

### Summary of some Sanskrit terms

Prakriti	Nature, the materialistic world, in opposition of consciousness or spirit. It refers to the primal matter with three different innate qualities (Gunas) <a href="https://en.wikipedia.org/wiki/Prak%E1%B9%9Bti">https://en.wikipedia.org/wiki/Prak%E1%B9%9Bti</a>
Tattvas	Elements or aspects of reality or aspects of a deity. <a href="https://en.wikipedia.org/wiki/Tattva">https://en.wikipedia.org/wiki/Tattva</a>
Upanishads	Part of the Vedas, ancient Sanskrit texts that contain some of the central philosophical concepts and ideas of Hinduism.
Tantra	Philosophy of techniques describing liberation of energy and expansion of consciousness
Parabrahman	The "Highest Brahman" that which is beyond all descriptions and conceptualisations. It is the formless spirit (soul) that eternally pervades everything, everywhere in the universe and whatever is beyond. <a href="https://en.wikipedia.org/wiki/Para_Brahman">https://en.wikipedia.org/wiki/Para_Brahman</a>
Âkâsha	The ether space. Empty space does not exist. Ether creates the space and fills it. It is also the sonoriferous ether (sound).
Vâyu	The tangiferous ether (touch).

Tejas	The luminiferous ether (light, colour).
Apas	The gustiferous ether (taste).
Prithivi	The odoriferous ether (smell).
Mahâbhûtas	The various ether types.
Sthûla Mahâbhûtas	The physical manifestations of the ether types.
Panchikarana	Vedantic theory of how matter came into existent originating from the primordial five subtle elements.
Prâna	Reality
Manas	Level of consciousness
Vijnâna	Higher level of consciousness
Ananda	Highest level of consciousness (eternal, spiritual)

**NATURE'S FINER FORCES**  
**BY RAMA PRASAD, M.A., F.T.S.**

**Preface**

A word of explanation is necessary with regard to the book now offered to the public. In the ninth and tenth volumes of The Theosophist I wrote certain essays on "Nature's Finer Forces." The subject of these essays interested the readers of The Theosophist so much, that I was asked to issue the series of essays in book form. On reading the essays for this purpose I found that in order to make a book they must be almost entirely rearranged and perhaps re-written. However, not being equal to the task of re-writing what I had once written, I determined to publish a translation of the book in Sanskrit on the Science of Breath and the Philosophy of the Tattvas. As, moreover, without these essays the book would have been quite unintelligible, I decided to add them to the book by way of an illustrative introduction. This accordingly has been done. The essays in The Theosophist have been reprinted with certain additions, modifications and corrections. Besides, I have written several more essays in order to make the explanations more complete and authoritative.

*This is a reformatted version of <http://www.hermetics.org/prasad.html>*

I was confirmed in this course by one more consideration. The book contains a good deal more than the essays touched upon, and I thought it better to lay all of it before the public.

The book is sure to throw a good deal of light upon the scientific researches of the ancient Aryans of India, and it will leave no doubt in a candid mind that the religion of ancient India had a scientific basis. It is chiefly for this reason that I have drawn my illustrations of the Tattvic Law from the Upanishads.

There is a good deal in the book which can only be shown to be true by long and diligent experiment. Those who are devoted to the pursuit of truth without prejudice will no doubt be ready to wait before they form any opinion about such portions of the book. Others it is useless to reason with.

To the former class of students I have to say one word more. From my own experience I can tell them that the more they study the book, the more wisdom they are sure to find in it, and let me hope that ere long I shall have a goodly number of colleagues, who will with me try their best to explain and illustrate the book still better and more thoroughly.

*Meerut, India, Rama Prasad, November 5th, 1889*

**PREFACE TO THE SECOND AND REVISED  
EDITION**

The points on which revision has been attempted are: (1) the style of printing has been made uniform with the rest of the books printed on the "H. P. B." Press; (2) consistency in transliteration of Sanskrit terms has been studied, and a number of errors corrected; (3) the English of some phrases has been unproved; and (4) a few passages have been omitted from the text. R. H. is responsible for some small portion of the work of revision and for the rest the undersigned, who has a high appreciation of Mr. Rama Prasad's essays—an appreciation, however, which is not extended to certain portions of the Tântrik work he has so ably translated.

G.R.S.M., LONDON, 1894.

**NATURE'S FINER FORCES,  
AND THEIR INFLUENCE UPON HUMAN LIFE AND  
DESTINY.**

**I The Tattvas**

The Tattvas are the five modifications of the Great Breath. Acting upon Prakriti this Great Breath throws it into five states, having distinctive vibratory motions, and performing different functions. The first outcome of the evolutionary state of Parabrahman is the Âkâsha Tattva. After this come in order the Vâyu, the Tejas, the Apas and the Prithivi. They are variously known as Mahâbhûtas. The word Âkâsha is generally translated into English by the word ether. Unfortunately, however, to modern English science sound is not known to be the distinguishing quality of ether. Some few might also have the idea that the modern medium of light is the same as Âkâsha. This, I believe is a mistake. The luminiferous ether is the subtle Tejas Tattva, and not the Âkâsha. All the five subtle Tattvas might no doubt be called ethers, but to use the term ether for Âkâsha, without any distinguishing epithet, is misleading. We might call Âkâsha the sonoriferous ether, the Vâyu the tangiferous ether, Apas the gustiferous ether, and Prithivi the odoriferous ether. Just as there

exists in the universe the luminiferous ether, an element of refined matter without which it has been found that the phenomena of light find no adequate explanation, so do there exist the four remaining ethers, elements of refined matter, without which it will be found that the phenomena of sound, touch, taste and smell find no adequate explanation.

The luminiferous ether is supposed by modern science to be matter in a most refined state. It is the vibrations of this element that are said to constitute light. The vibrations are said to take place at right angles to the direction of the wave. Nearly the same is the description of the Tejas Tattva given in the book. It makes this Tattva move in an upward direction, and the centre of the direction is, of course, the direction of the wave. Besides, it says that one whole vibration of this element makes the figure of a triangle.

Suppose in this figure A B is the direction of the wave; B C the direction of the vibration. C A is the line along which, seeing that in expansion the symmetrical arrangements of the atoms of a body are not changed, the vibrating atom must return to its symmetrical position in the line A B.



The Tejas Tattva of the ancients is then exactly the luminiferous ether of the moderns, so far as the nature of the vibration is concerned. There is no conception, however, of the four remaining ethers, at all events in a direct manner, in modern science. The vibrations of Âkâsha, the sonoriferous ether, constitute sound; and it is quite necessary to recognize the distinctive character of this form of motion.

The experiment of the bell in a vacuum goes to prove that the vibrations of the atmosphere propagate sound. Any other media, however, such as the earth and the metals, are known to transmit sound in various degrees. There must, therefore, be some one thing in all these media which gives birth to sound—the vibration which constitutes sound. That something is the Indian Âkâsha.<sup>1</sup>

But Âkâsha is all-pervading, just as is the luminiferous ether. Why, then, is not sound transmitted to our ears when a vacuum is produced in the bell-jar? The real fact is that we must make a difference between the vibrations of the elements which constitute sound and light, etc., and the vibrations of tile media which transmit these impressions to our senses. It is not the vibrations of the ethers — the subtle Tattvas — that cause our perceptions, but the ethereal vibrations transferred to different media, which are so many modifica-

tions of gross matter—the Sthûla Mahâbhûtas. The luminiferous ether is present just as much in a darkened room as in the space without. The minutest space within the dimensions of the surrounding walls themselves is not void of it. For all this the luminosity of the exterior is not present in the interior. Why? The reason is that our ordinary vision does not see the vibrations of the luminiferous ether. It only sees the vibrations of the media which the ether pervades. The capability of being set into ethereal vibrations varies with different media. In the space without the darkened room the ether brings the atoms of the atmosphere into the necessary state of visual vibration, and one wide expanse of light is presented to our view. The same is the case with every other object that we see. The ether which pervades the object brings the atoms of that object into the necessary state of visual vibration. The strength of the ethereal vibrations which the presence of the sun imparts to the ether pervading our planet is not sufficient to evoke the same state in the dead matter of the darkening walls. The internal ether, divided from the external one by this dead mass, is itself cut off from such vibrations. The darkness of the room is thus the consequence, notwithstanding the presence therein of the luminiferous ether. An electric spark in the vacuum of a bell-jar must

needs be transmitted to our eyes, because the glass of the jar which stands in contact with the internal luminiferous ether has a certain degree of the capability of being put into the state of visual vibration, which from thence is transmitted to the external ether and thence to the eye. The same would never be the case if we were to use a porcelain or an earthen jar. It is this capability of being put into the state of visual vibration which in glass and similar objects we call transparency.



To return to the sonoriferous ether (Âkâsha).  
Every form of gross matter has, to a certain extent, which varies with varying forms, what we may call auditory transparency.

I have now to say something about the nature of the vibrations. Two things must be understood in this connection. In the first place the external form of the vibration is something like the hole of the ear.



It throws matter which is subject to it, into the form of a dotted sheet. These dots are little points, rising above the common surface so as to produce microscopic pits in the sheet. It is said to move by fits and starts (Sankrama), and to move in all directions (Sarvatogama).

That means to say that the impulse falls back upon itself along the line of its former path, which lies on all sides of the direction of the wave.

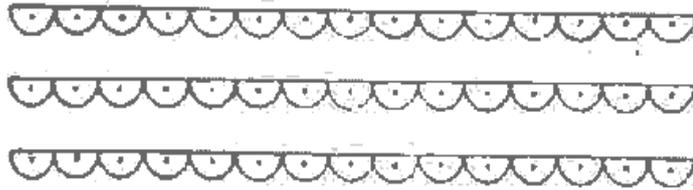
It will be understood that these ethers produce in gross media vibrations similar to their own. The form, therefore, into which the auditory vibrations throw the atmospheric air is a true clue to the form of the ethereal vibration. And the vibrations of atmospheric air discovered by modern science are similar.

I come now to the tangiferous ether (Vâyü). The vibrations of this ether are described as being spherical in form, and the motion is said to be at acute angles to the wave (Tiryak). Such is the representation of these vibrations on the plane of the paper.



The remarks about the transmission of sound in the case of Âkâsha apply here, too, mutatis mutandis.

The gustiferous ether (Apas Tattva) is said to resemble in shape the half moon. It is, moreover, said to move downward. This direction is opposite to that of the luminiferous ether. This force, therefore, causes contraction. Here is the representation of the Apas vibrations on the plane of paper.

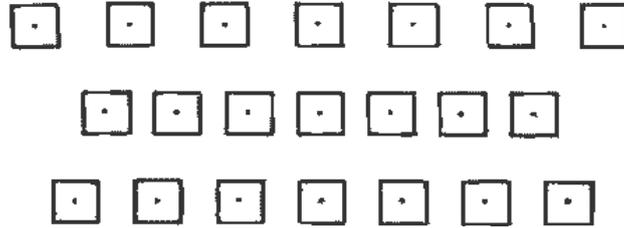


The process of contraction will be considered when I come to the qualities of the Tattvas.

The odoriferous ether (Prithivi) is said to be quadrangular in shape. Thus:

This is said to move in the middle. It neither moves at right angles, nor at acute angles, nor upwards, nor downwards, but it moves along the line of the wave. The line and the quadrangle are in the same plane.

These are the forms, and the modes of motion, of the five ethers. Of the five sensations of men, each of these ethers gives birth to one, thus:



1. Âkâsha,, sonoriferous ether, sound.
2. Vâyü, tangiferous ether, touch.
3. Tejas, luminiferous ether, colour.
4. Apas, gustiferous ether, taste.
5. Prithivi, odoriferous ether, smell.

In the process of evolution these coexisting ethers, while retaining their general relative forms and primary qualities, contract time qualities of the other Tattvas. This is known as the process of Panchikarana or division into five.

If we take, as our book does, H, P, R, V and L to be the algebraical symbols for (1), (2), (3), (4), (5), respectively, the ethers after Panchikarana assume the following forms:

$$(1) H = \frac{H}{-} + \frac{P}{-} + \frac{R}{-} + \frac{V}{-} + \frac{L}{-}$$

$$\begin{aligned}
 (2) P &= \frac{2}{2} + \frac{8}{8} + \frac{8}{8} + \frac{8}{8} + \frac{8}{8} \\
 (3) R &= \frac{R}{2} + \frac{H}{8} + \frac{P}{8} + \frac{V}{8} + \frac{L}{8} \\
 (4) V &= \frac{V}{2} + \frac{R}{8} + \frac{H}{8} + \frac{P}{8} + \frac{L}{8} \\
 (4) L &= \frac{L}{2} + \frac{V}{8} + \frac{R}{8} + \frac{H}{8} + \frac{P}{8}
 \end{aligned}$$

One molecule of each ether, consisting of eight atoms, has four of the original principal ethers, and one each of the remaining four.

The following table will show the five qualities of each of the Tattvas after Panchikarana.

	SOUND	TOUCH	TASTE	COLOUR	SMELL
(1) H.	Ordinary	.....	.....	.....	.....
(2) P.	Very Light	Rather cool	Acid	The blue of the cloud	Acid
(3) R.	Light	Very hot	Hot	Red	Hot
(4) V.	Heavy	Cool	Astringent	White	Astringent

(5) L. Deep Slightly hot Sweet Yellow Sweet

It might be remarked here that the subtle Tattvas exist now in the universe on four planes. The higher of these planes differs from the lower in having a greater number of vibrations per second. The four planes are:

- |                  |          |
|------------------|----------|
| 1. Physiological | Prâna.   |
| 2. Mental        | Manas.   |
| 3. Psychic       | Vijnâna. |
| 4. Spiritual     | Ananda.  |

I shall now, however, discuss some of the secondary qualities of these Tattvas.

1. *Space*.—This is a quality of the Âkâsha Tattva. It has been asserted that the vibration of this ether is shaped like the hole of the ear, and that in the body thereof are microscopic points (Vindus). It follows, evidently, that the interstices between the points serve to give space to ethereal minima, and offer them room for locomotion (Avakâsha).

2. *Locomotion*.—This is the quality of the Vâyû Tattva. Vâyû is a form of motion itself, for motion in all directions is motion in a circle, large or small. The Vâyû Tattva has itself the form of spherical motion. When to the motion

which keeps up the form of the different ethers is added the stereotyped motion of the Vâyû, locomotion is the result.

3. *Expansion.*—This is the quality of the Tejas Tattva. This follows evidently from the shape and form of motion which is given to this ethereal vibration. Suppose A B C is a lump of metal:



If we apply to it a brand of fire, the luminiferous ether in it is set in motion, and that drives the gross atoms of the lump into similar motion. Suppose a is an atom. This being impelled to assume the shape of the Tejas, vibration goes towards a', and then takes the symmetrical position of a''. Similarly does every point change its place round the centre of the piece of metal. Ultimately the whole piece assumes the shape of A' B' C'. Expansion is thus the result.

4. *Contraction.*— This is the quality of the Apas Tattva. As has been remarked before, the direction of this ether is the reverse of the Agni, and it is therefore easy to understand that contraction is the result of the play of this Tattva.

5. *Cohesive Resistance.*— This is the quality of the Prithivi Tattva. This, it will be seen, is the reverse of Âkâsha.

Âkâsha, gives room for locomotion, while Prithivi resists it. This is the natural result of the direction and shape of this vibration. It covers up the spaces of the Âkâsha.

6. *Smoothness.*— This is a quality of the Apas Tattva. As the atoms of any body in contraction come near each other and assume the semi-lunar shape of the Apas, they must easily glide over each other. The very shape secures for the atoms easy motion.

This, I believe, is sufficient to explain the general nature of the Tattvas. The different phases of their manifestation on all the planes of life will be taken up in their proper places.

The reader might be put in mind of the phenomena of the telephone, and still better those of the photophone. It is clear that the rays which transmit sound in the latter are not the visual rays of the sun. They are surely audible rays. The former are the vibrations of the luminiferous ether. What are the latter The vibrations, of course, of the sonoriferous ether, the constituent of the Indian Prâna, which is called Âkâsha

## II. Evolution

It will be very interesting to trace, according to the theory of the Tattvas, the development of man, and the formation of the world.

The Tattvas, as we have already seen, are the modifications of Svara. Regarding Svara, we find in our book:

“In the Svara are the Vedas and the Shâstras, and in the Svara is music. All the world is in the Svara; Svara is the spirit itself.”

The proper translation of the word Svara is the current of life-wave. It is that wavy motion which is the cause of the evolution of cosmic undifferentiated matter into the differentiated universe, and the involution of this into the primary state of non-differentiation, and so on, in and out, for ever and ever. Whence does this motion come? This motion is the spirit itself. The word *Atmâ* used in the book, itself carries the idea of eternal motion, coming as it does from the root "at", eternal motion; and it may be significantly remarked, that the root *at* is connected with, is, in fact, simply another form of, the roots *ah*, breath, and *as*, being. All these roots have for their original the sound produced by the breath of animals. In the Science of Breath the technical symbol for

inspiration is *sa*, and for expiration *ha*. It is easy to see how these symbols are connected with the roots *as* and *ah*. The current of the life-wave spoken of above is technically called *Hansachasa*, i.e., the motion of *ha* and *sa*. The word *Hansa*, which is taken to mean God, and is made so much of in many Sanskrit works, is only a symbolic representation of the two eternal processes of life — *ha* and *sa*.

The primeval current of the life-wave is, then, the same which in man assumes the form of inspiratory and expiratory motion of the lungs, and this is the all-pervading source of the evolution and the involution of the universe;

The book goes on:

“It is the *Svara* that has given form to the first accumulations of the divisions of the universe; the *Svara* causes involution and evolution; the *Svara* is God Himself or more properly the Great Power (*Maheshvara*).”

The *Svara* is the manifestation of the impression on matter of that power which in man is known to us as the power which knows itself. It is to be understood that the action of this power never ceases. It is ever at work, and evolution and involution are the very necessity of its unchangeable existence.

The Svara has two different states. The one is known on the physical plane of life as the sun-breath, the other as the moon-breath. I shall, however, at the present stage of evolution designate them as positive and negative respectively. The period during which this current comes back to the point whence it started is known as the day and night of Parabrahman. The positive or evolutionary period is known as the day of Parabrahman; the negative or involutory portion is known as the night of Parabrahman. These nights and days follow each other without break. The sub-divisions of this period comprehend all the phases of existence, and it is therefore necessary to give here the scale of time according to the Hindu Shâstras.

I shall begin with a Truti as the least division of time.

#### THE DIVISIONS OF TIME

26  $\frac{2}{3}$  Trutis = 1 Nimesha =  $\frac{8}{45}$  second.

