit, matching the decrease in the energy of the atom. The temporary appearance of a virtual photon corresponds to the field energy moving up a step all by itself, and then falling back again, like a guitar that plays random notes all by itself.

In addition to the electromagnetic field, in all its states, you have to imagine also a field for electrons, one for protons, and so on for every kind of particle and interaction there is. And each of these vacuum fields exists in a superposition of many states. All of these fields fill the Universe and together form the vacuum, making it a very many-stringed instrument. The vacuum is the lowest-energy state of spacetime filled with these fields."

John Gribbin: Page 511, Q is for Quantum, Phoenix Giant, London, paperback, 1999.

13. Dr. T.N. Ganapathy uses an appropriate term, "Subsistence Entity" with reference to this aspect.

Dr. T.N. Ganapathy: *The Philosophy of the Tamil Siddhas*, Indian Council of Philosophical Research, New Delhi, 1993, page 102.

14. 'The Method of falsification' was introduced by K.R. Popper as the criterion of truth. He argues that any theory, in order to be scientific must be capable of being subjected to some experiment in which its correctness may be challenged. In other words, a scientific theory is one which is falsifiable on principle, in the sense that there must exist an experiment which might expose it as false, if it were false. This is his theory of falsification.

K.R. Popper: *The Logic of Scientific Discovery*, London 1980, especially pages 40 to 42.

'Popper conceives that the basis of philosophy of science is to inquire into the nature of the method, which a scientist employs, as well as

its rationality. In order to show this, Popper raises the question, "what is a scientific theory?" His answer is that a theory is scientific only insofar as it is falsifiable or refutable. Popper's criterion is not to be misunderstood. Prima facie it appears that Popper's theory is paradoxical. Popper does not mean to say that a scientific theory is one which gets refuted or falsified. He only means to say that a scientific theory forbids certain states of affair. For example, the statement "Arsenic is a poisonous substance" is a scientific theory in the sense that it forbids the quality of non-poisonous character of arsenic. Thus it gives chance for falsifiability or refutability, whereas the statements of pseudo-science (metaphysics) do not forbid any states of affair. Hence, they are not falsifiable. Popper's main intention in introducing "falsifiability" as a criterion is not only to demarcate science from pseudo-science, but also to reduce the number of contending hypotheses for explaining a class of phenomena'.

K. Srinivas: *An Evaluation of A. J. Ayer's Logical Positivism*, Intellectual Publishing House, New Delhi, 1990, at page 72.

15. The Human Genome Project officially began in 1990 as a 15-year program to characterize in detail the complete set of genetic instructions of the human and some important laboratory organisms. NHGRI, at the National Institutes of Health, and the Department of Energy carry out the effort. Most of the work is done in university research centers and in national laboratories. TheHuman Genome Project (HGP) is an international research effort to determine the DNA sequence of the entire human genome. Contributors to the HGP include the National Institutes of Health (NIH), which began participation in the HGP in 1988 and created the National Human Genome Research Institute (NHGRI) in 1993; the U.S. Department of Energy (DOE), where discussions of the HGP began as early as 1984; numerous universities through out the United States; and international partners in the United Kingdom, France, Germany, Japan and China.

The HGP also includes efforts to characterize and sequence the entire genomes of several other organisms, many of which are used extensively in biological research. Identification of the sequence or function of genes in a model organism is an important approach to finding and elucidating the function of human genes.

Completely sequencing an organism's genome is just the beginning of our understanding of that organism's biology. All of the genes still need to be identified; the function of those genes' expressed products (functional RNAs and proteins) must be elucidated; and the non-coding regulatory sequences need to be understood. The Functional Analysis of the Genome program manages and supports research that will lead to improved techniques and strategies for efficient identification and functional analysis of genes, coding regions and other functional elements of entire genomes on a high throughput basis. The Human Genome Project is entering its climactic phase that will result, as early as 2003, in a complete and accurate DNA sequence representing the genetic blueprint and evolutionary history of the human species. The year 2003 is also the 50th anniversary of the discovery by James Watson and Francis Crick of the double helix of DNA. "There could hardly be a structure more fitting tribute to this momentous event in biology than the completion of the first human

genome sequence in this anniversary year," the plans says. Watson was also the first director of the Human Genome Project at the National Institutes of Health from 1989 to 1992.