18 Nimeshas = 1 Kâshtha =  $3\frac{1}{5}$  seconds = 8 Vipalas.

30 Kâshthas = 1 Kala =  $1\frac{3}{5}$  minutes = 4 Palas.

30 Kalâ = 1 Mahûrta = 48 minutes = 2 Ghâris.

30 Mahûrtas = 1 day and night = 24 hours = 60 Ghâris.

30 days and nights and odd hours = 1 Pitrya day and night = 1 month and odd hours.

12 months = 1 Daiva day and night = 1 year = 365 days, 5hr, 30', 31".

365 Daiva days and nights = 1 Daiva year.  
4,800 Daiva years = 1 Satya Yuga.  
3,600 Daiva years = 1 Tretâ Yuga.  
2,400 Daiva years = 1 Dvapara Yuga.  
1,200 Daiva years = 1 Kali Yuga.  
12,000 Daiva years = 1 Chatur Yuga (four Yugas).  
12,000 Chatur Yugas = 1 Daiva Yuga.  
2,000 Daiva Yugas = 1 day and night of Brahmâ.  
365 Brahmîc days and nights = 1 year of Brahmâ.  
71 Daiva Yugas = 1 Manvantara.  
12,000 Brahmîc years = 1 Chatur Yuga of Brahmâ and so on.  
200 Yugas of Brahmâ = 1 day and night of Parabrahman.

These days and nights follow each other in eternal succession, and hence eternal evolution and involution.

We have thus five sets of days and nights. 1, Parabrahmic; 2, Brahmîc; 3, Daiva; 4, Pitrya; 5, Manusliâ. A sixth is the Manvantaric day, and the Manvantaric night (Pralaya).

The days and nights of Parabrahman follow each other without beginning or end. The night (the negative period) and the day (the positive period) both merge into the Sushumnâ (the conjunctive period) and emerge into the other. And so do the other days and nights. The days all through this division are sacred to the positive, the hotter current, and the nights to the negative, the cooler current. The impres-

sions of names and forms, and the power of producing an impression, lie in the positive phase of existence. Receptivity is given birth to by the negative current.

After being subjected to the negative phase of Parabrahman, Prakriti, which follows Parabrahman like a shadow, has been saturated with evolutionary receptivity; as the hotter current sets in, changes are printed upon it, and it appears in changed forms. The first imprint which the evolutionary positive current leaves upon Prakriti is known as Âkâsha. Then, by and by, come into existence the remaining ethers. These modifications of Prakriti are the ethers of the first stage.

Into these five ethers, as now constituting the objective plane, works on the current of the Great Breath. A further development takes place. Different centres come into existence. The Âkâsha throws them into a form which gives room for locomotion. With the beginning of the Vâyu Tattva these elementary ethers are thrown into the form of spheres. This was the beginning of formation, or what may also be called solidification.

These spheres are our Brahmândas. In them the ethers assume a secondary development. The so-called division into five takes place. Well, but in this Brahmîc sphere in which the new ethers have good room for locomotion, the

Tejas Tattva now comes into play, and then the Apas Tattva. Every tattvic quality is generated into, and preserved in, these spheres by these currents. With the Apas the formation is complete. In process of time we have a centre and an atmosphere. This sphere is the self-conscious universe.

In this sphere, according to the same process, a third ethereal state comes into existence. In the cooler atmosphere removed from the centre another class of centres comes into existence. These divide the Brahmic state of matter into two different states. After this comes into existence another state of matter whose centres bear the name of Devas or suns.

We have thus four states of subtle matter in the universe.

1. Prâna, life matter, with the Sun for centre.
2. Manas, mental matter, with the Manu for centre.
3. Vijñâna, psychic matter, with Brahmâ for centre.
4. Ananda, spiritual matter, with Parabrahman as the infinite substratum.

Every higher state is positive with regard to the lower one, and every lower one is given birth to by a composition of the positive and negative phase of the higher.

1. Prâna has to do with three sets of days and nights in the above division of time.

(a) Our ordinary days and nights.

(b) The bright and dark half of the month which are called the Pitrya day and night.

(c) The northern and southern halves of the year, the day and night of the Devas.

These three nights acting upon earth-matter impart to it the receptivity of the cool, negative shady phase of life-matter. The respective days coming in after, these nights imprint themselves upon it. The earth herself thus becomes a living being, having a north pole, in which a central force draws the needle towards itself and a south pole in which is centred a force which is, so to say, the shade of the north polar centre. It has also always the solar force centred in the eastern half, and the lunar — the shade of the former — centred in the western half.

These centres come, in fact, into existence even before the earth is manifested on the gross plane. So also do the centres of other planets come into existence. As the sun presents himself to the Manu there come into existence two states of the matter in which the sun lives and moves — the positive

and the negative. As the solar Prâna, after having been for some time subjected to the negative shady state, is subjected in its revolutionary course to the source of its positive phase, Manu, the figure of Manu is imprinted upon it. This Manu is, in fact, the universal mind, and all the planets with their inhabitants are the phases of his existence. Of this, however, more hereafter. At present we see that earth-life or Terrestrial Prâna has four centres of force.

The positive phase acting upon it when it has been cooled by the negative current imprints itself upon it, and earth-life in various forms comes into existence. The essays on Prâna will explain this more clearly.

2. Manas has to do with Manu. The suns revolve round these centres with the whole of their atmospheres of Prâna. This system gives birth to the Lokas or spheres of life, of which the planets are one class.

These Lokas have been enumerated by Vyâsa in his commentary on the Yogashâstra (Pâda iii. Sûtra 26).

The aphorism runs thus:

“By meditation upon the sun is obtained a knowledge of the physical creation.”

On this says the revered commentator:

“There are seven Lokas (spheres of existence).”

1. Bhûrloka extends to the Meru.
2. Antarikshaloka extends from the surface of the Meru to the Dhruva, the pole-star, and contains the planets, the Nakshatras, and the stars.
3. Svarloka lies beyond, is fivefold and sacred to Mahendra.
4. Maharloka, sacred to Prajâpati.
5. Janaloka, sacred to Brahmâ.
6. Taparloka, sacred to Brahmâ.
7. Satyaloka, sacred to Brahmâ.

It is not my purpose to try at present to explain the meaning of these Lokas. It is sufficient for my present purpose to say that the planets, the stars, the lunar mansions are all impressions of Manu, just as the organisms of the earth are impressions of the sun. The solar Prâna is prepared for this impression during the Manvantaric night.

Similarly Vijñâna has to do with the nights and days of Brahmâ, and Ananda with those of Parabrahman.

It will thus be seen that the whole process of creation, on whatever plane of life, is performed most naturally by the

five Tattvas in their double modifications, the positive and negative. There is nothing in the universe which the Universal Tattvic Law of Breath does not comprehend.

After this very brief exposition of the theory of tattvic evolution comes a series of Essays, taking up all the subtle states of matter one by one, and describing more in detail the working of the tattvic law in those planes, and also the manifestations of these planes of life in humanity.

### **III. The Mutual Relation Of The Tattvas And Of The Principles.**

The Âkâsha is the most important of all the Tattvas. It must, as a matter of course, precede and follow every change of state on every plane of life. Without this there can be no manifestation or cessation of forms. It is out of Âkâsha that every form comes, and it is in Âkâsha that every form lives. The Âkâsha is full of forms in their potential state. It intervenes between every two of the five Tattvas, and between every two of the five principles.

The evolution of the Tattvas is always part of the evolution of a certain definite form. Thus the manifestation of the primary Tattvas is with the definite aim of giving what we may call a body, a prâkritic form, to the Îshvara. In the bosom of the Infinite Parabrahman there are hidden innumerable such centres. One centre takes under its influence a certain portion of the Infinite, and there we find first of all coming into existence the Akâsha Tattva. The extent of this Âkâsha limits the extent of the universe, and out of it the Îshvara is to come. To this end out of this Âkâsha comes the Vayu Tattva. This pervades the whole universe and has a certain cen-

tre which serves to keep the whole expanse together, and as one whole separate from other universes (Brahmândas).

It has been mentioned, and further on will be more clearly explained, that every Tattva has a positive and a negative phase. It is also evident on the analogy of the sun that places more distant from the centre are always negative to those which are nearer. We might say that they are cooler than these, as it will be seen further on that heat is not peculiar to the sun only, but that all the higher centres have a greater amount of heat than even the sun itself.

Well, then, in this Brahmic sphere of Vâyû, except for some space near the Parabrahmic Âkâsha, every atom of the Vâyû is reacted upon by an opposite force. The more distant and therefore the cooler one reacts upon the nearer and therefore the hotter. The equal and opposite vibrations of the same force cancel each other, and both together pass into the âkâshic state. Thus, while some of this space remains filled up by the Brahmic Vâyû on account of the constant outflow of this Tattva from the Parabrahmic Âkâsha, the remainder is rapidly turned into Âkâsha. This Âkâsha is the mother of the Brahmic Agni Tattva. The Agni Tattva working similarly gives birth through another Âkâsha to the Apas, and this similarly to the Prithivi. This Brahmic Prithivi thus contains the

qualities of all the preceding Tattvas besides a fifth one of its own.

The first stage of the universe, the ocean of psychic matter, has now come into existence in its entirety. This matter is, of course, very, very fine, and there is absolutely no grossness in it as compared with the matter of the fifth plane. In this ocean shines the intelligence of Îshvara, and this ocean, with everything that might be manifest in it, is the self-conscious universe.

In this psychic ocean, as before, the more distant atoms are negative to the nearer ones. Hence, except a certain space which remains filled with the psychic Prithivi on account of the constant supply of this element from above, the rest begins to change into an Âkâsha. This second Âkâsha is full of what are called Manus in their potential state. The Manus are so many groups of certain mental forms, the ideas of the various genera and species of life to appear further on. We have to do with one of these.

Impelled by the evolutionary current of the Great Breath, Manu comes out of this Âkâsha, in the same way as Brahmâ did out of the Parabrahmic Âkâsha. First and uppermost in the mental sphere is the Vâyu, and then in regular order the Tejas, the Apas, and the Prithivi. This mental matter follows

the same laws and similarly begins to pass into the third âkâshic state, which is full of innumerable suns. They come out in the same way, and begin to work on a similar plan which will be better understood here than higher up.

Everybody can here test for himself that the more distant portions of the solar system are cooler than the nearer ones. Every little atom of Prâna is comparatively cooler than the next one towards the sun from itself. Hence equal and opposite vibrations cancel each other. Leaving, therefore, a certain space near the sun as always filled up with the Tattvas of Prâna, which are there being constantly supplied from the sun, the rest of the Prâna passes into the âkâshic state.

It might be noted down here that the whole of this Prâna is made up of innumerable little points. Of these points I shall in future speak as Trutis, and might say here that it is these Trutis which appear on the terrestrial plane as atoms (Anu or Paramnânu). They might be spoken of as solar atoms. These solar atoms are of various classes according to the prevalence of one or more of the constituent Tattvas.

Every point of Prâna is a perfect picture of the whole ocean. Every other point is represented in every point. Every atom has, therefore, for its constituents, all the four Tattvas, in varying proportions according to its position in respect of

others. The different classes of these solar atoms appear on the terrestrial plane as the various elements of chemistry.

The spectrum of every terrestrial element reveals the colour or colours of the prevalent Tattva or Tattvas of a solar atom of that substance. The greater the heat to which any substance is subjected the nearer does the element approach its solar state. Heat destroys for the time being the terrestrial coatings of the solar atoms.

The spectrum of sodium thus shows the presence of the yellow Prithivi, that of lithium, the red Agni, and the yellow Prithivi, that of caesium, the red Agni, the green admixture, the yellow Prithivi, and the blue Vâyu. Rubidium shows red, orange, yellow, green and blue, i.e., the Agni, Prithivi and Agni, Prithivi, Vâyu and Prithivi, and Vâyu. These classes of solar atoms which all together make up the wide expanse of the solar Prâna, pass into the âkâshic state. While the sun keeps up a constant supply of these atoms, those that are passing into the âkâshic state pass on the other side into the planetary Vâyu. Certain measured portions of the solar Âkâsha naturally separate themselves from others, according to the differing creation which is to appear in those portions. These portions of Âkâsha are called Lokas. The earth itself

is a Loka called the Bhûrloka. I shall take up the earth for further illustration of the law.

That portion of the solar Âkâsha which is the immediate mother of the earth, first gives birth to the terrestrial Vâyu. Every element is now in the state of the Vâyu Tattva, which may now be called gaseous. The Vâyu Tattva is spherical in shape, and thus the gaseous planet bears similar outlines. The centre of this gaseous sphere keeps together round itself the whole expanse of gas. As soon as this gaseous sphere comes into existence, it is subjected to the following influences among others.

1. The superposed influence of the solar heat.
2. The internal influence of the more distant atoms on the nearer ones and vice versa.

The first influence has a double effect upon the gaseous sphere. It imparts more heat to the nearer hemisphere than to the more distant one. The superficial air of the nearer hemisphere having contracted a certain amount of solar energy, rises towards the sun. Cooler air from below takes its place. But where does the superficial air go? It cannot pass beyond the limit of the terrestrial sphere, which is surrounded by the solar Âkâsha, through which comes a supply from the solar

Prâna. It, therefore, begins to move in a circle, and thus a rotatory motion is established in the sphere. This is the origin of the earth's rotation upon its axis.

Again, as a certain amount of the solar energy is imparted to the gaseous terrestrial sphere, the impulse of the upward motion reaches the centre itself. That centre itself, therefore, and along with it the whole sphere, moves towards the sun. It cannot, however, go on in this direction, for a nearer approach would destroy that balance of forces which gives the earth its peculiarities. A Loka which is nearer to the sun than our planet cannot have the same conditions of life. Hence, while the sun draws the earth towards himself, those laws of life which have given it a constitution, by which for ages it must roll on, keep it in the sphere they have assigned to it. Two forces thus come into existence. Drawn by one the earth would go towards the sun; checked by the other it must remain where it is. These are the centrifugal and the centripetal forces) and their action results in giving the earth its annual revolution.

Secondly, the internal action of the gaseous atoms upon each other ends in the change of the whole gaseous sphere, except the upper portion, into the âkâshic state. This âkâshic state gives birth to the igneous (pertaining to the Agni Tattva)

state of terrestrial matter. This changes similarly into the Apas, and this again into the Prithivi.

The same process obtains in the changes of matter with which we are now familiar. An example will better illustrate the whole law.

Take ice. This is solid, or what the Science of Breath would call in the state of Prithivi. One quality of the Prithivi Tattva, the reader will remember, is cohesive resistance. Let us apply heat to this ice. This heat as it passes into the ice is indicated by the thermometer. When the temperature rises to 78° the ice changes its state. But the thermometer no longer indicates the same amount of heat; 78° of heat have become latent.

Let us now apply 536° of heat to a pound of boiling water. As is generally known, this great quantity of heat becomes latent while the water passes into the gaseous state.

Now, let us follow the reverse process. To gaseous water let us apply a certain amount of cold. When this cold becomes sufficient to entirely counteract the heat which keeps it in the gaseous state, the vapour passes into the âkâshic state, and from thence into the Tejas state. It is not necessary that the whole of the vapour should at once pass

into the next state. The change is gradual. As the cold is gradually passing into the vapour, the Tejas modification is gradually appearing out of, and through the intervention of, the Âkâsha, into which it had passed during latency. This is being indicated on the thermometer. When the whole has passed into the igneous state, and the thermometer has indicated  $536^{\circ}$ , the second Âkâsha comes into existence. Out of this second Âkâsha comes the liquid state at the same temperature, the whole heat having again passed into the âkâshic state, and therefore is no longer indicated by the thermometer.

When cold is applied to this liquid, heat again begins to come out, and when it reaches  $78^{\circ}$ , this heat having come out of and through the Âkâsha into which it had passed, the whole liquid has passed into the igneous state. Here it again begins to pass into the Âkâshic state. The thermometer begins to fall down, and out of this Âkâsha begins to come the Prithivi state of water—ice.

Thus we see that the heat which is given out by the influence of cold passes into the âkâshic state, which becomes the substratum of a higher phase, and the heat which is absorbed passes into another âkâshic state, which becomes the substratum of a lower phase.

It is in this way that the terrestrial gaseous sphere changes into its present state. The experiment described above, points out many important truths about the relation of these Tattvas to each other.

First of all it explains that very important assertion of the Science of Breath which says that every succeeding tattvic state has the qualities of all the foregoing tattvic states. Thus we see that as the gaseous state of water is being acted upon by cold, the latent heat of steam is being cancelled and passing into the âkâshic state. This cannot but be the case, since equal and opposite vibrations of the same force always cancel each other, and the result is the Âkâsha. Out of this comes the Tejas state of matter. This is that state in which the latent heat of steam becomes patent. It will be observed this state has no permanence. The Tejas form of water, as indeed of any other substance, cannot exist for any length of time, because the major part of terrestrial matter is in the lower and therefore more negative states of Apas and Prithivi, and whenever for any cause any substance passes into the Tejas state, the surrounding objects begin at once to react upon it with such strength as at once to force it into the next âkâshic state. Those things which now live in the normal state of the Apas or the Prithivi find it quite against the laws of their

existence to remain, except under external influence, in the Tejas (igneous) state. Thus an atom of gaseous water before passing into the liquid state has already remained in the three states, the âkâshic, the gaseous, and the Tejas. It must, therefore, have all the qualities of the three Tattvas, and so it no doubt has. Cohesive resistance is only wanted, and that is the quality of the Prithivi Tattva.

Now when this atom of liquid water passes into the icy state, what do we see? All the states which have preceded must again show themselves. Cold will cancel the latent heat of the liquid state, and the âkâshic state will come out. Out of this âkâshic state is sure to come the gaseous state. This gaseous (Vâyava) state is evidenced by the gyrations and other motions which are set up in the body of the liquid by the mere application of the cold. The motion, however, is not of very long duration, and as they are ceasing (passing into the âkâshic state) the Tejas state is coming out. This, too, however, is not of long duration, and as this is passing into the âkâshic state, the ice is coming into existence.

It will 'be easy to see that all the four states of terrestrial matter exist in our sphere. The gaseous (Vâyava) is there in what we now call the atmosphere; the igneous (Tejas) is the normal temperature of earth life; the liquid (Apas) is the

ocean; the solid (Parthiva) is the terra firma. None of these states, however, exists quite isolated from the other. Each is constantly invading the domain of the other, and thus it is difficult to find any portion of space filled up only with matter in one state. The two adjacent Tattvas are found intermixed with each other to a greater extent than those that are removed from each other by an intermediate state. Thus Prithivi will be found mixed up to a greater extent with water than with Agni and Vâyu, Apas with Agni than with Vâyu, and Vâyu with Agni more than with any other. It would thus appear from the above, according to the science of Tattvas, that the flame and other luminous bodies on earth are not in the terrestrial Tejas (igneous) state. They are in or near the solar state of matter.