For details regarding the project and its methodology see:

Deloukas, P., et al. *A Physical Map of* 30,000 human genes. Science 282, 744-746 (1998).

16. There are forces of attraction that operate between atoms and molecules because of the way electric charge in the atoms and molecules is distributed over a finite volume, instead of being concentrated at a point. They are named after the Dutch physicist Van der Waals.

> "When two atoms are relatively far apart, the positive charge on each nucleus is only partly screened by the part of the electron cloud on the side nearest the other atom. and is attracted to the other atom's electron cloud. At about the point where the electron clouds touch, the two positively charged nuclei become aware of each other and are repelled from one another. This defines the Van der Waals radius of the atom. The electron clouds also contribute to this repulsion. All things are made of atoms, little entities that move around constantly, attracting each other in this way when they are a little distance apart, but repelling each other if they are squeezed together."

John Gribbin: Page 514-515, *Q* is for *Quantum*, Phoenix Giant, London, paperback, 1999.

17. The name "metaphysics", which means literally "beyond physics," was coined by Andronicus of

Rhodes in order to designate Aristotle's works on "first philosophy" which were placed after his books on physics.

18. There is a current of philosophical thought called Bhêdàbhêda philosophy. There are several schools of Bhêdàbhêda philosophy. However, they all speak of apparent difference and yet ultimate unity, which is a basic tenet of Advaita. Bhàskarà and Yàdavaprakàsa are the chief exponents of this philosophy, though they differ in certain aspects.

> "His [Bhàskarà's) teaching of Bhêdàbhêda differs from the other species associated with the name of Yadavaprakasa... While Yàdavaprakàsa postulates both difference and non-difference as the essential relation between Brahman on the one hand and the prapanca on the other, Bhàskarà upholds the idea of Brahman as the absolute and the relative and distinguishes between cetna and Acètna in the prapanca. The relation between Brahman and Acêtna is both different and non-different, while in the relation between Brahman and the Jïva, difference is adventitious and non-difference essential. Yàdavaprakàsa is more idealistic and he does not recognise any fundamental distinction between cit and acit: acit is only cit in an unmanifested state. What is latent in the former becomes patent in the latter, and the unconscious is but a phase of the conscious."

P.N. Srinivasachari: Page 5 & 6, *The Philosophy of Bhêdàbhêda*, The Adayar Library and Research Centre, Chennai, 1972.

19. John Pfeiffer: The Cell, Time - Life Books,

Hong Kong, 2nd Edition, 1988, Page - 16.

20. The illusion created by the assumption of individuality was explained by different analogies by different thinkers. One set of thinkers compared it to the appearance of millions of reflections of a single moon in several lakes and rivers. This analogy goes under the name, 'Pratibimba Vàda'. However this reflection-theory faced severe criticism since it had to accept two realities of the reflected moon and the reflecting surfaces. This is not in tune with the non-dualism, which is the basis of Advaita. Hence another analogy was proposed in which the assumption of individuality was compared to our artificially demarcating the one vast space into several regions, geographically and locally, though space is one unitary continuum without any real parts or distinctions. This goes under the name, 'Avacche daka Vàda'. One school of Buddhism, called 'Madhyamika' school declared that the ultimate reality is nothing but void, called 'Sùnya' in Sanskrit and technically it was called the 'Sùnvatà'. Nàgàrjuna was the chief exponent of this doctrine. Dr. S. Radhakrishnan notes that in Buddhist literature, Sùnyatà is said to be:

"... the synonym of that which has no cause, that which is beyond contemplation, that which is beyond conception, that which is not produced, that which is not born of non-existence, of resignation, of restraint, of extinction or of final journey."

Dr.S.Radhakrishnan: *Indian Philosophy*, Vol.1,Oxford University Press, Paperback, 1996.