## **IV Prâna**

### **The Centres Of Prâna; The Nâdis; The Tattvic Centres Of Life; The Ordinary Change Of Breath.**

Prâna, as already expressed, is that state of tattvic matter which surrounds the sun, and in which move the earth and other planets. It is the next state above terrestrial matter. The terrestrial sphere is separated from the solar Prâna by an Âkâsha. This Âkâsha is the immediate mother of the terrestrial Vâyû whose native colour is blue. It is on this account that the sky looks blue.

Although at this point in the heavens, the Prâna changes into the Âkâsha, which gives birth to the terrestrial Vâyû, the rays of the sun which fall on the sphere from without are not stopped on their inward journey. They are refracted, but move onwards into the terrestrial sphere all the same. Through these rays the ocean of Prâna, which surrounds our sphere, exerts upon it an organizing influence.

The terrestrial Prâna—the earth-life which appears in the shape of all the living organisms of our planet — is, as a whole, nothing more than a modification of the solar Prâna.

As the earth moves round her own axis and round the sun, twofold centres are developed in the terrestrial Prâna. During the diurnal rotation every place, as it is subjected to the direct influence of the sun, sends forth the positive life-current from the east to the west. During the night the same place sends forth the negative current.

In the annual course the positive current travels from the north to the south during the six months of summer—the day of the Devas, and the negative during the remaining six months—the night of the Devas.

The north and east are thus sacred to the positive current, the opposite quarters to the negative current. The sun is the lord of the positive current, the moon that of the negative, because the negative solar Prâna comes during the night to the earth from the moon.

The terrestrial Prâna is thus an ethereal being with double centres of work. The first is the northern, the second the southern. The two halves of these centres are the eastern and western centres. During the six months of summer the current of life runs from the north to the south, and during the months of winter the negative current goes the other way.

With every month, with every day, with every Nimesha, this current completes a minor course, and while the current continues in its course the diurnal rotation gives it an eastern or a western direction. The northern current runs during the day of man from east to west, during the night from west to east. The directions of the other current are respectively opposite to the above. So practically there are only two directions—the eastern and western. The difference of the northern and southern currents is not practically felt in terrestrial life. These two currents produce in the terrestrial Prâna two distinguishable modifications of the composing ethers. The rays of either of these ethereal modifications, proceeding from their different centres, run into each other — the one giving life, strength, form, and various qualities to the other. Along the rays emerging from the northern centre, run the currents of the positive Prâna; along those emerging from the southern, the currents of the negative Prâna. The eastern and western channels of these currents are respectively called Pingalâ. and Ida, two of the celebrated Nâdis of the Tantrists. It will be better to discuss the other bearings of Prâna when we have localized it in the human body.

The influence of this terrestrial Prâna develops two centres of action in the gross matter which is to form a human

body. Part of the matter gathers round the northern, and part round the southern centre. The northern centre develops into the brain; the southern into the heart. The general shape of the terrestrial Prâna is something like an ellipse. In this the northern focus is the brain; the southern the heart. The column along which the positive matter gathers runs between these foci.

The line in the middle is the place where the eastern and western—right and left—divisions of the column join. The column is the medulla' oblongata. The central line is also Sushumnâ the right and left divisions being the Pingalâ and Ida. The rays of Prâna which diverge either way from these Nâdis are only their ramifications, and constitute together with them the nervous system.

The negative Prâna gathers round the southern centre. This, too, takes a form similar to the former. The right and left divisions of this column are the right and left divisions of the heart.

Each division has two principal branches, each of which subdivides into minor ramifications. The two openings either way are one a vein, and one an artery, the four opening into four chambers — the four petals of the lotus of the heart. The

right part of the heart again, with all its ramifications, is called Pingalâ, the left Ida, and the middle part Sushumnâ.

There is reason-to think, however, that the heart only is spoken of as the lotus, while the three fore-going names are set apart for the nervous system. The current of Prâna works forward and backward, in and out. The cause of this lies in the momentary changes of the being of Prâna. As the year advances, every moment a change of state takes place in the terrestrial Prâna, on account of the varying strengths of the solar and lunar currents. Thus, every moment is, strictly speaking, a new being of Prâna. As Buddha says, all life is momentary. The moment which is the first to throw into matter the germ which will develop the two centres, is the first cause of organized life. If the succeeding moments are in their tattvic effect friendly to the first cause, the organism gains strength and develops; if not, the impulse is rendered fruitless. The general effect of these succeeding moments keeps up general life; but the impulse of any one moment tends to pass off as the others come in. A system of forward and backward motion is thus established. One moment of Prâna proceeding from the centre of action goes to the farthest ends of the gross vessels — vascular and neural—of the organism. The succeeding moment gives it, however, the

backward impulse. A few moments are taken in the completion of the forward impulse, and the determination of the backward one. This period differs in different organisms. As the Prâna runs forward, the lungs inspire; as it recedes, the process of expiration sets in.

The Prâna moves in the Pingalâ when it moves from the northern centre towards the east, and from the southern towards the west; it moves in Ida when it moves from the northern centre towards the west, and from the southern centre towards the east. This means that in the former case the Prâna moves from the brain, towards the right, through the heart, to the left and back to the brain; and from the heart to the left through the brain to the right back to the heart. In the latter the case is the reverse. To use other terms, in the former case the Prâna moves from the nervous system to the right through the system of blood-vessels, to the left, and back again to the nervous system; or, from the system of blood-vessels, to the left, through the nervous system, to the right, and back again to the system of blood-vessels. These two currents coincide. In the latter the case is the reverse. The left part of the body containing both the nerves and the blood-vessels may be called Ida, the right, Pingalâ. The right and left bronchi form as well the parts respectively of Pingalâ

and Ida, as any other parts of the right and left divisions of the body. But what is Sushumnâ? One of the names of Sushumnâ is Sandhi, the place where the two — Ida and Pingalâ—join. It is really that place from which the Prâna may move either way — right or left — or, under certain conditions, both ways. It is that place which the Prâna must pass when it changes from the right to the left and from the left to the right. It is, therefore, both the spinal canal and the cardiac canal. The spinal canal extends from the Brahmarandhra, the northern centre of Prâna through the whole vertebral column (Brahmadanda). The cardiac canal extends from the southern centre midway between the two lobes of the heart. As the Prâna moves from the spinal canal to the right hand towards the heart, the right lung works; the breath coming in and going out at the right nostril. When it reaches the southern canal, one cannot feel the breath from either nostril. As, however, it goes out of the cardiac canal to the left, the breath begins to come from the left nostril, and flows through that until the Prâna again reaches the spinal canal. There, again, one ceases to feel the breath from either nostril. The effect of these two positions of Prâna is identical upon the flow of breath, and, therefore, both the northern and southern canals are designated by Sushumnâ. If we may speak in this way,

let us imagine that a plane passes midway between the spinal and cardiac canals. This plane will pass through the hollow of the Sushumnâ., But let it be understood that there is no such plane in reality. It, will perhaps be more correct "to say that as the rays of the positive Ida and Pingalâ spread both ways as nerves, and those of 'the negative similarly as blood-vessels, the rays of the Sushumnâ spread all over the body midway between the nerves and blood-vessels—the positive" and negative Nâdis., The following is the description of Sushumnâ in the Science of Breath:

"When the breath goes in and out, one moment by the left and the other by the right nostril, that too is Sushumna. When Prâna is in that Nâdi, the fires of death "burn; tins is called Vishuna. 'When it moves one moment in the right, and the other in the left, let t be called the unequal state (Vishunabhâva); when t moves through both at once, the wise have called it Vishuna,"

Again:

" [It is Sushumnâ] at the time of the passing of the Prâna from the Ida into the Pingalâ, or vice versa; and also of the change of one Tattva into another."

Then the Sushumnâ has two other functions. It is called Vedo-Veda in one of its manifestations, and Sandhyasandhi in the other. As, however, the right and left directions of the cardiac Prâna coincide with the left and right of the spinal current, there are some writers who dispense with the double Sushumna. According to them 'the spinal canal alone is the Sushumna. The Uttaragâtâ and the Shatachakra Niûpana are works which favour this view. This method of explanation takes away a good deal of difficulty. The highest, recommendation of this view is its comparative simplicity. The right side current from, the heart, and, the left side current from the spine, may both, without any difficulty, be taken as the left side spinal currents, as may the remaining two currents be deemed spinal currents of the right side.

One more consideration is in favour of this view. The nervous system represents the sun, the system of blood-vessels the moon. Hence the real force, of life dwells in the nerves. The positive and negative — the solar and lunar — phase? of life matter are only different phases of Prâna, the solar matter. The more distant, and, for that reason, the cooler matter is negative to that which is nearer and hotter. It is solar life which manifests itself in the various phases of the moon. To pass out of technicalities, it is nervous force which

manifests itself in various forms, in the system of blood-vessels. The blood-vessels are only the receptacles of nervous force. Hence, in the nervous system, the real life of the gross body are the true Ida, Pingalâ, and Sushumnâ. These are, in such a case, the spinal column, and the right and left sympathetics, with all their ramifications throughout the body.

The development of the two centres is thus the first stage in the development of the foetus. The matter which gathers up under the influence of the northern centre is the spinal column; the matter which gathers up round the southern centre is the heart. The diurnal rotation divides these columns or canals into the right and left divisions. Then the correlative influence of these two centres upon each other develops an upper and lower division in each of these centres. This happens somewhat in the same way, and on the same principle, as a Leyden jar is charged with positive electricity by a negative rod. Each of these centres is thus divided into four parts: 1, the right side positive; 2, the left side positive; 3, the right side negative; 4, the left side negative. In the heart these four divisions are called the right and left auricles and ventricles. The Tantras style these four divisions the four petals of the cardiac lotus, and indicate them by various letters. The positive petals of the heart form the centre from which pro-

ceed the positive blood-vessels — the arteries; the negative petals are the starting points of the negative blood-vessels — the veins. This negative Prâna is pregnant with ten forces: 1, Prâna; 2, Apâna; 3, Samâna; 4, Vyâna; 5, Udâna; 6, Krikila; 7, Nâga; 8, Devadatta; 9, Dhananjaya; 10, Kûrma. These ten forces are called Vâyus. The word Vayu is derived from the root *va*, to move, and means nothing more than a motive power. The Tantrists must not be understood to define it as a gas. Hence I shall speak in future of these Vâyus as the forces or motive powers of Prâna. These ten manifestations of Prâna are by some reduced to the first five alone, holding that the remaining ones are only modifications of the former, which are the all-important of the functions of Prâna. This, however, is only a question of division. From the left side positive petal the Prâna gathers up into a Nâdi, which rami-fies within the chest into the lungs, and again gathers up into a Nâdi which opens into the right side negative petal. This entire course forms something like a circle (Chakra). This Nâdi is called in modern science the pulmonary artery and vein. Two lungs come into existence by alternate workings of the positive and negative Prânas of the eastern and western powers.

Similarly from the right side positive petal branch several Nâdis, which go both upwards and downwards in two directions—the former under the influence of the northern, the latter under the influence of the southern powers. Both these Nâdis open after a circular march throughout the upper and lower portions of the body into the left side negative petal.

Between the left side positive and the right side negative petal is one Chakra (disk). This Chakra comprises the pulmonary artery, the lungs and the pulmonary vein. The chest gives room to this Chakra, which is positive with respect to the lower portions of the body, where run the ramifications of the lower Chakra, which latter joins the right side positive and the left side negative petals.

In the above-mentioned Chakra (in the cavity of the chest) is the seat of Prâna, the first and most important of the ten manifestations. Inspiration and expiration being a true index to the changes of Prâna, the pulmonary manifestations thereof-have the same name. With the changes of Prâna we have a corresponding change in the other functions of life. The lower negative Chakra contains the principal seats of some of the other manifestations of life. This Apana is located in the long intestine; Samana in the navel; and so on. Udâna is located in the throat; Vyâna all over the body.

Udâna causes belching; Kûrma causes the eyes to shut and open; Krikila in the stomach causes hunger. In short, proceeding from the four petals of the heart we have an entire network of these blood-vessels. There are two sets of these blood-vessels lying side by side in every part of the body, connected by innumerable little channels — the capillaries.

We read in the Prashnopanishad:

" From the heart [ramify the] Nâdis. Of these there are 101 principal ones [Pradhana Nadis]. Each of these branches into 100; each of these again into 72,000."

Thus, there are 10,100 branch Nâdis and 727,200,000 still smaller ones, or what are called Twig-Nadis. The terminology is imitated from a tree. The root is in the heart. From this proceeds various stems. These ramify into branch-vessels and these again into twig-vessels; all these Nâdis put together are 727,210,201.

Now, of these the Sushumnâ is the one; the rest are divided half and half over the two halves of the body. So we read in the Kathopanishad (6th Valli, 16th Mantra):

"A hundred and one Nâdis are connected with the heart. Of these one passes out into the head. Going out by that one

becomes immortal. The others become the cause in sending the life principle out of various other states."

This one that goes to the head, remarks the commentator, is the Sushumna. The Sushumna then is that Nâdi, whose nervous substratum or reservoir of force is the spine. Of the remaining principal Nâdis, the Ida is the reservoir of the life force which works in the left part of the body, having fifty principal Nâdis. So also has the right part of the body fifty principal Nâdis. These go on dividing as above. The Nâdis of the third degree become so minute as to be only visible by a microscope. The ramifications of the Sushumna all over the body serve during life to carry the Prana from the positive to the negative portions of the body, and vice versa. In the case of the blood these are the modern capillaries.

The Vedântins, of course, take the heart to be the starting point of this ramification. The Yogis, however, proceed from the navel. Thus in the book on the Science of Breath we read:

"From the root in the navel proceed 72,000 Nâdis spreading all over the body. There sleeps the goddess Kundalini like a serpent. From this centre [the navel] ten Nâdis go upwards, ten downwards, and two and two crookedly."

The number 72,000 is the result of their own peculiar reckoning. It matters little which division we adopt if we understand the truth of the case.

Along these Nâdis run the various forces which form and keep up the physiological man. These channels gather up into various parts of the body as centres of the various manifestations of Prâna. It is like water falling from a hill, gathering' into various lakes, each lake letting out several streams. These centres are:

1, hand power centres; 2, foot power centres; 3, speech power centres; 4, excretive power centres; 5, generative power centres; 6, digestive and absorbing power centres; 7, breathing power centres; 8, the five sense power centres.

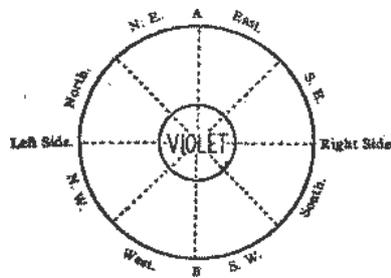
Those of these Nâdis which proceed to the outlets of the body perform the most important functions of the body, and they are hence said to be the ten principal ones in the whole system. These are:

1. Gandhâri goes to the left eye.
2. Hastijihvâ goes to the right eye.
3. Pûshâ goes to the right ear.
4. Yashasvint goes to the left ear.

5. Alambusha, or Alammukha (as it is variously spelt in one MS.), goes to the mouth. This evidently is the alimentary canal.
6. Kuhfû goes to the generative organs.
7. Shankhinî goes to the-excretive organs.
8. Ida leads to the left nostril of the nose.
9. Pingala leads to the right nostril. It appears that these names are given to these local Nâdis, for the same reason that the pulmonary manifestation of Prâna is known by the same name.
10. Sushumna has already been explained in its various phases and manifestations.

There are two more outlets of the body, which receive their natural development in the female — the breasts. It is quite possible that the Nadi Daminî, of which no specific mention has been made, might go to

one of these. Whatever it be, the principle of the division and classification is clear, and this is something actually gained.



Centres of moral and intellectual powers also exist in the system. Thus we read in the Vishramopanishad (the above figure will serve to illustrate the translation):

1. "While the mind rests in the eastern portion [or petal], which is white in colour, then it is inclined towards patience, generosity, and reverence.
2. "While the mind rests in the south-eastern portion, which is red in colour, then it is inclined towards sleep, torpor, and evil inclination.
3. "While the mind rests in the southern portion, which is black in colour, then it is inclined towards anger, melancholy, and bad tendencies.
4. "While the mind rests in the south-western portion, which is blue in colour, then it is inclined towards jealousy and cunning.
5. "While the mind rests in the western portion, which is brown in colour, then it is inclined towards smiles, amorousness, and jocoseness.
6. "While the mind rests in the north-western portion, which is indigo in colour, then it is inclined towards anxiety, restless dissatisfaction, and apathy.

7. "While the mind rests in the northern portion, which is yellow in colour, then it is inclined towards love and enjoyment and adornment.
8. "While the mind rests in the north-eastern portion, which is white in colour, then it is inclined towards pity, forgiveness, reflection and religion.
9. "While the mind rests in the Sandhis [conjunctions] of these portions, then arise disease and confusion in body and home, and the mind inclines towards the three humours.
10. "While the mind rests in the middle portion, which is violet in colour, then consciousness goes beyond the qualities [the three qualities of Maya) and it inclines towards intelligence."

When any one of these centres is in action, the mind is conscious of the same kind of feeling, and inclines towards it Mesmeric passes serve only to excite these centres.

These centres are located in the head as well as in the chest, and also in the abdominal region and the loins, etc.

It is these centres, together with the heart itself, that bear the name of Padmas, or Kamalas (lotuses). Some of these are large, some small, very small. A tântrik lotus is of the type of

a vegetable organism, a root with various branches. These centres are the reservoirs of various powers, and hence the roots of the Padmas; the Nadis ramifying from these centres are their various branches

The nervous plexuses of the modern anatomists coincide with these centres. From what has been said above it will appear that the centres are constituted by blood-vessels. But the only difference between the nerves and the blood-vessels is the difference between the vehicles of the positive and negative Prânas. The nerves are the positive, the blood-vessels the negative system of the body. Wherever there are nerves there are corresponding blood-vessels. Both of them are indiscriminately called Nâdis. One set has for its centre the lotus of the heart, the other the thousand-petalled lotus of the brain. The system of blood-vessels is an exact picture of the nervous system, is, in fact, only its shadow. Like the heart the brain has its upper and lower divisions—the cerebrum and the cerebellum—and, as well, its right and left divisions. The nerves going to both sides of the body and coming back from thence, together with those going to the upper and lower portions, correspond to the four petals of the heart. This system too, then, has as many centres of energy as the former. Both these centres coincide in position. They are, in

fact, the same — the nervous plexuses and ganglia of modern anatomy. Thus, in my opinion, the tântrik Padmas are not only the centres of nervous power of the positive northern Prâna, but as well and necessarily of the negative Prâna.