"For Nàgàrjuna, the Nirvàna, Buddha, Sùnyatà are different names for the same reality. If Nirvàna is interpreted as the cessation of the world, then it becomes a relative motion, something brought about by causes. To assume that the world exists before Nirvàna and becomes nonexistent after it, is an illogical conception. So Nàgàrjuna insists that there is no real difference between the absolute and the phenomenal, Nirvâna and Samsàra. He says: 'having regard to causes or conditions, we call this world a phenomenal one. "This same world, when causes and conditions are disregarded, is called the absolute." He describes his Sùnyatà almost in the very words in which the Nirguna Brahman is characterised in the Upanisads."

Dr. S. Radhakrishnan: *Indian Philosophy*, Vol. 1, Oxford University Press, Paperback, 1996, page 700.

Sùnyatà of Nàgàrjuna is not to be confused, however, with a transcendent absolute of any sort nor is it to be taken as sheer void."

G.C. Nayak, *Màdhyamika Sùnyatà: A Reappraisal*, Indian Council of Philosophical Research, 2001.

- 21. Jean Paul Sartre: *Being and Nothingness*, Eng. Transl. Barnes, H., Philosophical Library, New York, 1956.
- 22. One school of Indian Philosophy, called Sànkhya, subscribed to an evolutionary doctrine, according to which, from two basic categories, namely, 'Purusa' and 'Prakrti', corresponding to the classical binaries of the mind and the body, other categories evolved in a particular manner and order. The Sànkhya propounded the doctrine of Prakrti-Parinàma-Vàda, which says that matter or Prakrti was the basic stuff that evolved.

Then emerged the more embellished doctrine of 'Brahma-Parinàma-Vàda', which says that the ultimate reality or 'Brahman' itself evolved as and into this world. Advaita rejects both. On the other hand Advaita propounds a theory of illusion or Màya, according to which, the one reality that is Brahman appears as many through a cosmic illusion called Màya. This is sometimes called, "Vivàrta Vàda".

".....the belief to be refuted before the Advaita is established is not so much the Sànkhya or Prakrti-Parinàma-Vàda as Brahma -Parinàma-Vàda."

M. Hiriyanna: *Outlines of Indian Philosophy*, George Allen and Unwin, London, 1932, page 339.

"The philosophical import of the term Vivarta is brought out by contrasting it with the term Parinàma. It is said that when the cause and the effect are taken to be realities of the same order, the effect is designated as Parinàma of the cause, e.g. Prakrti and its evolutes in Sànkhya. But if the effect cannot be ascribed the same ontological status as its cause, it is styled Vivàrta, as in the case of the world as effect in relation to its cause, Brahman, in Advaita Vêdànta. It is important to note that the idea of the cause in Vivarta Vàda is so conceived, that the cause, unlike in Parinàma Vàda, is not said to undergo any transformation or modification. It is thus by denying both the àrambhavàda and Parinàmavàda that Advaita Vêdànta develops its Vivàrtavàda."

Anindita Niyogi Balslev, A study of time in Indian Philosophy, Munshiram Manoharlal

Publishers Pvt. Ltd., Delhi, 1999.

23. In certain Upanisads and vêdàntic literature, a detailed analysis is made of the various states of consciousness, in order to understand the subsratum of the self. The following passages from Màndukya Upanisad illustrate the point:

"The first quarter is Vaisvanara, who is associated with the state of waking, whose consciousness is external, dream, who has seven limbs and nineteen mouths, and who experiences gross objects." (MU3)

"The second quarter is Taijasà, who is associated with the state of dream, whose consciousness is internal, who has seven limbs and nineteen mouths, and who experiences subtle objects." (MU4)

"The third quarter is Prajñà, who is associated with the state of sleep, who has become unified, who is just a mass of consciousness, who is full of bliss, and who is the doorway to the experience..." (MU5)

"They consider that the 'fourth' is neither dream consciousness, nor waking consciousness, nor both dream as well as waking consciousness, neither is it consciousness (i.e. a cognition), nor the absence of consciousness. It is unseen, it is outside the range of empirical dealings, it cannot be grasped (as an object), it is without a distinguishing characteristic (whereby it could be inferred), it is unthinkable, indescribable, it constitutes the essence of the single thought 'I'. It is where there is the cessation of the phenomenal world, it is peaceful, auspicious and non-dual. That is the Self, That is to be known." (MU 7) (As given by Michael Comans, "*The method of early Advaita Vedànta*", Motilal Banarasidas Publishers Pvt. Ltd., Delhi, 2000, Page 3,4 and 5.)