The translation of the Science of Breath which is now presented to the reader has two sections enumerating the various actions which are to be done during the flow of the positive or the negative breath. They show nothing more than what can in some cases be very easily verified, that certain actions are better done by positive energy, and others by negative energy. The taking in of chemicals and their changes are actions, as well as any others. Some of the chemicals are better assimilated by the negative,(1) others by the positive(2) Prâna. Some of our sensations produce more lasting effects upon the negative, others upon the positive Prâna.

Prâna has now arranged the gross matter in the womb into the nervous and blood vessel systems. The Prana, as has been seen, is made of the five tatwa, and the nadi serve only as lines for tatwic currents to run on. The centers of power noticed above are centers of tatwic power. The tatwic centers in the right part of the body are solar, and those in the left are lunar. Both these solar and lunar centers are of five descriptions. Their kind is determined by what are called the nerv-

ous ganglia. The semi-lunar ganglia are the reservoirs of the apas tatwa. Similarly, we have the reservoirs of the other forces. From these central reservoirs the tatwic currents run over the same lines, and do the various actions allotted to them in physiological anatomy.

Everything in the human body that has more less of the cohesive resistance is made up of the prithivi tatwa. But in this the various tatwas work imprinting differing qualities upon the various parts of the body.

The vayu tatwa, among others, performs the functions of giving birth to, and nourishing the skin; the positive gives us the positive, and the negative the negative skin. Each of these has five layers:

- (1) Pure vayu, (2) Vayu-agni, (3) Vayu-prithivi, (4) Vayu-apas, (5) Vayu-akasa. These five classes of cells have the following figures:

(1) Pure Vayu: This is the complete sphere of the Vayu:



(2) Vayu-Agni: The triangle is superposed over the sphere, and the cells have something like the following shape:



(3) Vayu-Prithivi: This is the result of the superposition of the quadrangular Prithivi over the spherical Vayu:

(4) Vayu-Apas: Something like an ellipse, the semi-moon superposed over the sphere:



(5) Vayu-Akasa: The sphere flattened by the superposition of the circle and dotted:



A microscopic examination of the skin will show that the cells of the skin have this appearance.

Similarly, bone, muscle and fat are given birth to by the prithivi, the agni, and the apas. Akasa appears in various positions. Wherever there is any room for any substance, there is akasa. The blood is a mixture of nutritive substances kept in the fluidic state by the apas tatwa of Prana.

It is thus seen that while Terrestrial Prana is an exact manifestation of the Solar Prana, the human manifestation is an exact manifestation of either. The microcosm is an exact picture of the macrocosm. The four petals of the lotus of the heart branch really into twelve nadi (K, Kh, g, gn, n, K', Kh', j, jh, n, t, the). Similarly the brain has twelve pairs of nerves. These are the twelve signs of the Zodiac, both in their positive and negative phases. In every sign the sun rises 31 times. Therefore we have 31 pairs of nerves. Instead of pairs, we

speak in the language of the Tantras of a chakra (disk or circle). Wherever these 31 chakra connect with the 12 pairs (chakras) of nerves in the brain, pass throughout the body, we have running side by side the blood vessels proceeding from the 12 nadis of the heart. The only difference between the spinal and cardiac chakras is that the former lie crosswise, while the latter lie lengthwise in the body. The sympathetic chords consist of lines of tatwic centers: the padma or kamal. These centers lie on all the 31 chakra noticed above. Thus from the two centers of work, the brain and the heart, the signs of the Zodiac in their positive and negative aspects – a system of nadi branch off. The nadi from either center run into one another so much that one set is found always side by side with the other. The 31 chakra are various tatwic centers; one set is positive, and the other is negative. The former owe allegiance to the brain, with which they are connected by the sympathetic chords; the latter owe allegiance to the heart, with which they have various connections. This double system is called Pingala on the right side, and Ida on the left. The ganglia of the apas centers are semi-lunar, those of the taijas, the vayu, the prithivi, and the akasa respectively triangular, spherical, quadrangular, and circular. Those of the

composite tatwa have composite figures. Each tatwic center has ganglia of all the tatwa surrounding it.

Prana moves in this system of nadi. As the sun passes into the sign of Aries in the Macrocosm, the Prana passes into the corresponding nadi (nerves) of the brain. From thence it descends every day towards the spine. With the rise of the sun it descends into the first spinal chakra towards the right. It thus passes into the Pingala. It moves along the nerves of the right side, at the same time passing little by little into the blood vessels. Up to noon of every day the strength of this Prana is greater in the nervous chakra than in the venous. At noon they become of equal strength. In the evening (with sunset), the Prana with its entire strength has passed into the blood vessels. From thence it gathers up into the heart, the negative southern center. Then it spreads into the left side blood vessels, gradually passing into the nerves. At midnight the strength is equalized; in the morning (pratasandhia) the prana is just in the spine; from thence it begins to travel along the second chakra. This is the course of the solar current of prana. The moon gives birth to other minor currents. The moon moves 12 odd times more than the sun. Therefore, while the sun passes over one chakra (i.e., during 60 ghari – day and night), the moon passes over 12 odd chakra. There-

fore we have 12 odd changes of prana during 24 hours. Suppose the moon too begins in Aries; she begins like the sun in the first chakra, and takes 58 min. 4 sec. in reaching the spine to the heart, and as many minutes from the heart back to the spine.

Both these prana move in their respective course along the tatwic centers. Either of them is present at any one time all over the same class of tatwic centers, in any one part of the body. It manifests itself first in the vayu centers, then in the taijas, thirdly in the prithivi, and fourthly in the apas centers. Akasa comes after each, and immediately precedes the susumna. As the lunar current passes from the spine towards the right, the breath comes out of the right nostril, and as long as the current of Prana remains in the back part of the body, the tatwa changes from the vayu to the apas. As the current passes into the front part of the right half, the tatwa changes back from the apas to the vayu. As the prana passes into the heart, the breath is not felt at all in the nose. As it proceeds from the heart to the left, the breath begins to flow out of the left nostril, and as long as it is in the front part of the body, the tatwa change from the vayu to the apas. They change back again a before, until the prana reaches the spine, when we have the akasa of susumna. Such is the even change of

prana that we have in the state of perfect health. The impulse that has been given to the localized prana by the sun and moon forces that give active power and existence to its prototype Prana, makes it work in the same way forever and ever. The working of the human free will and other forces change the nature of the local prana, and individualize it in such a way as to render it distinguishable from the universal Terrestrial and Ecliptical prana. With the varying nature of prana, the order of the tatwa and the positive and negative currents may be affected in various degrees. Disease is the result of this variation. In fact, the flow of breath is the truest indication of the changes of tatwa in the body. The balance of the positive and negative currents of tatwa results in health, and the disturbance of their harmony in disease. The science of the flow of breath is therefore of the highest importance to every man who values his own health and that of his fellow creatures. At the same time, it is the most important, useful and comprehensive, the easiest and the most interesting branch of Yoga. It teaches us how to guide our will so as to effect desired changes in the order and nature of our positive and negative tatwic currents. This it does in the following way. All physical action is prana in a certain state. Without prana there is no action, and every

action is the result of the differing harmonies of tatwic currents. Thus, motion in any one part of the body is the result of the activity of the vayu centers in that part of the body. In the same way, whenever there is activity in the prithivi centers, we have a feeling of enjoyment and satisfaction. The causes of the other sensations are similar.

We find that while lying down we change sides when the breath passes out of that nostril. Therefore we conclude that if we lie on any side the breath will flow out the opposite nostril. Therefore, whenever we see that it is desirable to change the negative conditions of our body to the positive, we resort to this expedient. An investigation into the physiological effects of prana on the gross coil, and the counter effects of gross action upon prana, will form the subject of the next essay.

## V. Prâna (II)

The Pranamaya Kosha (Coil of Life) changes into three general states during day and night: the waking, the dreaming, and the sleeping (jagrata, swapna, susupti). These three changes produce corresponding changes in the manamaya Kosha (the mental coil), and thence arises the consciousness of the changes of life. The mind, in fact, lies behind the prana. The strings (tatwic lines) of the former instrument are finer than those of the latter; that is, in the former we have a greater number of vibrations than in the latter during the same space of time. Their tensions stand to each other, however, in such a relation that with the vibrations of the one, the other of itself begins to vibrate. The changes give to the mind, therefore, a similar appearance, and consciousness of the phenomenon is caused. This, however, some time after. My present object is to describe all those changes of prana, natural or induced, that make up the sum total of our worldly experience, and which, during ages of evolution, have called the mind itself out of the state of latency. These changes, as I have said, divide themselves into three general states: the waking, the dreaming, and the sleeping. Waking is the positive, sleeping the negative state of prana; dreaming is the conjunction of the two (susumna sandhi). As stated in the

foregoing essay, the solar current travels in a positive direction during the day, and we are awake. As night approaches the positive current has made itself lord of the body. It gains so much strength that the sensuous and active organs lose sympathy with the external world. Perception and action cease, and the waking state passes off. The excess of the positive current slackens, as it were, the tatwic chords of the different centers of work, and they accordingly cease to answer to the ordinary ethereal changes of external nature. If at this point the strength of the positive current passed beyond ordinary limits, death would ensue, prana would cease to have any connection with the gross body, the ordinary vehicle of the external tatwic changes. But just at the moment the prana passes out of the heart, the negative current sets in, and it begins to counteract the effects of the former. As the prana reaches the spine, the effects of the positive current have entirely passed off, and we awake. If at this moment the strength of the negative current passes the ordinary limit by some cause or other, death would ensue, but just at this moment the positive current sets in with midnight, and begins to counteract the effect of the former. A balance of the positive and negative currents thus keeps body and soul together. With excess in the strength of either current, death

makes its appearance. Thus we see that there are two kinds of death: the positive or spinal, and the negative or cardiac. In the former the four higher principles pass out of the body through the head, the brahmarandhra, along the spine; in the latter they pass out of the mouth through the lungs and the trachea. Besides these there are generally speaking about six tatwic deaths. All these deaths chalk out different paths for the higher principle. Of these, however, more hereafter. At this stage, let us investigate the changes of prana more thoroughly.

There are certain manifestations of prana that we find equally at work in all three states. As I have said before, some writers have divided these manifestations into five heads. They have different centers of work in different parts of the body, from whence they assert their dominion over every part of the physical coil. Thus:

Positive: (1) Prana, right lung; Negative: Prana, left lung. Prana is that manifestation of the life coil which draws atmospheric air from without into the system.

Positive: (2) Apana, the apparatus that passes off feces, long intestine, etc.; Negative: Apana, the urinary apparatus. Apana is the manifestation that throws, from the inside, out of the system, things that are not wanted there.

Positive: (3) Samana, stomach; Negative: Samana, duodenum. Samana is that manifestation which draws in and carries the juice of food to every part of the body.

Positive: (4) Vyana, all over the body, appearing in varying states with different organs (on the right side); Negative: Vyana, all over the body (on the left side). Vyana is that manifestation which inclines the currents of life back to the centers – the heart and the brain. It is, therefore, this manifestation that causes death, local or general.

Positive: (5) Udana, at the spinal and cardiac centers (right side), and the region of the throat; Negative: Udana, the spinal and cardiac centers (left side).

If Prana recedes from any part of the body (for some reason or other), that part loses its power of action. This is local death. It is in this way that we become deaf, dumb, blind, etc. It is in this way that our digestive powers suffer, and so on. General death is similar in its operations. With the excess of the strength of either of the two currents, the prana remains in the susumna, and does not pass out. The acquired power of work of the body then begins to pass off. The farther from the centers (the heart and the brain), the sooner they die. It is thus that the pulse first ceases to be felt in the extremities, and then nearer and nearer the heart, until we find it nowhere.

Again, it is this upward impulse that, under favourable conditions, causes growth, lightness, and agility.

Besides the organs of the body already mentioned or indicated, the manifestation of vyana serves to keep in form the five organs of sense, and the five organs of action. The organs of the gross body and the powers of prana that manifest themselves in work have both the same names. Thus we have:

Active Organs & Powers: (1) Vak, the vocal organs and the power of speech; (2) Pani, the hands and the manual power; (3) Pada, the feet and the walking power; (4) Payu, anus; (5) Upastha, the generative organs and the powers that draw these together.

Sensuous Organs & Powers: (1) Chakrus, eye and ocular power; (2) Twak, skin and tangiferous power; (3) Srotra, ear and sonoriferous power; (4) Rasama, tongue and gustatory power; (5) Cobrana, nose and odoriferous power.

The real fact is that the different powers are the corresponding organs of the principle of life. It will now be instructive to trace the tattvic changes and influences of these various manifestations of life.

Prana: During health prana works all over the system in one class of tatwic centers at one time. We thus see that both during the course of the positive and negative current we have five tatwic changes. The color of prana during the reign of the positive and negative current is pure white; during that of the positive, reddish white. The former is calmer and smoother than the latter.

The tatwic changes give to each of these five new phases of color. Thus:

Positive: reddish white/ Negative: pure white:

(1) The vayu tatwa, blue; (2) The agni tatwa, red; (3) The prithivi, yellow; (4) The apas, white; (5) The akasa tatwa, dark

It is evident that there is a difference between the positive and negative tatwic phases of color. There are thus ten general phases of color.

The positive current (reddish white) is hotter than the negative (the pure white). Therefore it may be generally said that the positive current is hot, and the negative cool. Each of these then undergoes five tatwic changes of temperature. The agni is the hottest, the yellow next to it; the vayu becomes cool, and the apas is the coolest. The akasa has a state that

neither cools nor heats. This state is the most dangerous of all, and if prolonged it causes death, disease and debility. It is evident that, if the cooling tatwa does not set in to counteract the accumulated effect of the latter in due time, the functions of life will be impaired. The just color and the just temperature at which these functions work in their vigor will be disturbed, and disease, death and debility are nothing more than this disturbance in various degrees. The case is similar if the heating tatwa does not set in in due time after the cooling one.

It will be easy to understand that these changes of tatwic colors and temperatures are not abrupt. The one passes of easily and smoothly into the other, and the tatwic mixtures produce innumerable colors – as many, in fact, as the solar prana has been shown to possess. Each of these colors tend to keep the body healthy if it remains in action just as long as it ought, but no sooner does the duration change than disease results. There is a possibility, therefore, of as many and more diseases as there are colors in the sun.

If any one color is prolonged, there must be some one or more that have given the period of their duration to it; similarly, if one color takes less time than it ought to, there must be some one or more that take its place. This suggests two

methods of the treatment of diseases. But before speaking of these, it will be necessary to investigate as fully as possible the causes that lengthen and shorten the ideal periods of the tatwas.

To return at present to Prana: This pulmonary manifestation of the principle of life is the most important of all, because its workings furnish us with a most faithful measure of the tatwic state of the body. It is on this account that the name prana has been given by pre-eminence to this manifestation.

Now, as the prana works in the pulmonary tajjas centers (i.e., the centers of the luminiferous ether), the lungs are thrown into a triangular form of expansion, atmospheric air runs in, and the process of inspiration is complete. With every truti, a backwards impulse is given to the currents of prana. The lungs are thrown into their stationary state with this returning current, and the excess air is expelled. The air that is thus thrown out of the lungs bears a triangular form. To some extent, the water vapor that this air contains furnishes us with a method of testing this truth by experiment. If we take a smooth, shining looking glass, put it under the nose, and breath steadily upon its cool surface, the water vapor of the air will be condensed, and it will be seen that this

bears a particular figure. In the case of pure agni, this figure will be a triangle. Let another person look steadily at the looking glass because the impression passes off rather quickly.

With the course of the other tatwas the lungs are thrown into their respective shapes, and the looking glass gives us the same figures. Thus, in apas we have the semi-moon, in vayu the sphere, and in prithivi the quadrangle. With the composition of these tatwas we may have other figures: oblongs, squares, spheroids, and so on.

It may also be mentioned that the luminiferous ether carries the materials drawn from the atmospheric air to the centers of the luminiferous ether, and thence to every part of the body. The other ethers also carry these materials to their respective centers. It is not necessary to trace the working of the other manifestations one by one. It may, however, be said that although all the five tatwas work in all the five manifestations, each of these manifestations is sacred to one of these tatwas. Thus in prana the vayu tatwa prevails, in samana the agni, in apana the prithivi, in vyana the apas, in udana the akasa. I may remind the reader that the general color of prana is white, and this will show how the apas tatwa prevails in

Vyana. The darkness of akasa is the darkness of death, etc., caused by the manifestation of udana.

During life these ten changes are always taking place at the intervals of about 26 minutes each. In waking, in sleep, or in dream, these changes never cease. It is only in the two susumnas or the akasa that these changes become potential for a moment, because it is from these that these tatwic manifestations show themselves on the plane of the body. If this moment is prolonged, the forces of prana remain potential, and in death the prana is thus in the potential state. When those causes that tended to lengthen the period of i, and thus cause death, are removed, this individual prana passes out of the potential into the actual, positive, or negative state as the case may be. It will energize matter, and will develop it into the shape towards which its accumulated potentialities tend.

Something may now be said about the work of the sensuous and active organs.

It may be generally said that all work is tatwic motion. This work is capable of being carried on during the waking state, and not in sleep or dream. These ten organs have ten general colors, generally thus:

Sensuous Organs: (1) Eye, agni, red; (2) Ear, akasa, dark; (3) Nose, prithivi, yellow; (4) Tongue (taste), apas, white; (5) Skin, vayu, blue;

Active Organs: (1) Hand, vayu, blue; (2) Foot, i, yellow; (3) Tongue (speech), apas, white; (4) Anus, akasa, dark; (5) Genitals, i, red.

Although these are the generally prevalent tatwas in these various centers, all the other tatwas exist in a subordinate position. Thus in the eye we have a reddish yellow, reddish white, reddish dark, reddish blue, and similarly in the other organs. This division into five of each of these colors is only general; in reality there is an almost innumerable variation of colors in each of these.

With every act of every one of these ten organs, the organ specially and the whole body generally assumes a different color, the color of that particular tatwic motion which constitutes that act.

All these changes of Prana constitute the sum total of our worldly experience. Furnished with this apparatus, prana begins its human pilgrimage, in company with a mind, which is evolved only to the extent of connecting the "I am" of the ahankara or vijnana, the fourth principle from below, with

these manifestations of prana. Time imprints upon it all the innumerable colors of the universe. The visual, the tangible, the gustatory, the auditory, and the olfactory appearances in all their variety gather into prana just as our daily experience carries many messages at one and the same time. In the same way do the appearances of the active organs, and the five remaining general functions of the body, gather up in this prana to manifest themselves in due time.