"The term 'fourth' (turïya) is used only in relation to the three states of waking, dream and deep sleep. It is incorrect to think that the 'fourth' is some state of experience that is entirely separate from the three states. The 'fourth' is the invariable substrate of the three states: the states of waking, dream and deep sleep are located in the 'fourth'. Waking, dream and sleep alternate, but the 'fourth', the essential self which is Brahman, does not undergo any change... unassociated with any state: it is the pure Awareness (or consciousness)...."

Michael Comans, *"The method of early Advaita Vêdànta"*, Motilal Banarasidas Publishers Pvt. Ltd., Delhi, 2000. pp. 5 & 6.

24. The great Tamil Poet Subramania Bharathi, who declared himself to be Siddha, prays to the Almighty to either extinguish desire/passion or to stop the breath, implying that cessation of one of these processes automatically results in the cessation of the other.

> "Bhàrati's Poems" (Tamil), Research Edition, Tamil University, Tanjore, India, 1987: Page 163.

25. On the wider connotation of the term" "Pràna", see the following passges:

"Indian thinkers analyse the whole of the manifested universe into two ultimate entities - Âkàsa and Pràna. Âkàsa is the ultimate or basic stuff out of which all the gross forms, from galaxies to atoms, from microscopic cells to the perfected human and divine bodies, take shape, and into which they resolve when they are dissolved or disintegrated to the pristine condition. Âkàsa, the matrix of all forms, cannot itself be perceived. It is experienced only as its gross effects or combinations."

"What works upon the Âkàsa and shapes it into all forms or manifestations is called Pràna. the name for that all-inclusive basic energy into which all forms of energy known to us as manifesting in matter and mind are reduced at the end of the cycle. It is Pràna vibrating at the beginning of the cosmic cycle that shapes Âkàsa, the basic condition of matter, into a new universe of diverse forms and states of subtlety. Out of Pràna is evolved also all forms of energy, physical or mental. Thus all physical forces like motion, electricity, magnetism and the rest are expressions of Pràna. All the biological functions in the body, the functions of the nerve currents and the operation of the mind are also aspects of Pràna. Thus the sum total of all forces in the universe, mental and physical, when resolved back to the original state, is Pràna".

(Page 39, 40: *The Four Yogas of Swàmi Vivêkànanda*, condensed and retold by Swàmi Tapasyananda, Advaita Ashrama, Calcutta, India, Fourth Impression, 1990.)

26. The following passages from Swàmi Vivêkànanda clearly bring out the significant role played by the process of imagination in Yoga:

"Imagination is the door to inspiration and

the basis of all thought."

The complete Works of Swàmi Vivêkànanda, Volume VIII, Advaita Ashrama, Calcutta, 8th Reprint, 1991, Page 38.

"Imagination properly employed is our friend; it goes beyond reason and is the only light that takes us everywhere."

The Complete Works of Swàmi Vivêkànanda, Volume VIII, Advaita Ashrama, Calcutta, 8th Reprint, 1991, Page 49.

27. The term 'positive trickery' implies the distinction between Avidyà and Màya, or Nescience and illusion, in English. The distinction is dealt with in the following two passages:

"Though Màya and Avidyà are essentially the same, still making a distinction between the two for the purpose of analysis, Advaita says that, while Màya is the Upàdhi of Isvara, Avidyà is the Upàdhi of Jîva. The self of the Jîva is no other than Brahman; but because of the limiting adjunct, it appears to be different. As a result of Avidyà, the limiting adjunct, the jîva becomes finite, i.e. limited.... till it overcomes Avidyà and realizes that it is no other than Brahman...."

Dr. R. Balasubramanian, Advaita Vedanta: Its Unity with other systems and its contemporary relevance, "Indian Philosophical systems", The Ramakrishna Mission Institute of culture, Calcutta, 1990, page 25.

"If the world is treated as illusory, then it should be an illusion for everyone who lives in this world of objects, because everyone experiences it. But the illusory snake is not experienced by everyone. Therefore, the world of objects is under the spell of cosmic illusion whereas the illusion of snake is an individual illusion. This cosmic illusion is often referred to as Màya while the individual illusion is referred to as Avidyà. In other words, they are two different terms used to express the same principle of inexplicability. For the sake of our convenience we may say that Avidyà is a part of Màya. Here the word 'part' should not be understood in the sense that Maya can be divided into various parts and that Avidyà is one among those parts. Màya can be best understood as what corresponds to the cosmic unconscious, which is the creative force behind the cosmos whereas Aviduà can be understood as what corresponds to the individual unconscious."

Page 59, K. Srinivas: "*P.T. Raju*", The Builders of Indian Philosophy series, general editor: Dr. R. Balasubramanian, Munshiram Manoharlal Publishers Pvt. Ltd., Delhi, 2001.

- 28. "Apparent to or perceptible by the senses", is one of the meanings given to the term "Phenomenal" in the Webster's New World College Dictionary, 4th edn., IDG Books India (P) Ltd., New Delhi, Page 1080.
- 29. In Sanskrit, the term "Indescribable" is denoted by the term "Anirvacanïya", used frequently in the texts of Advaita Vêdànta.
- 30. The steps given here are as taught by the author's Guru.
- 31. Rene Descartes, the French Philosopher who initiated the begining of the modern era in Western Philosophy, hypothesized that the point

of interaction between the mind and the body could be the pineal gland. On this issue, Swàmi Vivêkânanda clearly expressed his view as follows:-

> "In the language of the Yogi, the Susumnà has its ends in two lotuses, the lower lotus surrounding the triangle of the Kundalini and top one in the brain surrounding the pineal gland."

The Complete Works of Swàmi Vivêkànanda, Volume VIII, Advaita shrama, Calcutta, 8th Reprint, 1991, Page 52.

GLOSSARY

1. Acêtna

Objects without the faculty of consciousness.

2. Acit

Objects without the faculty of mind.

3. Advaita

Non-dualism, especially a school of Indian philosophy. Its basic tenet is that the ultimate reality is unitary, absolute, non-differentiated, without another. Gaudapàda, the author of "Màndùkya Upanisad", is considered to be the founder of this school of thought, though the most popular exponent of this school was Âdhi Sankara.

4. Âjñà

One of the six centres of interaction between the gross and the subtle body.

5. Anàhatam

One of the six centres of interaction between the gross and the subtle body.

6. Anirvacaniya

The indescribable.

7. Architectonic

A technical term used by the German philosopher, Kant, to mean the design, especially, of the human mind.

8. Aspirant

The one, who aspires to achieve something, especially, the ultimate spiritual perfection or goal.

9. Avacèdaka Vàda

The argument that cites the one, unitary, vast expanse of space that is classified into different localities only for the sake of convenience as the analogy to explain the unitary, un-differentiated Brahman, mistaken to be appearing as different souls and objects.

10. Avidyà

Nescience.

11. Bhêdàbhêda

Difference-in-unity, especially with reference to the ultimate reality in the world of appearances. For more details, see note No. 17 above.

12. Bîjàksara

A sound-symbol that is said to act upon the subtle centres when repeatedly uttered in silence. Lam, Vam, Ram, Yam, Ham are some of these soundsymbols.

13. Bhùthàs

Manifestations, especially denoting the five elements of the earth, water, air, fire and space. Etymologically, in Sanskrit the term "Bhùthà" means manifestation. For example, "Màtrbhùthàm" means the one who manifested as the mother.

14. Brahman

The ultimate reality, especially in a school of Indian philosophy called Vêdànta.

15. Brahmopadêsà

The initiation into the path of acquiring experiential knowledge of the Ultimate Reality.

16. Categories

The inbuilt features of the human mind as set out in the philosophy of Kant.

17. Cêtna

The beings that are considered to possess the faculty of consciousness.

18. Cit

The faculty of mind.

19. Cords

Tube-like paths like the spinal cord in a biological system.

20. Doctrine of perception

The various theories in philosophy that seek to explain the process of perception.