A few illustrations will render all this clear:

### **Sexual Relations**

The generative agni tatwa of the male is positive, and that of the female is negative. The former is hotter, harsher, and more restless than the latter; the latter is cooler, smoother, and calmer than the former. These two currents tend to run into each other, and a feeling of satisfaction is the result if the two currents are allowed to take their course; if not, a feeling of uneasiness is the result. The genesis of these feelings will be my subject under the head of the manomaya kosha (mental principle). Here I shall only speak of the coloration of prana by the action or inaction of this organ. The positive agni tends to run into the negative, and vice versa. If it is not allowed to do so, the repeated impulses of this tatwa turn upon themselves, the center gains strength, and every day the

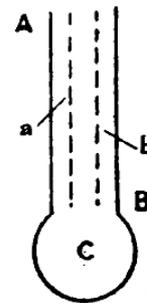
whole prana is colored deeper and deeper red. The centers of the agni tatwa all over the body become stronger in their action, while all the others contract a general tinge of the red. The eyes and the stomach become stronger. This, however, is the case only within certain limits and under certain circumstances. If the agni gains too much strength, all the other centers of the remaining tatwas become vitiated in their action by an over-coloration of agni, and disease and debility result. If, however, man indulges in this luxury more often than he should, and in more than one place, the male prana gets colored by the female agni, and vice versa. This tends to weaken all the centers of this tatwa, and gives a feminine color to the whole prana. The stomach becomes cooled down, the eyes grow weak, and virile manly power departs. If, however, more than one individual female agni takes possession of the male prana, and vice versa, the general antagonistic tatwa becomes deeper and stronger. The whole prana is vitiated to a greater extent, greater debility is the result, and spermatorrhea, impotence, and other such antagonistic colors take possession of the prana. Besides, the separate individualities of the male or female agni that has taken possession of any one prana will tend to repel each other.

### **Walking**

Suppose now that a man is given to walking. The prithivi tatwa of the feet gains strength, and the yellow color pervades the whole prana. The centers of the prithivi all over the body begin to work more briskly; agni receives a mild and wholesome addition to its power, the whole system tends towards healthy equilibrium, neither too hot, nor too cold, and a general feeling of satisfaction accompanied with vigor, playfulness, and a relish of enjoyment is the result.

### Speech

Let me take one more illustration from the operation of Vak (speech), and I shall be done with the organs of action. The power (Sakti) of speech (Vak, saraswati) is one of the most important goddesses of the Hindu pantheon. The apas tatwa is the chief ingredient of prana that goes towards the formation of this organ. Therefore the color of the goddess is said to be white. The vocal chord with the larynx in front form the vina (musical instrument) of the goddess.



In the above figure of the vocal apparatus, AB is the thyroid, a broad cartilage forming the projection of the throat, and much more prominent in men than in women. Below this

is the annular cartilage C, the crenoid. Behind this, or we may say on this, are stretched the chord a and b.

Atmospheric air passing over these chords in the act of breathing sets these chords in vibration, and sound is the result. Ordinarily these chords are too loose to give any sound. The apas tatwa, the milk-white goddess of speech, performs the all-important function of making these chords tense. As the semi-lunar current of the apas tatwa passes along the muscles of these chords, they are as it were shriveled up and curves are formed in the chords; they become tighter.

The depth of these curves depends upon the strength of the apas current. The deeper these curves, the tenser are the chords. The thyroid serves to vary the intensity of the voice thus produced. The thyroid serves to vary the intensity of the voice thus produced. This will do here, and it is enough to show that the real motive power in the production of voice is the apas tatwa or Prana. As will be easily understood, there are certain ethereal conditions of the external world that excite the centers of the apas tatwa; the current passes along the vocal chords, they are made tense, and sound is produced. But the excitement of these centers also comes from the soul through the mind. The use of this sound in the course

of evolution as the vehicle of thought is the marriage of Brahma (the Vijana mayakosha, the soul) with Saraswati, the power of speech as located in man.

The apas tatwa of the vocal apparatus, although it is the chief motive power in the production of sound, is modified according to the circumstance by the composition of the other tatwas in various degrees. As far as human ken reaches, about 49 of these variations have been recorded under the name of swara. First, there are seven general notes. These may be positive and negative (tivra and komala), and then each of these may have three subdivisions. These notes are then composed into eight raga, and each raga has several ragini. The simple ragini may then be compounded into others, and each ragini may have a good many arrangements of notes. The variations of sound thus become almost innumerable. All these variations are caused by the varying tensions of the vocal chords, the Vina of Saraswati, and the tensions vary by the varying strength of the apas current, caused by the superposition of the other tatwas.

Each variation of sound has a color of its own that affects the whole prana in its own way; the tatwic effect of all these sounds is noted in books of music. Various diseases may be cured, and good or bad tendencies imprinted on the prana by

the power of sound. Saraswati is an all-powerful goddess, and controls our prana for good or evil as the case may be. If a song or note is colored by the agni tatwa, the sound colors the prana red, and similarly the vayu, the apas, the akasa, and the prithivi, blue, white, dark, and yellow. The red colored song causes heat; it may cause anger, sleep, digestion, and redness of color. The akasa colored song causes fear, forgetfulness, etc. Songs may similarly give our prana the color of love, enmity, adoration, morality, or immorality, as the case may be.

Let us turn to another key. If the words we utter bear the color of the agni tatwa – anger, love, lust – our prana is colored red, and this redness turns upon ourselves. It may burn up our substance, and we may look lean and lank and have 10,000 other diseases. Terrible retribution of angry words! If our words are full of divine love and adoration, kindness and morality, words that give pleasure and satisfaction to whoever hears them – the colors of the prithivi and the apas – we become loving and beloved, adoring and adored, kind and moral, pleasing and pleased, satisfying and ever satisfied. The discipline of speech itself – the satya of Patanjali – is thus one of the highest practices of Yoga.

Sensuous impressions color the prana in a similar way. If we are given to too much of sight-seeing, to the hearing of pleasant sounds, to the smelling of dainty smells, etc., the colors of these tatwas will be overly strengthened, and will gain a mastery over our prana. If we are too fond of seeing beautiful women, hearing the music of their voices, heaven help us, for the least and most general effect will be that our pranas will receive the feminine coloration. If it were only for the love of women, man should avoid this over-indulgence, for feminine qualities in men do not obtain favor in the eyes of women.

These illustrations are sufficient to explain how the tatwic colors of external nature gather up in prana. It may be necessary to say that no new colors enter into the formation of prana. All the colors of the universe are present there already, just as they are in the sun, the prototype of prana. The coloration I have spoken of is only the strengthening of this particular color to an extent that throws the others in shade. It is this disturbance of balance that in the first place causes the variety of human prana, and in the second those innumerable diseases to which flesh is heir.

From this point it is evident that every action of man gives his prana a separate color, and the color affects the gross

body in turn. But when, at what time, does the particular tatwic color affect the body? Ordinarily it is under similar tatwic conditions of the external universe. This means that if the agni tatwa has gained strength in any prana at any one particular division of time, the strength will show itself when that particular division of time recurs again. Before attempting a solution of this problem, it is necessary to understand the following truths:

The sun is the chief life-giver of every organism in the system. The moment that a new organism has come into existence, the sun changes his capacity in relation to that organism. He now becomes the sustainer of positive life in that organism. Along with this the moon begins to influence the organism in her own way. She becomes the sustainer of negative life. The planets each establish their own currents in the organism. For the sake of simplicity, I have as yet spoken only of the sun and moon, the respective lords of the positive and negative currents of the right and left halves of the body, of the brain and the heart, of the nerves and the blood vessels. These are the two chief sources of life, but it must be remembered that the planets exercise a modifying influence over these currents. The real tatwic condition of any moment is determined by all the seven planets, just like the sun and the

moon. Each planet, after determining the general tatwic condition of the moment, goes to introduce changes in the organism born at that moment. These changes correspond with the manifestation of that color of prana that rose at that time. Thus, suppose the red color has entered prana when the moon is in the second degree of the sign of Libra. If there is no disturbing influence of any other luminary, the red color will manifest itself whenever the moon is in the same position; in the other case, when the disturbing influence is removed. It may show itself in a month, or it may be postponed for ages. It is very difficult to determine the time when an act will have its effect. It depends a good deal upon the strength of the impression. The strength of the impression may be divided into ten degrees, although some writers have gone further.

- (1) Momentary: This degree of strength has its effect then and there;
- (2) 30 degrees strength: In this case the effect will show itself when each planet is in the same sign as at the time of the impression;
- (3) 15 degrees strength: Hora; (4) 10 degrees strength: Dreskana; (5) 200 degrees strength: Navaansha; (6) 150 degrees strength: Dwadasansa; (7) 60 or 1 degree

strength: Trinsansa; (8) 1” strength: Kala; (9) 1””  
strength: Vipala; (10) 1””” strength: Truti.

Suppose in any prana, on account of any action, the agni tatwa obtains the strongest possible prevalence consistent with the preservation of the body, the tatwa will begin to have its effect then and there until it has exhausted itself to a certain extent. It will then become latent and show itself when at any time the same planets sit in the same mansions. Examples will illustrate better. Suppose the following advancement of the planets at any moment denotes the tatwic condition when any given color has entered the prana:

The 3rd of April, Tuesday:

Planet	Sign	Degree	Minute	Second
Sun	11	22	52	55
Moon	8	16	5	9
Mercury	10	25	42	27
Venus	11	26	35	17
Mars	5	28	1	40
Jupiter	7	15	41	53
Saturn	3	9	33	30

It is at this time, we suppose, that the act above referred to is committed. The present effect will pass off with the two hours' lunar current that may be passing at that time. Then it will become latent, and remain so till the time when these planets are in the same position again. As has been seen, these positions might be nine or more in number.

As soon as the exact time passes of when a color has obtained predominance in prana, the effect thereof on the gross body becomes latent. It shows itself again in a general way when the stars sit in the same mansions. Some of the strength is worn off at this time, and the force becomes latent to show itself in greater minuteness when at any time the half-mansions coincide, and so on with the remaining parts noticed above. There may be any number of times when there is only an approach to coincidence, and then the effect will tend to show itself, though at that time it will remain only a tendency.

These observations, although necessarily very meager, tend to show that the impression produced upon prana by any act, however insignificant, really takes ages to pass off, when the stars coincide in position to a degree with that when the act was committed. Therefore, a knowledge of astronomy is highly essential in occult Vedic religion. The following

observation may, however, render the above a little more intelligible.

As often remarked, the prana mayokosha is an exact picture of the Terrestrial Prana. The periodical currents of the finer forces of nature that are in the earth pass according to the same laws in the principle of life; just like the Zodiac, the prana mayakosha is subdivided into mansions, etc. The northern and southern inclinations of the axis give us a heart and a brain. Each of these has 12 ramifications branching off from it; these are the 12 signs of the Zodiac. The daily rotation than gives us the 31 chakras spoken of previously. There is the positive semi-mansion and the negative semi-mansion. Then we have the one-third, the one-ninth, the one-twelfth, and so on to a degree, or the divisions and subdivisions thereof. Each chakra, both diurnal and annual, is in fact a circle of 360 degrees, just like the great circles of the heavenly spheres. Through the chakra a course of seven descriptions of life-currents is established:

(1) Solar, (2) lunar, (3) Mars, agni, (4) Mercury, prithivi, (5) Jupiter, vayu, (6) Venus, apas, (7) Saturn, akasa.

It is quite possible that along the same chakra there may be passing all or any one or more of these differing currents at one and the same time. The reader is reminded of the tele-

graph currents of modern electricity. It is evident that the real state of prana is determined by the position of these localized currents. Now if any one or more of these tatwic currents is strengthened by any act of ours, under any position of the currents, it is only when we have to a degree the same position of the currents that the tatwic current will make its appearance at full strength. There may also be appearances of slight power at various times, but the full strength will never be exhausted until we have the same position of these currents to the minutest division of a degree. This takes ages upon ages, and it is quite impossible that the effect should pass off in the present life. Hence rises the necessity of a second life upon this earth.

The accumulated tatwic effects of a life's work give each life a general tinge of its own. This tinge wears off gradually as the component colors pass off or weaken in strength, one by one. When each of the component colors is one by one sufficiently worn off, the general color of a life passes off. The gross body that was given birth to by this particular color ceases to respond to the now generally different colored prana. The prana does not pass out of the susumna. Death is the result.

### **Death**

As already said, the two ordinary forms of death are the positive through the brain, and the negative through the heart. This is death through the susumna. In this all the tatwas are potential. Death may also take place through the other nadis. In this case there must always be the prevalence of one or more tatwas.

The prana goes towards different regions after death, according to the paths through which it passes out of the body. Thus:

(1) The negative susumna takes it to the moon; (2) the positive susumna takes it to the sun; (3) the agni of the other nadi takes it to the hill known as Raurava (fire); (4) the apas of the other nadi takes it to the hill known as Ambarisha, and so on, the akasa, the vayu, and the prithivi take it to Andhatanusra, Kalasutra, and Maha kala (See Yoga Sutra, pada 111, Aphorism 26, commentary).

The negative path is the most general one that the prana takes. This path takes it to the moon (the chandraloka) because the moon is the lord of the negative system, and the negative currents, and the negative susumna the heart, which therefore is a continuation of the lunar prana. The prana that has the general negative color cannot move but along this path, and it is transferred naturally to the reservoirs, the cent-

ers of the negative prana. Those men in whom the two hours' lunar current is passing more or less regularly take this path.

The prana that has lost the intensity of its terrestrial color energizes lunar matter according to its own strength, and thus establishes for itself there a sort of passive life. Here the mind is in a state of dream. The tatwic impressions of gathered up forces pass before it in the same way as they pass before it in our earthly dreams. The only difference is that in that state there is not the superimposed force of indigestion to render the tatwic impressions so strong and sudden as to be terrible. That dreamy state is characterized by extreme calmness. Whatever our mind has in it of the interesting experiences of this world, whatever we have thought, heard, seen or enjoyed, the sense of satisfaction and enjoyment, the bliss and playfulness of the apas and the prithivi tatwa, the languid sense of love of the agni, the agreeable forgetfulness of the akasa, all make their appearance one after the other in perfect calm. The painful impressions make no appearance, because the painful arises when any impression forces itself upon the mind that is out of harmony with its surroundings. In this state the mind lives in Chandraloka, as will be better understood when I come to speak of the tatwic causes of dreams.

Ages roll on in this state, when the mind has, according to the same general laws that obtain for prana, worn out the impressions of a former life. The intense tatwic colors that the ceaseless activity of prana had called into existence now fade away, until at last the mind comes upon a chronic level with the prana. Both of them have now lost the tinge of a former life. It may be said of prana that it has a new appearance, and of the mind that it has a new consciousness. When they are both in this state, both very weak, the accumulated tatwic effects of prana begin to show themselves with the return of the stars to the same positions. These draw us back from the lunar to the terrestrial prana. At this stage, the mind has no individuality worth taking account of, so that it is drawn by prana to wherever its affinities carry it. It comes and joins with those solar rays that bear a similar color, with all those mighty potentialities that show themselves in the future man remaining quite latent. It passes with the rays of the sun according to the ordinary laws of vegetation into grain that bears similar colors. Each grain has a separate individuality, which accounts for its separate individuality from others of its brothers, and in many there may be human potentialities giving it an individuality of its own. The grain

or grains produce the virile semen, which assumes the shape of human beings in the wombs of women. This is rebirth.

Similarly do human individualities come back from the five states that are known as hells. These are the states of posthumous existence fixed for those men who enjoy to an excessive and violent degree the various impressions of each of the tatwas. As the tatwic intensity, which disturbs the balance and therefore causes pain, wears off in time, the individual prana passes off to the lunar sphere, and thence undergoes the same states that have been described above.

Along the positive path through the brahmarandhra pass those prana that pass beyond the general effects of Time, and therefore do not return to the earth under ordinary laws. It is Time that brings back prana from the moon, when he is even the most general, and the least strong tatwic condition comes into play with the return of identical astral positions; but the sun being the keeper of Time himself, and the strongest factor in the determination of his tatwic condition, it would be impossible for solar Time to affect solar prana. Therefore, only that prana travels towards the sun in which there is almost no preponderance of any tatwic color. This is the state of the prana of Yogin alone. By the constant practice of the eight branches of Yoga, the prana is purified of any very

strongly personifying colors, and since it is evident that on such a prana Time can have no effect, under ordinary circumstances, they pass off to the sun. These prana have no distinct personifying colors; all of them that go to the sun have almost the same general tinge. But their minds are different. They can be distinguished from each other according to the particular branch of science that they have cultivated, or according to the particular and varying methods of mental improvement that they have followed on earth. In this state the mind is not dependent, as in the moon, upon the impressions of prana. Constant practice of Yoga has rendered it an independent worker, depending only upon the soul, and molding the prana to its own shapes, and giving it its own colors. This is a kind of Moksha.

Although the sun is the most potent lord of life, and the tatwic condition of prana now has no effect upon the prana that has passed to the sun, the planetary currents still have some slight effect upon it, and there are times when this effect is very strong, so that the earthly conditions in which they have previously lived are called back again to their minds. A desire to do the same sort of good they did the world in their previous life takes possession of them, and impelled by this desire they sometimes come back to earth.

Snakaracharya has noticed in his commentary of the Brahma-sutra that Apantaramah, a Vedic rishi, thus appeared on earth as Krishna-dwaipayana, about the end of the Dwapara and the beginning of the Kaliyuga.

## **VI. Prana (III)**

As it is desirable that as much as possible should be known about Prana, I give below some quotations on the subject from the Prasnopnishat. They will give additional interest to the subject, and present it in a more comprehensive and far more attractive garb.

Six things are to be known about Prana, says the Upanishad:

“He who knows the birth (1), the coming in (2), the places of manifestation (3), the rule (4), the macrocosmic appearance (5), and the microcosmic appearance of Prana becomes immortal by that knowledge.”

Practical knowledge of the laws of life, i.e., to live up to them, must naturally end in the passing of the soul out of the shadowy side of life into the original light of the Sun. This means immortality, that is, passing beyond the power of terrestrial death.

But to go on with what the Upanishad has to say about the six things to be known about Prana:

### **The Birth of Prana**

The Prana is born from the Atma; it is caused in the atma, like the shadow in the body.

The human body, or any other organism, becomes the cause of throwing a shade in the ocean of prana, as it comes between the sun and the portion of space on the other side of the organism. Similarly, the prana is thrown as a shade in the macrocosmic soul (Iswara) because the macrocosmic mind (manu) intervenes. Briefly the prana is the shade of Manu caused by the light of the Logos, the macrocosmic center. The suns are given birth to in this shade, by the impression of the macrocosmic mental ideas into this shade. These suns, the centers of Prana, become in their turn the positive starting point of further development. The manus throwing their shade by the intervention of the suns, give birth in those shades to planets, etc. The suns throwing their shades by the intervention of planets, give birth to moons. Then these different centers begin to act upon the planets, and the sun descends on the planets in the shape of various organisms, man included.