21. $E = MC^2$

The famous equation established by Einstein in

his paper on the theory of special relativity. The equation means that the energy of any system, object or particle is equal to its rest mass multiplied by the square of the velocity of light. The velocity of light was established to be a constant and also as the upper limit for possible velocity. In other words no system, object or particle with mass can move with velocity equal to or more than the velocity of light.

22. Electromagnetic field

The unified field governing the forces of electricity and magnetism as established by the British scientist James clerk Maxwell in the 19th century. It was later established that it is the field that governs the forces of attraction and repulsion between electrons and photons.

23. Empiricism

The theory of knowledge according to which knowledge is constituted exclusively of the data received through sense organs.

24. Energy levels

The postulate introduced by the Danish physicist Niels Bohr to explain the reason for absorption and emission of light by glowing objects. According to this postulate, electrons in an atom are supposed to be at different levels, away from the nucleus, that is, figuratively speaking, at different radii from the central core of the atom, and at each radius the electron requires a specific energy to maintain its distance constantly from the nucleus. Such distance and the energy required are inversely proportionate to each other. More energy is required for the electron to move farther away from the nucleus. When the required energy is provided from outside to the atomic electron, it becomes more energetic and moves farther away from the nucleus, momentarily, and gets back to its original position, emitting the surplus energy in the form of radiation. The concept of energy levels underwent further changes and improvements in the hands of later scientists like P.A.M. Dirac, Heisenberg and Schrodinger.

25. Extra sensory perception

The faculty of receiving sense impressions or sense data otherwise than through the sense organs and without any mediation what soever.

26. Guru

The Master in the spiritual field.

27. Idakalai

A subtle cord supposed to run on the left side of the central cord, parallel to it. These two, together with another that runs similarly on the right side of the central cord, constitute the subtle foundation for the system of respiration according to Siddhas.

28. Jïva

The Sanskrit term that denotes the soul.

29. Jñànà

Wisdom, especially, spiritual.

30. Kundali / Kundalini

A subtle force that is said to lie dormant in the

form of a coiled serpent in the subtle centre called Mùlàdhàram.

31. Màdhyamika

The follower of one school of Buddhism, which professes the middle path or the golden mean between the two extremes.

32. Mahàvàkya

The great phrases in Upanisads having deep connotations.

33. Manas

The mind.

34. Màndukya

One of the principal Upanisads

35. Mànikkavàsagar

A Tamil saint considered to be one of the four pioneers of Saivism, that is, a religion professing the supremacy of Lord Siva. However, Unlike the other three, he is regarded as one whose views are more in tune with Vêdànta, rather than, Saiva Siddhànta. He is also called Mànivàsagar.

36. Manivàsagar

Another name for the Tamil saint Mànikkavàsagar.

37. Manipùrakam

One of the six centres of interaction between the gross and the subtle body.

38. Màya

Illusion.

39. Mukti

Liberation of the soul or the Individual Being.

40. Mùlâdhàram.

One of the six centres of interaction between the gross body and the subtle body.

41. Nirguna Brahman

The ultimate reality is supposed to be without any attribute in the transcendental state or from a transcendental point of view and at the same time it is considered to be an omnipotent being with all auspicious qualities and attributes, from the empirical point of view, in the school of philosophy called 'Advaita'. The former is called "the Nirguna Brahman" and the latter, "the Saguna Brahman".

42. Nirvàna

The name for the ultimate liberation of the soul in Buddhist philosophy.

43.Parinàma Vàda

The theory of evolution.

44. Photons

The name given to particles of radiant energy, including light.

45. Piñgalai

A subtle cord supposed to run on the right side of the central cord, parallel to it. These two, together with another that runs similarly on the left side of the central cord, constitute the subtle foundation for the system of respiration according to Siddhas.

46. Prajñà

Consciousness.

47. Prakrti

The substratum of matter recognised in a school of Indian Philosophy called, Sànkhya.

48. Pràna

The Sanskrit term denoting the vital life-force, though at times the term also denotes the normal breath. In Upanisads, this term has been used in several places to imply the ultimate reality itself.

49. Pranava

The primordial syllable that is identified as the symbol of Brahman itself.

50. Prànàyàma

The science of regulating breath and through that the subtle life-force itself.