### **The Macrocosmic Appearance**

This prana is found in the macrocosm as the ocean of life with the sun for its center. It assumes two phases of existence: (1) the prana, the solar, positive life-matter, and (2) the

rayi, the lunar, negative life-matter. The former is the northern phase and the eastern; the latter is the southern phase and the western. In every Moment of Terrestrial life, we have thus the northern and southern centers of prana, the centers from which the southern and northern phases of life-matter take their start at any moment. The eastern and western halves are there too.

At every moment of time – i.e., in every truti – there are millions of truti – perfect organisms – in space. This might require some explanation. The units of time and space are the same: a truti.

Take any one truti of time. It is well known that every moment of time the tatwic rays of prana go in every direction from every point to every other point. Hence it is clear enough that every truti of space is a perfect picture of the whole apparatus of prana, with all its centers and sides, and positive and negative relations. To express a good deal in a few words, every truti of space is a perfect organism. In the ocean of Prana that surrounds the sun there are innumerable such truti.

While essentially the same, it is easy to understand that the following items will make a difference in the general

color, appearance, and forms of these truti: (1) distance from the solar center; (2) inclination from the solar axis.

Take the earth for illustration. That zone of solar life, taking into consideration both the distance and the inclination in which the earth moves, gives birth to earth-life. This zone of earth-life is known as the ecliptic. Now every truti of space in this ecliptic is a separate individual organism. As the earth moves in her annual course, i.e., as the truti of time changes, these permanent truti of space change the phases of their life. But their permanency is never impaired. They retain their individuality all the same.

All the planetary influences reach these truti always, wherever the planets may be in their journey. The changing distance and inclination is, of course, always causing a change of life-phase.

This truti of space, from its permanent position in the ecliptic, while maintaining its connection with all the planets, at the same time sends its tatwic rays to every other quarter of space. They also come to the earth.

It is a condition of earth life that the positive and negative currents, the prana and the rayi, be equally balanced. Therefore, when the two phases of life matter are equally strong in

this ecliptical truti, the tatwic rays that come from it to the earth energize gross matter there. The moment that the balance is disturbed by the tatwic influence of the planets, or by some other cause, terrestrial death ensues. This simply means that the tatwic rays of the truti that fall on earth cease to energize gross matter, although they do fall there all the same, and although the truti is there all the same in its permanent ecliptical abode. In this posthumous state, the human truti will energize gross matter in that quarter of space whose laws of relative, negative and positive predominance coincide with that state. Thus, when the negative life matter, the rayi, becomes overly strong, the energization of the truti is transferred from the earth to the moon. Similarly it may pass to other spheres. When the terrestrial balance is restored again, when this posthumous life has been lived, the energization is transferred to the earth again.

Such is the macrocosmic appearance of Prana, with the pictures of all the organisms of the earth.

### **The Coming In Of Prana**

How does this prana maya kosha – this truti of the macrocosm – come into this body? Briefly, “By actions at whose root lies the mind”, says the Upanishad. It was explained previously how every action changes the nature of the prana

maya kosha, and it will be explained in the essay on the “Cosmic Picture Gallery” how these changes are represented in the cosmical counterpart of our life-principle. It is evident that by these actions change is produced in the general relative nature of the prana and the rayi, which has been spoken of previously. It is hardly necessary to say that the mind – the human free will – lies at the root of those actions that disturb the tatwic balance of the life-principle. Hence, “The prana comes into this body by actions, at whose root lies the mind.”

### **The Places of Manifestation**

“As the paramount Power appoints its servants, telling, ‘Rule such and such villages’, so does the Prana. It puts its different manifestations in different places. The apana (this discharges feces and urine) is in the Payu (anus) and the upastha. The manifestations known as sight and hearing (Chakrus and Srotra) are in the eye and ear. The prana remains itself, going out of mouth and nose. Between (the places of prana and apana, about the navel) lives the Samana. It is this that carries equally (all over the body) the food (and drink) that is thrown in the fire. Hence are those seven lights (by means of prana, light of knowledge is thrown over color, form, sound, etc.)

“In the heart is of course this atma (the pranamaya kosha) and in it, of course, the other coils. Here there are a hundred and one nadi. Of these there are a hundred in each. In each of these branch nadis there are 72,000 other nadi. In these moves the vyana.

“By one (the Susumna) going upward, the udana carries to good worlds by means of goodness, and to bad ones by means of evil; by both to the world of men.

“The sun is, of course, the macrocosmic prana; he rises, and thereby helps the eyesight. The Power that is in the earth keeps up the power of apana. The akasa (the ethereal matter) that is between heaven and earth, helps the samana.

“The ethereal life-matter (independent of its being between heaven and earth) which fills macrocosmic space, is vyana.

“The taijas – the luminiferous ether – is udana; hence he whose natural fire is cooled down approaches death.

“Then the man goes toward the second birth; the organs and senses go into the mind; the mind of the man comes to the Prana (its manifestations now ceasing). The prana is combined with the taijas; going with the soul, it carries her to the spheres that are in view.”

The different manifestations of Prana in the body, and the places where they manifest themselves have been dwelt upon. But other statements of interest appear in this extract. It is said that this atma, this prana maya kosha, with the other coils of course, is located in the heart. The heart, as has been seen, represents the negative side of life, the rayi. When the positive prana impresses itself upon the rayi – the heart and the nadis that flow from it – the forms of life and the actions

of man come into existence. It is therefore, properly speaking, the reflection in the heart that works in the world, i.e., is the proper lord of the sensuous and active organs of life. If this being of the heart learns not to live here, the sensuous and active organs both lose their life; the connection with the world ceases. The being of the brain that has no immediate connection with the world, except through the heart, now remains in unrestrained purity. This means to say that the soul goes to the suryaloka (the Sun).

The next point of interest is the description of the functions of the External Prana, which lie at the root of, and help the working of the individualized prana. It is said that the Sun is the Prana. This is evident enough, and has been mentioned many times before this. Here it is meant to say that the most important function of life, inspiration and expiration, the function of which, according to the Science of Breath, is the One Law of existence in the Universe on all the planes of life, is brought into existence and kept in activity by the sun in himself. It is the solar breath that constitutes his existence, and this reflected in man producing matter gives birth to human breath.

The Sun then appears in another phase. He rises, and as he does, he supports the eyes in their natural action.

Similarly, the power that is in the earth sustains the apana manifestation of prana. It is the power that draws everything towards the earth, says the commentator. In modern language, it is gravity.

Something more might be said here about the udana manifestation of prana. As everybody knows, there is a phase of microcosmic prana that carries everything, names, forms, sight, sounds, and all other sensations, from one place to another. This is otherwise known as the universal agni, or the Tejas of the text. The localized manifestation of Prana is called udana, that which carries the life-principle from one place to another. The particular destination is determined by past actions, and this universal agni carries the prana, with the soul, to different worlds.

## VII. Prâna (IV)

This Prana is then a mighty being, and if its localized manifestations were to work in unison, and with temperance, doing their own duty, but not usurping the time and place of others, there would be but little evil in the world.

But each of these manifestations asserts its sole power over the bewildered human soul. Each of these claims the whole life of man to be its own proper domain:

“The akasa, the vayu, the agni, the prithivi, the apas, speech, sight and hearing – all of them say clearly that they are the sole monarchs of the human body.”

The principal prana, he whose manifestations all these are, tells them:

“Be not forgetful; it is I who sustain the human body, dividing myself into five.”

If the five manifestations of Prana with all their minor subdivisions revolt against him, if each begin to assert its own lordship and cease to work for the general benefit of the lord paramount, the real life, misery makes its sad appearance to harass the poor human soul. “But the manifestation of prana, blinded by ignorance,” would not “put forth” in the admonitions of their lord. “He leaves the body, and as he

leaves, all the other minor pranas leave it too; they stay there as he stays.” Then their eyes are opened. “As the bees follow the queen bee in every posture, so does prana; these, speech, the mind, the eye, the ear, follow him with devotion, and thus praise him.”

“He is the agni, the cause of heat; he is the sun (the giver of light); he is the cloud, he is the Indra, he is the Vayu, he is the prithivi, he is the rayi, and the deva, the sat, and the asat, and he is the immortal.

[Rayi and asat are the negative, deva and sat the positive phases of life-matter.]

“Like the spokes in the nave of a wheel, everything is sustained in prana: the hymns of the Rik, the Yajur, and the Sama Veda, the sacrifice, the Kshatriya, and the Brahmin, etc.

“Thou art the Progenitor; thou movest in the womb; thou art born in the shape of the father or the mother; to thee, O Prana, that puts up in the body with thy manifestations, these creatures offer presents.

“Thou art the carrier of offerings to the deva, thou art the carrier of oblations to the fathers; thou art the action and the power of the senses and other manifestations of life.

“Thou art, O Prana, in power the great lord, the Rudra [the destroyer] and the Preserver; thou movest in the sky as the sun, thou art the preserver of the light of heaven.

“When thou rainest, these creatures are full of joy because they hope to have plenty of food.

“Thou art Prana, pure by nature; thou art the consumer of all oblations, as the Ekarshi fire [of the Atharva; thou art the preserver of all existence; we are to thee the offerers of food; thou art our father as the Recorder [or, the Life-giver of the Recorder].

“Make healthy that appearance of thine which is located in the speech, the ear, the eye, and that which is stretched towards the mind; do not fly away.

“Whatever exists in the three heavens, all of it is in the power of prana. Protect us like a mother her offspring; give us wealth and intellect.”

With this I conclude my description of Prana, the second principle of the Universe, and the human body. The epithets bestowed upon this mighty being in the above extract will be easy of understanding in the light of all that has gone before. It is now time to trace the working of the universal Tatwic

Law of Breath on the next higher pane of life, the mind  
(manomayakosha).

1. For example, milk and other fatty substances.
2. Such food as is digested in the stomach.

## **VIII. The Mind (I)**

### **Introduction**

No theory of the life of the Universe is at once so simple and so grand as the theory of breath (Swara). It is the one universal motion, which makes its appearance in maya by virtue of the unseen substratum of the Cosmos, the parabrahma of the Vedantins. The most appropriate expression for Swara in English is the “current of life”. The Indian Science of Breath investigates and formulates the laws, or rather the one Universal Law, according to which this current of life, this motive power of Universal Intelligence, running (as Emerson so beautifully puts it) along the wire of thought, governs evolution and involution and all the phenomena of human life, physiological, mental and spiritual. In the whole length and breadth of this universe there is no phenomenon, great or small, that does not find its most natural, most intelligible, most apposite explanation in the theory of the five modes of manifestation of this universal motion: the five elementary tatwas. In the foregoing essays I have tried to explain generally how every physiological phenomenon was governed by the five tatwas. The object of the present essay is to briefly run over the various phenomena relating to the third higher

body of man – the manomaya kosha, the mind – and note how symmetrically and universally the tatwas bring about the formation and work of this principle.

### **Knowledge**

It is what is in general language called knowledge that distinguishes the mind from physiological life (prana), but it will be seen on a little consideration that different degrees of knowledge might very well be taken as the distinguishing characteristics of the five states of matter, which in man we call the five principles. For what is knowledge but a kind of tatwic motion of breath, elevated into self-consciousness by the presence, in a greater or lesser degree, of the element of ahankara (egoism)? His is no doubt the view taken of knowledge by the Vedantic philosopher when he speaks of intelligence as being the motive power, the first cause of the universe. The word swara is only a synonym of intelligence, the one manifestation of the One descending into prakriti.

“I see something” means, according to our view of knowledge, that my manomaya kosha has been put into visual vibration. “I hear” means that my mind is in a state of auditory vibration. “I feel” means that my mind is in a state of tangible vibration. And so on with the other senses. “I love”

means that my mind is in a state of amatory vibration (a form of attraction).

The first state, that of the anandamaya, is the state of the highest knowledge. There is then but one center, the substratum for the whole infinity of parabrahma, and the ethereal vibrations of his breath are one throughout the whole expanse of infinity. There is but one intelligence, but one knowledge. The whole universe with all its potentialities and actualities is a part of that knowledge. This is the highest state of bliss. There is no consciousness of self here, for the I has only a relative existence, and there must be a Thou or a He before there can be an I.

The ego takes form when, in the second plane of existence, more than one minor center comes into existence. It is for this reason that the name ahankara has been given to this state of matter. The ethereal impulses of those centers are confined to their own particular domain in space, and they differ in each center. They can, however, affect each other in just the same way as the individualized ethereal impulses of one man are affected by those of others. The tatwic motion of one center of Brahma is carried along the same universal lines to the other. Two differing motions are thus found in

one center. The stronger impulse is called the I, the weaker the Thou or the He as the case may be.

Then comes manas. Viraj is the center, and manas the atmosphere of this state. These centers are beyond the ken of ordinary humanity, but they work under laws similar to those ruling the rest of the cosmos. The suns move the virats in the same way as the planets move around the sun.

### **The Functions of the Mind**

The composition of the manas is similar to that of prana: it is composed of a still finer grade of the five tatwas, and this increased fineness endows the tatwas with different functions.

The five functions of prana have been given. The following are the five functions of manas, as given by Patanjali and accepted by Vyasa:

(1) Means of knowledge (Pramana), (2) False knowledge (Viparyaya), (3) Complex imagination (Vikalpa), (4) Sleep (Nidra), (5) Memory (Smrite).

All the manifestation of the mind fall under one or another of these five heads. Thus, Pramana includes:

(1) Perception (pratyaksha), (2) Inference (anumana), (3) Authority (Agama).

Viparyana includes:

(1) Ignorance (avidya, tamas), (2) Egoism (asinita, moha), (3) Retention (raja, mahamoka), (4) Repulsion (tamisra, dwesha), (5) Tenacity of life (abhinweshha, and-hatamisra).

The remaining three have no definite subdivisions. Now I shall show that all the modifications of thought are forms of tatwic motion on the mental plane.

### **Pramana (Means of Knowledge)**

The word pramana (means of knowledge) is derived from two roots, the predicative *ma*, and the derivative root *ana*, with the prefix *pra*. The original idea of the root *ma* is “to go”, “to move”, and hence “to measure”. The Prefix *pra* gives the root idea of fullness, connected as it is with the root *pri*, to fill. That which moves exactly up or down to the same height with any other thing is the pramana of that thing. In becoming the pramana of any other thing, the first thing assumes certain qualities that it did not have before. This is always brought about by a change of state caused by a certain

kind of motion, for it is always motion that causes change of state. In fact, this is also the exact meaning of the word pramana, as applied to a particular manifestation of the mind.

Pramana is a particular tatwic motion of the mental body; its effect is to put the mental body into a state similar to that of something else. The mind can undergo as many changes as the external tatwas are capable of imprinting upon it, and these changes have been classified into three general heads by Patanjali.

### **Pratyaksha (Perception)**

This is that change of state which the operations of the five sensuous organs produce in the mind. The word is a compound of “I”, each, and “aksha”, sensuous power, organ of sense. Hence is that sympathetic tatwic vibration that an organ of sense in contact with its object produces in the mind. These changes can be classified under five heads, according to the number of the senses.

The eye gives birth to the taijas vibrations, the tongue, the skin, the ear, and the nose respectively to the apas, the vayu, the akasa and the prithivi vibrations. The pure agni causes the perception of red, the taijas-prithivi of yellow, the taijas-

apas of white, the taijas-vayu of blue, and so on. Other colors are produced in the mind by mixed vibrations in a thousand varying degrees. The apas gives softness, the vayu roughness, the agni harshness. We see through the eyes not only color, but also form. It will be remembered that a particular form has been assigned to every tatwic vibration, and all the forms of gross matter answer to corresponding tatwic vibrations. Thus, form can be perceived through every sense. The eyes can see form, the tongue can taste it, the skin can touch it, and so on. This may probably appear to be a novel assertion, but it must be remembered that virtue is not an act. The ear would hear form, if the more general use of the eye and skin for this purpose had not almost stifled it into inaction.

The pure apas vibrations cause an astringent taste, the apas-prithivi a sweet, the apas-agni hot, the apas-vayu acid, and so on. Innumerable other vibrations of taste are caused by intermediate vibrations in various degrees.

The case is similar with the vocal and other changes of vibration. It is clear that our perceptive knowledge is nothing more than a veritable tatwic motion of the mental body, caused by the sympathetic communications of the vibrations of prana, just as a stringed instrument of a certain tension

begins to vibrate spontaneously when vibration is set up in another similar instrument.

### **Anumana (Inference)**

The word anumana has the same roots as the word pramana. The only difference is in the prefix. We have here anu, “after”, instead of pra. Inference (anumana) is therefore after-motion. When the mind is capable of sustaining two vibrations at one and the same time, then if any one of these vibrations is set up and perceived, the second vibration must also manifest itself. Thus, suppose a man pinches me. The complex vibrations that make up the perception of the action of man pinching me are produced in my mind. I recognize the phenomena. Almost simultaneously with these vibrations another set of vibrations is produced in me. I call this pain. Now here are two kinds of tatwic motion, one coming after the other. If at any other time I feel similar pain, the image of the man pinching will be recalled to my consciousness. This after-motion is “inference”. Induction and deduction are both modifications of this after-motion. The sun always appears to rise in a certain direction. The concept of that direction becomes forever associated in my mind with the rising of the sun. Whenever I think of the phenomenon of

sunrise, the concept of that direction presents itself. Therefore I say that, as a rule, the sun rises in that direction. Inference is therefore nothing more than a tatwic motion coming after another related one.

### **Agama (Authority)**

The third modification of what is called the means of knowledge (pramana) is authority (agama). What is this? I read in my geography, or hear from the lips of my teacher that Britain is surrounded by the ocean. Now what has connected these words in my mind with the picture of Britain, the ocean, and their mutual relations? Certainly it is not perception, and therefore not inference, which must by nature work through sensuous knowledge. What then? There must be some third modification.

The fact that words possess the power to raise a certain picture in our minds is one of very deep interest. Every Indian philosopher recognizes it as a third modification of the mind, but it receives no recognition at the hands of modern European philosophy.

There is, however, little doubt that the color corresponding to this mental modification differs from that correspond-

ing to either perception or inference. The color belonging the perceptive modifications of the mind is always single in nature. A certain phase of the taijas vibration must always prevail in the visual modification, and similarly the vibrations of other tatwas correspond to our different sensuous modifications. Each manifestation has its own distinctive color. The red will appear as well in the visual as in the auditory or any other vibration, but the red of the visual will be bright and pure; that of the organ of smell will be tinged with yellow; that of the organ of touch with blue, and the soniferous ether will be rather dark. There is, therefore, not the least likelihood that the vocal vibration will coincide with the pure perceptive vibration. The coal vibrations are double in their nature, and they can only (if at all) coincide with the inferential vibrations; and here, too, they can only coincide with the auditory vibrations. A little consideration will, however, show that there is some difference between the vocal and inferential vibrations. In inference, a certain modification of sound in our mind is followed by a certain visual picture, and both these vibrations retain an equally important position in our mind. We place two precepts together, compare them, and then say that one follows the other. In the verbal modification there is no comparison, no simultaneous conscious-

ness, no placing together of the two precepts. The one causes the other, but we are not at all conscious of the fact. In inference the simultaneous presence for some time of both the cause and the effect brings about a change in the color of the effect. The difference is less great in the vocal as compared with the inferential vibration. Axiomatic knowledge is not inferential in the present, though it has no doubt been so in the past; in the present it has become native to the mind.

### **Viparyaya (False Knowledge)**

This is the second mental modification. This word also is derived from a root meaning motion : *i* or *ay*. “to go”, “to move”. The prefix *pari* is connected with the root *pra*, and gives the same radical meaning as *pramana*. The word *Par-yaya* has the same radical meaning as *pramana*. The word *Viparyaya* therefore means “a motion removed from the motion that coincides with the object”. The vibrations of *pramana* coincide in nature with the vibrations of *viparyaya*. Certain acquired conditions of the mind imprint on the precepts a new color of their own, and thus distinguish them from the precepts of *pramana*. There are five modifications of this manifestation.

## **Avidya (Ignorance)**

This is the general field for the manifestation of all the modifications of false knowledge. The word comes from the root *vid*, “to know”, the prefix *a*, and the suffix *ya*. The original meaning of the *vidya* is, therefore, “the state of a thing as it is”, or expressed in terms of the mental plane in one word, “knowledge”. As long as in the face of a human being I see a face and nothing else, my mental vibration is said to be *vidya*. But as soon as I see a moon or something else not a face, when it is a face I am looking at, my mental vibration is no longer said to be *vidya*, but *avidya*. *Avidya* (ignorance) is therefore not a negative conception; it is just as positive as *vidya* itself. It is a great mistake to suppose that words having the privative prefixes always imply abstractions and never realities. This, however, is by the bye. The state of *avidya* is that state in which the mental vibration is disturbed by that of *akasa*, and some other *tatwas*, which thus result in the production of false appearances. The general appearance of *avidya* is *akasa*, darkness, and this is why *tamas* is a synonym of this word.

This general prevalence of darkness is caused by some defect in individual minds, because, as we find from daily experience, a given object does not excite the same set of

vibrations in all minds. What, then is the mental defect? It is to be found in the nature of the stored-up potential energy of the mind. This storing-up of potential energy is a problem of the deepest importance in philosophy, and the doctrine of transmigration of souls finds its most intelligible explanation in this. The law might be enunciated as follows:

### **The Law of Vasana**

If anything be set in any particular kind of tatwic motion, internal or external, it acquires for a second time the capability of easily being set in motion, and of consequently resisting a different sort of motion. If the thing is subjected to the same motion for some time, the motion becomes a necessary attribute of the thing. The superposed motion becomes, so to speak, “second nature”.

Thus, if a man accustoms his body to a particular form of exercise, certain muscles in his body are very easily set into motion. Any other form of exercise that requires the use of other muscles will be found fatiguing on account of the resistance set up by muscular habits. The case is similar with the mind. If I have a deep-rooted conviction, as some do to this day, that the earth is flat and the sun moves around it, it may require ages to dislodge it. A thousand examples might

be cited of such phenomena. It is, however, only necessary in this place to state that the capacity of turning easily to one mental state and offering resistance to another one is what I mean by this stored-up energy. It is variously called *vasana* or *Sanskara* in Sanskrit.

The word *vasana* comes from the root *vas*, “to dwell”. It means the dwelling or fixing of some form of vibratory motion in the mind. It is by *vasana* that certain truths become native to the mind, and not only certain so-called truths, but all the so-called natural tendencies, moral, physical, spiritual, become in this way native to the mind. The only difference in different *vasana* is their respective stability. The *vasana* that are imprinted upon the mind as the result of the ordinary evolutionary course of nature never change. The products of independent human actions are of two kinds. If actions result in tendencies that check the evolutionary progressive tide of nature, the effect of the action exhausts itself in time by the repellent force of the undercurrent of evolution. If, however, the two coincide in direction, increased strength is the result. The latter sort of actions we call virtuous, the former vicious.

It is this *vasana*, this temporary dominion of the opposite current, that causes false knowledge. Suppose the positive

generative current has in any man the strength  $a$ , if too it is presented a negative female current of the same degree of strength  $a$ , the two will try to unite. An attraction that we term sexual love will then be set up. If these two currents are not allowed to unite, they increase in strength and react on the body itself to its injury; if allowed to unite, they exhaust themselves. This exhaustion causes a relief to the mind, the progressive evolutionary current asserts itself with greater force, and thus a feeling of satisfaction is the result. This tawic disturbance of the mind will, as long as it has sufficient strength, give its own color to all perceptions and concepts. They will not appear in their true light, but as causes of satisfaction. Thus they say that true lovers see all things rose-colored. The appearance of a face we love to see causes a partial running of currents into one another, and a certain amount of satisfaction is the result. We forge that we are seeing a face: we are only conscious of some cause resulting in a state of satisfaction. That cause of satisfaction we call by different names. Sometimes we call it a flower, at others we call it a moon. Sometimes we feel that the current of life is flowing from those dear eyes, at others we recognize nectar itself in that dear embrace. Such are the manifestations of avidya. As Patanjali says, avidya consists in the perception

of the eternal, the pure, the pleasing, and the spiritual instead of or rather in the non-eternal, the impure, the painful, and the non-spiritual. Such is the genesis of avidya, which, as has been remarked, is a substantial reality, and not a mere negative conception.

This mental phenomenon causes the four remaining ones.

### **Asmita (Egoism)**

Egoism (Asmita) is the conviction that real life (purusha swara) is one with the various mental and physiological modifications, that the higher self is one with the lower one, that the sum of our percepts and concepts is the real ego, and that there is nothing beyond. In the present cycle of evolution and in the previous ones, the mind has been chiefly occupied with these percepts and concepts. The real power of life is never seen making any separate appearance, hence the feeling that the ego must be the same with the mental phenomena. It is plain that avidya, as defined above, lies at the root of this manifestation.

### **Raga (Desire to Retain)**

The misleading feeling of satisfaction above mentioned under avidya is the cause of this condition. When any object repeatedly produces in our mind this feeling of satisfaction, our mind engenders the habit of falling again and again into the same state of tatwic vibration. The feeling of satisfaction and the picture of the object that seemed to cause that satisfaction tend to appear together, and this is a hankering after the object, a desire not to let it escape us – that is to say, Raga.

### **Pleasure**

Here may investigate more thoroughly the nature of this feeling of satisfaction and its opposite: pleasure and pain. The Sanskrit words for these two mental states are respectively sukha and dukkha. Both come from the root khan, “to dig”; the prefixes *su* and *dus* make the difference. The former prefix conveys the idea of “ease” and it derives this idea from the unrestrained easy flow of breath. The radical idea of sukha is, therefore, unrestrained digging – digging where the soil offers but little resistance. Transferred to the mind, that act becomes sukha, which makes an easy impression upon it. The act must, in the nature of its vibrations, coincide with the then prevailing conditions of the mental vibrations. Before

any percepts or concepts had taken root in the mind, there was no desire, no pleasure. The genesis of desire and what is called pleasure – that is, the sense of satisfaction caused by the impressions produced by external objects – begins with certain percepts and concepts taking root in the mind. This taking root really is only an overclouding of the original set of impressions arising out of evolutionary mental progress. When contact with the external object momentarily removes that cloud from the clear horizon of the mind, the soul is conscious of a feeling of satisfaction that avidya connects with the external object. This, as shown above, gives birth to desire.

### **Pain & Dwesha**

The genesis of pain and the desire to repel (dwesha) is similar. The radical idea of dukkha (pain) is the act of digging where a good deal of resistance is experienced. Transferred to the mind, it signifies an act that encounters resistance from the mind. The mind does not easily give place to these vibrations; it tries to repel them with all its might. There arises a feeling of privation. It is as if something of its nature was being taken away, and an alien phenomenon introduced. The consciousness of privation, or

want, is pain, and the repulsive power that these alien vibrations excite in the mind is known by the name of dwesha (desire to repel). The word dwesha comes from the root *dwesh*, which is a compound of *du* and *ish*. *Ish* itself appears to be a compound root, *i* and *s*. The final *s* is connected to the root *su*, "to breath", "to be in one's natural state". The root *i* means "to go", and the root *ish*, therefore, means to go toward one's natural state. Transferred to the mind, the word becomes a synonym of raga. The word *du* in *dwesh* performs the same function as *dus* in *dukkh*. Hence *dwesh* comes to mean "a hankering after repulsion". Anger, jealousy, hatred, etc., are all modifications of this, as love, affection and friendship are those of raga. By what has been said above, it is easy to follow up the genesis of the principle of "tenacity of life". I must now try to assign these actions to their prevailing *tatwas*.

The general color of *avidya* is, as already said, that of *akasa*, darkness. Otherwise, the *agni* *tatwa* prevails in anger. If this is accompanied by *vayu*, there will be a good deal of motion in the body, *prithivi* will make it stubborn, and *apas* easily manageable. *Akasa* will give a tinge of fear.

The same tatwa prevails in love. Prithivi makes it abiding, vayu changeable, agni fretting, apas lukewarm, and akasa blind.

Akasa prevails in fear; it tends to produce a hollow in the veins themselves. In prithivi the timid man is rooted to the spot, with vayu he runs away, with apas he succumbs to flattery, and agni tends to make one vengeful.

### **Vikalpa**

Vikalpa is that knowledge which the words imply or signify, but for which there is no reality on the physical plane. The sounds of nature connected with its sight have given us names for precepts. With the additions or subtractions of the precepts we have also had additions and subtractions of the sounds connected therewith. The sounds constitute our words.

In vikalpa two or more precepts are added together in such a way as to give birth to a concept having no corresponding reality on the physical plane. This is a necessary result of the universal law of visana. When the mind is habituated to a perception of more phenomena than one, all of them have a tendency to appear again; and whenever two or

more such phenomena coincide in time, we have in our mind a picture of a third something. That something may or may not exist in the physical plane. If it does not, the phenomenon is vikalpa. If it does, however, we call it Samadhi.

### **Nidra (Sleep)**

This also is a phenomenon of the manomaya kosha mind. Indian philosophers speak of three states in this connection: waking, dream, and sleep.

### **Waking**

This is the ordinary state when the principle of life works in connection with the mind. The mind then receives impressions of the external objects through the action of the senses. The other faculties of the mind are purely mental, and they may work in the waking as in the dreaming state. The only difference is that in dreams the mind does not undergo the perceptive changes. How is this? These changes of state are always passive, and the soul has no choice in being subjected to them. They come and go as a necessary result of the working of swara in all its five modifications. As has been explained in the articles on Prana, the different sensuous organs cease to respond to external tatwic changes when the

positive current gains more than ordinary strength in the body. The positive force appears to us in the shape of heat, the negative in the shape of cold. Therefore I may speak of these forces as heat and cold.

### **Dreams**

The Upanishad says that in dreamless sleep the soul sleeps in the blood vessels (nadi), the pericardium (puritat), the hollow of the heart. Has the system of blood vessels, the negative center of Prana, anything to do with dreams also? The state of dream, according to the Indian sage, is an intermediate one between waking and sleeping, and it is but reasonable to suppose that there must be something in this system that accounts for both these phenomena. What is that something? It is variously spoken of as the pitta, the agni, and the sun. It is needless to say that these words are meant to denote one and the same thing. It is the effect produced on the body by the solar breath in general, and the agni tatwa in particular. The word pitta might mislead many, and therefore it is necessary to state that the word does not necessarily always mean lull. There is one pitta that Sanskrit physiology locates specifically in the heart. This is called the sadhaka

pitta. It is nothing more or less than cardiac temperature, and it is with this that we have to do in sleep or dream.

According to the Indian philosopher, it is the cardiac temperature that causes the three states in varying degrees. This and nothing more is the meaning of the Vedic text that the soul sleeps in the pericardium, etc. All the functions of life are carried on properly as long as we have a perfect balance of the positive and negative currents, heat and cold. The mean of the solar and lunar temperatures is the temperature at which the prana keeps up its connection with the gross body. The mean is struck after an exposure of a whole day and night. Within this period the temperature is subjected to two general variations. The one is the extreme of the positive; the other the extreme of the negative. When the positive reaches its daily extreme the sensuous organs pass out of time with the external tatwas.

It is a matter of daily experience that the sensuous organs respond to external tatwic vibrations within certain limits. If the limit is exceeded either way, the organs become insensible to these vibrations. There is, therefore, a certain degree of temperature at which the sensuous organs can ordinarily work; when this limit is exceeded either way, the organs become incapable of receiving any impression from without.

During day the positive life current gathers strength in the heart. The ordinary working temperature is naturally exceeded by this gathering up of the forces, and the senses sleep. They receive no impression from without. This is sufficient to produce the dreaming state. As yet the chords of the gross body (sthula sharira) alone have slackened, and the soul sees the mind no longer affected by external impressions. The mind is, however, habituated to various precepts and concepts, and by the mere force of habit passes into various states. The breath, as it modifies into the five tatwic states, becomes the cause of the varying impressions coming up. As already said, the soul has no part in calling up these visions of its own free will. It is by the working of a necessary law of life that the mind undergoes the various changes of the waking and the sleeping states. The soul does nothing in conjuring up the phantasms of a dream, otherwise it would be impossible to explain horrible dreams. Why, indeed, if the soul is entirely free in dreaming does it sometimes call into being the hideous appearances that, with one terrible shock, seem to send our very blood back to our heart? No soul would ever act thus if it could help it.

The fact is that the impressions of a dream change with the tatwas. As one tatwa easily glides into the other, one

thought gives place to another. The akasa causes fear, shame, desire, and anger; the vayu takes us to different places; the taijas shows us gold and silver, and the prithivi may bring us enjoyment, smiles, dalliance, and so on. And then we might have composite tatwic vibrations. We might see men and women, dances and battles, councils and popular gatherings; we might walk in gardens, smell the choicest flowers, see the most beautiful spots; we might shake hands with our friends, we might deliver speeches, we might travel into different lands. All these impressions are caused by the tatwic state of the mental coil, brought about either by (1) physical derangement, (2) ordinary tatwic changes, (3) or some other coming natural change of state.

As there are three different causes, there are three different kinds of dreams. The first cause is physical derangement. When the natural currents of prana are disturbed so that disease results, or are about to be so disturbed, the mind in the ordinary way undergoes these tatwic changes. The sympathetic chords of the minds are excited, and we dream of all the disagreeable accompaniments of whatever disease may be within our physical atmosphere in store for us. Such dreams are akin in their nature to the ravings of delirium; there is only a difference in strength and violence. When ill,

we may in a similar way dream of health and its surroundings.

The second kind of dream is caused by ordinary tatwic changes. When the past, the present, and the future tatwic condition of our surroundings is uniform in its nature, when there is no change, and when no change is in store for us, the stream of dreams is most calm and equable in its easy flow. As the atmospheric and the healthful physiological tatwas glide smoothly one into the other, so do the impressions of our minds in this class of dreams. Ordinarily we cannot even remember these dreams, for in them there is nothing of special excitement to keep them in our memory.

The third kind of change is similar to the first; there is only a difference in the nature of the effects. These we call the effects of disease or health, as the case may be; here we might group the results under the general name of prosperity or calamity.

The process of this sort of mental excitement is, however, the same in both. The currents of life, pregnant with all sorts of good and evil, are sufficient in strength while yet potential and only tending towards the actual, to set the sympathetic chords of the mind in vibration. The purer the mind, and the freer from dust of the world, the more sensitive it is to the

slightest and the most remote tendency of prana towards some change. Consequently we become conscious of coming events in dreams. This explains the nature of prophetic dreams. To weigh the force of these dreams, however, to find out exactly what each dream means, is a most difficult task, and under ordinary circumstances quite impossible. We may make 10,000 mistakes at every step, and we need nothing less than a perfect Yogi for the right understanding of even our own dreams, to say nothing of those of others. Let us explain and illustrate the difficulties that surround us in the right understanding of our dreams. A man in the same quarter of the city in which I live, but unknown to me, is about to die. The tatwic currents of his body, pregnant with death, disturb the atmospheric tatwas, and through their instrumentality are spread in various degrees all over the world. They reach me, too, and excite the sympathetic chords of my mind while I am sleeping. There being no special room in my mind for that man, my impression will be only general. A human being, fair or ugly, male or female, lamented or not, and having other similar qualities, will come into the mind on his deathbed. But what man? The power of complex imagination, unless strongly kept in check by the hardest exercise of yoga, will have its play, and it is almost certain that a man

who has previously been connected in my mind with all these tatwic qualities will make his appearance in my consciousness. It is evident that I shall be on the wrong track. That someone is dead or dying, we may be sure, but who or where is impossible for ordinary men to discover. And not only does the manifestation of vikalpa put us on the wrong track, but all the manifestations of the mind do that. The state of samadhi, which is nothing more than putting one's self into a state of the most perfect amenability to tatwic surroundings, is therefore impossible unless all the other manifestations are held in perfect check. Patanjali says, "Yoga is keeping in check the manifestations of the mind."

### **Sleep**

The dreamy state is maintained as long as and when the cardiac temperature is not strong enough to affect the mental coil. But with increasing positive strength, that too must be affected. The manas and the prana are made of the same materials and are subject to the same laws. The more subtle these materials are, however, the stronger must be the forces that produce similar changes. All the coils are tuned together, and changes in the one affect the other. The vibrations per second of the first one are, however, larger in number than

those of the lower one, and this causes its subtlety. The higher are always affected through the immediately lower principles. Thus the external tatwas will affect prana immediately, but the mind can only be affected through the prana and not directly. The cardiac temperature is only an indication of the degree of heat in prana. When sufficient strength is gathered up there, the prana affects the mental coil. That too now passes out of tune with the soul. The mental vibration can only work at a certain temperature; beyond that it must go to rest. In this state we have no more dreams. The only manifestation of the mind is that of rest. This is the state of dreamless sleep.

I pass on now to the fifth and last mental manifestation.