51. Pratibimba Vàda

The argument that cites the analogy of one moon appearing as millions of reflections in several wells, lakes and rivers to explain how the one Ultimate Reality, appears as different souls and objects.

52.Prapan'ca

The Sanskrit term for the universe. Etymologically the term means that which is reflected in the five manifestations.

53. Purusa

The substratum or the ultimate source of all living beings recognised in a school of Indian Philosophy called, Sànkhya.

54. Rationalism

The theory of knowledge according to which reason plays the supreme role in the acquisition and organisation of knowledge.

55. Samàdhi

The state in which consciousness is emptied of all contents, intelectual and emotional, and remains a pure consciousness.

56. Samsàra

Life, especially in ebb and tide, caused by the cycle of birth and death.

57. Sànkhya

A school of Indian Philosophy that advocates a form of dualism of mind and matter.

58. Siddhas

Spiritual adepts, especially in Tamil, who mostly wandered as nomadic philosophers, speaking and singing in esoteric language. See note No.4 at page 128 of this book for more details on Siddhas.

59. Skepticism

The extreme point of view in which everything is doubted and denied and nothing is accepted or postulated.

60. Solipsism

The name assigned to the philosophy of subjective idealism propounded by the English philosopher Bishop Berkeley, according to whom the entire world is in one's mind and nothing is outside oneself.

61. Spacetime

The phrase that has become popular after Einstein postulated that space and time are not two different entities but are just two aspects of one continuum.

62. Superposition

A technical term to denote a situation in which two or more systems may remain intertwined or interlaced, both or all of them occupying the same space and the same point in the space-time continuum.

63. Substratum

The ultimate substance of which all other substances are made. It also means the underlying principle of the universe.

64. Sùksma S'arira

Subtle bodies, generally considered to survive the death of the gross body, in the philosophy propounded by Siddhas.

65. S'ùnya

Void or vacuum, especially in Buddhist philosophy.

66. S'ùnyatà

The technical term in Buddhist philosophy that denotes the ultimate reality considered to be the Great Void.

67. Susumnà

A subtle cord supposed to lie in the middle of two other cords, which three together constitute the subtle foundation for the system of respiration according to Siddhas.

68. Susupti

The Sanskrit term denoting the state of deep sleep.

69. Suli Munai

The Tamil name for Susumna. Etymologically, the term means the tip of the spiral field.

70. Sùtra

An aphorism that is either a formula or a code.

71. Svàdhisthànam

One of the six centres of interaction between the gross body and the subtle body.

72. Syllabic seeds

Certain syllables which are chanted by spiritual

aspirants, as recommended in the system of Indian philosophy called "yoga". Siddhas have also recognised such syllables. These are called in Sanskrit, "Bïjàksara", meaning seminal syllables.

73. Taijasà

The name for the state of consciousness that is in dream.

74. Tattvamasi

One of the Mahà và kyas which declares the identity of oneself with the Ultimate Reality.

75. Tiruvàsagam

A poetic devotional work in Tamil authored by Mànikkavàsagar.

76. Turïya

The name for the pure consciousness that is beyond and that which underlies the other three states.

77. Upanisads

Ancient Indian philosophical texts mostly in diaglogue form, said to have been compiled by the sage Vyasa, the author of the epic Mahàbhàrata.

78. Vais'vànara

The name for the state of consciousness that is awake.

79. Vêdànta

A school of philosophy that is generally

considered as based on the interpretation of three cannonical texts, namely, Upanisads, Brahma Sutra and the Bhagavat Gita.

80. Verbalism

The habit of constantly uttering in mind, words that express the ceaseless thoughts.

81. Virtual particles

Extremely short-lived particles postulated in particle physics.

82. Vis'uddhi

One of the six centres of interaction between the gross and the subtle body.

83. Vivàrta

Erroneous perception that gives rise to illusion.

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There is a supreme, all-encompassing force, divine and benevolent, called by different names by different religions.

- All religions lead to the same goal and everyone of them deserves equal respect.
- Every soul is originally and ultimately divine in nature, whatever attire it may wear in between.
- There are methods by which every human being is capable of speeding up the process of realising the Universal Truth and every soul making a sincere attempt in this direction will receive Divine protection and help.

ANAND JOTHI