### **Smrite (Retention, Memory)**

As Professor Max Muller has remarked, the original idea at the root *smri* (from which smrite) is “to make soft, to melt”. The process of making soft or melting consists in the melting thing assuming a consistency nearer and nearer to the tatwic consistency of the melting force. All change of state is equivalent to the assumption on the part of the thing changing, of the state of tatwa that causes the change. Hence the secondary idea of the root, “to love”. Love is that state of

mind in which it melts into the state of the object of love. This change is analogous to the chemical change that gives us a photograph on a sensitive plate. As in this phenomenon the materials on the sensitive plate are melted into the state of the reflected light, so the sensitive plate of the mind melts into the state of its percepts. The impression upon the mind is deeper, the greater the force of the imprinting rays and the greater the sympathy between the mind and the object perceived. This sympathy is created by stored up potential energy, and the perceptive rays themselves act with greater force when the mind is in a sympathetic state.

Every percept takes root in the mind, as explained above. It is nothing more than a change of the tatwic state of the mind, and what is left behind is only a capacity for sooner falling into the same state again. The mind falls back into the same state when it is under the influence of the same tatwic surroundings. The presence of the same thing calls back the same mental state.

The tatwic surroundings may be of two descriptions, astral and local. The astral influence is the effect upon the individual prana of the condition of the terrestrial prana at that time. If this effect appears as the agni tatwa, those of our concepts that have a prominent connection with this tatwa

will make their appearance in the mind. Some of these are a hankering after wealth, a desire for progeny, etc. If we have the vayu tatwa, a desire to travel may take possession of our minds and so on. A minute tatwic analysis of all of our concepts is of the greatest interest; suffice it to say here that the tatwic condition of prana often calls up into the mind objects that have made the objects of perception in similar previous conditions. It is this power that underlies dreams of one class. In the waking state too this phase of memory often acts as reminiscence.

Local surrounding are constituted by those object which the mind has been accustomed to perceive together with the immediate object of memory. This is the power of association. Both these phenomena constitute memory proper (smrite). Here the object comes first into the mind, and afterwards the act and the surroundings of perception. Another very important kind of memory is what is called buddhi, literary memory. This is the power by which we call to mind what we have learned of scientific facts. The process of storing up these facts in the mind is the same, but the coming back into consciousness differs in this, that here the act first comes into the mind and then the object. All the five tatwas and the foregoing mental phenomena may cause the phe-

nomenon of memory. Literary memory has a good deal to do with yoga, i.e., the exercise of free will to direct the energies of the mind into desirable channels. While those impressions that take root in the mind on account of natural surroundings make the mind the unwilling slave of the external world, buddhi may lead it to bliss and freedom. But will these tatwic surroundings always bring related phenomena into consciousness? No! This depends upon their correlative strength. It is well known that when the vibrations per second of akasa (sound) pass beyond a certain limit either way, they do not affect the tympanum. It is, for example, only a certain number of vibrations per second of the taijas tatwa that affects the eye, and so on with the other senses. The case with the mind is similar. It is only when mental and external tatwic tensions are equal that the mind begins to vibrate as it comes into contact with the external world. Just as the varying states of the external organs make us more or less sensitive to ordinary sensation, so different men might not hear the same sounds, might not see the same sights, the mental tatwas might not be affected by percepts of the same strength, or might be affected in different degrees by percepts of the same strength. The question is, how is the variation of this mental tatwic strength produced? By exercise, and the

absence of exercise. If we accustom the mind, just as we do the body, to any particular precept or concept, the mind easily turns to those percepts and concepts. If, however, we give up the exercise, the mind becomes stiff and ceases by degrees to respond to these percepts and concepts. This is the phenomenon of forgetting. Let a student whose literary exercises is just opening the buds of his mind, whose mind is just gaining strength enough to see into the causes and effects of things, give up his exercise. His mind will begin to lose that nice perception. The stiffer the mind becomes the less will the casual relation affect him, and the less he will know of it, until at last he loses all his power.

Ceaseless influence and activity of one sort being impossible in the ordinary course of time, every impression tends to pass away as soon as it is made. Its degree of stability depends upon the duration of the exercise. But although activity of one sort is impracticable, activity of some sort is always present in the mind. With every action the color of the mind changes, and one color may take so deep a root in the mind as to remain there for ages upon ages, to say nothing of minutes, hours, days and years. Just as time takes ages to demolish the impressions of the physical plane, just as marks of incision upon the skin may not pass away even in two dec-

ades, so also it takes ages to demolish the impressions of the mind. Hundreds and thousands of years may this be spent in devachan in order to wear away those antagonistic impressions that the mind has contracted in earthly life. By antagonistic impressions, I mean those impressions that are not compatible with the state of moksha, and have about them a tinge of earthly life.

With every moment the mind changes its color, whether the impression be adding or subtracting. These changes are temporary. But there is at the same time a permanent change going on in the color of the mind. With every little act of our worldly experience, the evolutionary tide of progress is gaining strength and passing into variety. The color is constantly changing. But the same general color is maintained under ordinary circumstances, during one earthly life. Under extraordinary circumstances we might have men having two memories. Under such circumstances as in the case of approaching death, the accumulated forces of a whole life combine into a different color. The tension, so to speak, becomes different from what it was before. Nothing can put the mind into the same state again. This general color of the mind differing from that of other minds, and yet retaining its general character for a whole life, gives us the consciousness

of personal identity. In every act that has been done, or that is, or might be done, the soul sees the same general color, and hence the feeling of personal identity. In death the general color changes, and although we have the same mind, we have a different consciousness. Hence no continuance of the feeling of personal identity is possible through death.

Such is a brief account of the manomaya kosha, the mental coil in the ordinary state. The influence of the higher principle (the vijnana maya kosha) through the exercise of yoga induces in the mind a number of other manifestations. Psychic manifestations show themselves in the mind and the prana, in the same way as mental manifestations are seen influencing and regulating the prana.

## **IX. The Mind (II)**

As has been seen, the universe has five planes of existence (which may also be divided into seven). The forms of the earth, which are little pictures of the universe, also have the same five planes. In some of these organisms the higher planes of existence are absolutely latent. In man, in the present age, the Vijnana maya kosha and the lower principles make their appearance.

We have had an insight into the nature of the macrocosmic prana, and we have seen that almost every point in this ocean of life represents a separate individual organism.

The case is similar with the macrocosmic mind. Every truti of that center takes in the whole of the macrocosmic mind in the same way. From every point the tatwic rays of the mental ocean go to every point, and thus every point is a little picture of the universal mind. This is the individual mind.

The Universal mind is the original of all the centers of Prana, in the same way as the solar prana is the original of the species of earth-life. Individual mind, too, is similarly the original of all the individual manifestations of the prana maya kosha. Similarly the soul, and the individual spirit on

the highest plane, is the perfect picture of all that comes below.

With the four higher planes of life there are four different states of consciousness, the waking, the dreaming, the sleeping, and the Tureya.

With these remarks the following extract from the Prasnopnishat will be intelligible and instructive.

“Now Sauryayana Gargya asked him, ‘Sir, in this body, what sleeps, and what remains awakened? Which of these luminous beings sees dreams? Who has this rest? In whom do all these [manifestations] rest in the potential unmanifested state?’

“He answered him, ‘O Gargya, as the rays of the setting sun are all collected in the luminous shell, and then go out again, as he rises again and again, so all that is collected in the luminous shell of mind beyond. For this reason then, the man does not hear, does not see, does not smell, does not taste, does not touch, does not take, does not cohabit, does not excrete, does not go on. They say that he sleeps. The fires of prana alone remain awakened in his body. The apana is the Garhapatya fire; the Vyana is the right hand fire. The prana is the ahavanurya fire, which is made by the Garhapatya.

That which carries equally everywhere the oblations of food and air, is the samana. The mind (manas) is the sacrificer (vajmana). The Udana is the fruit of the sacrifice. He carries the sacrificer every day to Brahma. Here this luminous being [the mind] enjoys great things in dreams. Whatever was seen, he sees again as if it were real; whatever was experienced in different countries, in different directions, he experiences the same again and again – the seen and the unseen, the heard or the unheard, thought or not thought upon. He sees all, appearing as the self of all manifestations.

“When he is overpowered by the taijas, then this luminous being sees no dreams in this state; then there appears in the body this rest [the dreamless sleep].

“In this state, my dear pupil, all [that is enumerated below] stays in the ulterior atma, like birds that resort to a tree for habitation – the prithivi composite and the prithivi non-composite; the apas composite and the apas non-composite; the taijas composite and the taijas non-composite; the vayu composite and the vayu non-composite; the akasa composite and the akasa non-composite; the sight and the visible, the hearing and the audible, the smell and the smellable, the taste and the tastable, the touch and the tangible, the speech and the utterable, the hands and whatever might be grasped,

the generative organ and the excrements, the feet and that which may be gone over, the faculty and the object of doubt, the faculty and the object of egoism, the faculty and the object of memory, the light and that which might be enlightened, the prana and that which keeps it together.

“The soul is the Vijnana atma, the seer, the toucher, the hearer, the smeller, the taster, the doubter, the ascerner, the agent. This soul [the Vijnana atma] stays in the ulterior, unchangeable atma [the ananda].

“So there are four atma – the life, the mind, the soul, the spirit. The ultimate force that lies at the root macrocosmic Power of all the manifestation of soul, mind, and the life the principle, is the spirit.”

By composite is meant that tatwa which has come into existence after the division into five, noticed in the first essay. The non-composite means a tatwa before the division into five.

The principal interest of this quotation lies in presenting in authoritative fashion the views that have already been propounded. The next essay explains one of the most important functions of the macrocosmic Power and Mind, that of

recording the human actions, and touches upon some other rather important truths.

## **X. The Cosmic Picture Gallery**

We are directed by our Guru in the philosophy of tatwas to look into vacant space toward the sky, when the sky is perfectly clear, and fix your attention there with the utmost possible strength.

We are told that after sufficient practice we shall see there a variety of pictures – the most beautiful landscapes, the most gorgeous palaces of the world, and men, women and children in all the varying aspects of life. How is such a thing possible? What do we learn by this practical lesson in the science of attention?

I think I have described with sufficient explicitness in the essays, the ocean of prana with the sun for its center, and have given a hint sufficiently suggestive of the nature of the macrocosmic mental and psychic atmospheres. It is of the essential nature of these atmospheres that every point therein forms a center of action and reaction for the whole ocean. From what has already been said, it will be plain that each of these atmospheres has a limit of its own. The terrestrial atmosphere extends only to a few miles, and the external boundary line of this sphere must, it will be readily understood, give it the appearance of an orange, just like that of the

earth. The case is the same with the solar prana, and the higher atmospheres. To begin with the terrestrial Prana, which has the measured limits of our atmosphere. Every little atom of our earth, and the most perfect organisms, as well as the most imperfect, makes a center of action and reaction for the tatwic currents of terrestrial Prana. The prana has the capability of being thrown into the shape of every organism or, to use a different language, the rays of prana as they fall upon every organism are returned from that organism according to the well-known laws of reflection. These rays, as is again well known, carry within themselves our pictures. Bearing these within them, they go up to the limit of the terrestrial prana noted above. It will be easy to conceive that within the imaginary sphere that surrounds our terrestrial prana, we now have a magnified picture of our central organism. Not one organism only, but all the smallest points, the most imperfect beginnings of organized life, as well as the most perfect organisms – all are pictured in this imaginary sphere. It is a magnificent picture-gallery; all that is seen or heard, touched, tasted or smelled on the face of the earth has a glorious and magnified picture there. At the limit of this terrestrial prana, the picture-forming tatwic rays exercise a double function.

Firstly they throw the sympathetic tatwic chords of the solar prana into similar motion. That is to say, these pictures are now consigned to the solar prana, from whence in due course they reach step by step to the universal intelligence itself.

Secondly, these rays react upon themselves, and turning back from the limiting sphere, are again reflected back to the center.

It is these pictures that the attentive mind sees in its noon-day gaze into vacancy, and it is these pictures, seen in this mysterious way, that give us the finest food for our imagination and intellect, and supply us with a far-reaching clue to the nature and working of the laws that govern the life of the macrocosm and the microcosm. For these pictures tell us that the smallest of our actions, on whatever plane of our existence, actions that may be so insignificant to us as to pass unnoticed even by ourselves, are destined to receive an everlasting record, as the effect of the past and the cause of the future. These pictures again tell us of the existence of the five universal tatwas that play so important a part in the universe. It is these pictures that lead us to the discovery of the manifold constitution of man and the universe, and of those pow-

ers of the mind that have not yet received recognition at the hands of the official science of the day.

That these truths have found place in the Upanishad may be seen from the following quotation from the Ishopnishat, mantra 4:

“The Atma does not move: is one: is faster than the mind: the senses reach it not: as it is the foremost in motion. It goes beyond the others in rapid motion while itself at rest, in it the Recorder preserves the actions.”

In the above quotation it is the word Matarishwa that I translate “Recorder”. Ordinarily the word is translated as air, and so far as I know, the word has never been understood clearly in the sense of the “Recorder”. My view, therefore, may be further explained with advantage.

The word is a compound of the words matari and swah. The word matari is the locative case of matri which ordinarily means mother, but which is rendered here as space, as the substratum of distance, from the root ma, to measure. The second word of the compound means the breather, coming as it does from the root Swas, to breathe. Hence the compound means “he who breathes in space”. In explaining this word the commentator Sankaracharya goes on to say:

“The word ‘Matarishwa’, which has been derived as above, means the Vayu [the mover] which carries in it all the manifestations of prana, which is action itself, that which is the substratum of all the groups of causes and effects, and in which all the causes and effects are held like beads in a thread, that which is given the name of sutra [the thread] inasmuch as it holds in itself the whole of the world.”

It is further said that the “actions” in the above quotation which this matarishwa holds in itself are all the movements of the individualized prana, as well as the actions of heating, lighting, ruining, etc., of the macrocosmic powers known as Agni, etc.

Now such a thing can by no means be the atmospheric air. It is evidently that phase of prana which acts as carrying the pictures of all actions, all motions from every point of space to every other point and to the limits of the surya mandala. This phase of prana is nothing more or less than the Recorder. It holds in itself forever and ever all the causes and effects, the antecedents and consequents of this world of ours.

It is action itself. This means that all action is a change of phase of prana.

It is said in the above quotation that this Recorder lives in the atma. Inasmuch as the atma exists, this Power always performs its function. The prana draws its life itself from the atma, and accordingly we find a similarity between the dualities of the two. It is said of the atma in the above extract that it does not move, and yet it moves faster than the mind. These appear to be contradictory qualities at first sight, and it is such qualities that make the ordinary God of commonplace theologians the absurd being he always looks to be. Let us, however, apply these qualities to prana, and once understood on this plane, they will be quite as clearly understood on the highest plane, the atma. It has been said more than once that from every point of the ocean of prana the tatwic rays fly in every direction, to every point within the surya mandala. Thus the ocean of prana is in eternal motion. For all this, however, does one point of this ocean ever change its place? Of course not. Thus while every point keeps its place, every point at the same time goes and shows itself in every other point.

It is the same simple way that the all-pervading atma is in eternal motion and yet always at rest.

The case is similar with all the planes of life; all our actions, all our thoughts, all our aspirations, receive an everlasting record in the books of Matarishwa.

I must now notice these pictures in a little more detail. The science of photography tells us that under certain conditions the visual pictures can be caught on the plane of the sensitive film. But how can we account for the reading of letters at a distance of 40 miles or more? Such phenomena are a matter of personal experience to me. Very recently, while sitting abstracted, or it may be in a kind of dream, about 4 o'clock in the morning, I read a postcard written by a friend to a friend about me, the very same night, at a distance of almost 30 miles. One more thing must be noticed here, I think. Almost half the card spoke about me, and the rest referred to other matters that might have a passing interest for me, but could not be engrossing. Now this rest of the card did not come before my eyes very clearly, and I felt that with all my effort I could not even keep my eye upon those lines or a sufficiently long time to understand them, but was irresistibly drawn towards the paragraph that spoke of me, and which I could read very clearly. Four days after this, the addressee showed it to me; it was exactly the same, sentence by sentence (so far as I could remember), as I had seen

before. I mention this phenomenon in particular, as in it the various prerequisites for the production of these phenomena are clearly defined. We learn from an analysis of this incident the following facts:

(1) When he was writing, the writer of the card meant that I should read the card, and especially the paragraph that concerned me.

(2) I was very anxious to know the news about me that the card contained.

(3) In the frame of mind mentioned above my friend wrote the card. What happened? The picture of his thoughts on the card, both on the physical and the mental plane, flew in every direction along the tatwic rays of the macrocosmic prana and mind. A picture was immediately made on the macrocosmic spheres, and from thence it bent its rays towards the destination of the postcard. No doubt all minds in the earth received a shock of this current of thought at the same time. But my mind alone was sensitive to the card and the news it contained. It was, therefore, on my mind alone that any impression was made. The rays were, as it were, refracted into my mind, and the result described above followed.

It follows from this illustration that in order to receive the pictorial rays of the prana we must have a mind in a state of sympathy, and not of antipathy; that is to say, a mind free from all action or intense feeling for the time being is the fittest receptacle for the pictorial representations of the cosmos, and so for a correct knowledge of the past and the future. And if we have an intense desire to know the thing, so much the better for us. It is in this way that the divine occultist reads the records of the past in the book of nature, and it is on this road that the beginner of this science must walk according to the direction of our Guru.

It must be understood that everything in every aspect that has been or is being on our planet has a legible record in the book of nature, and the tattvic rays of the prana and the mind are constantly bringing the outlines of these pictures back to us. It is to a great extent due to this that the past never leaves us, but always lives within us, although many of its most magnificent monuments have been forever effaced from the face of our planet for the ordinary gaze. These returning rays are always inclined toward the center that originally gave them birth. In the case of the mineral surroundings of terrestrial phenomena these centers are preserved intact for ages upon ages, and it is quite possible for any sensitive mind, at

any time, to turn these rays towards itself by coming into contact with any material remains of historic phenomena. A stone unearthed at Pompeii is pictured as part of the great event that destroyed the city, and the rays of that picture naturally are inclined towards that piece of stone. If Mrs. Denton puts the stone to her forehead, a sympathetic and receptive condition is the only pre-requisite for the transference of the whole picture to her mind. This sympathetic state of mind may be natural to a person, or it may be acquired. It may be mentioned that what we are in the habit of calling natural powers are really acquired, but they have been acquired in previous incarnations. Shiva says:

“There are some to whom the tatwas become known, when the mind is purified by habituation, either by the acquired velocity of other births or by the kindness of the Guru.”

It seems that two pieces of granite, the same to all intents and purposes externally, may have an entirely different tatwic color, for the color of a thing depends to a very great extent upon its tatwic surrounding. It is this occult color that constitutes the real soul of things, although the reader must by this time know that the Sanskrit word prana is more appropriate.

It is no myth to say that the practiced yogi might bring the picture of any part of the world, past or present, before his mind's eye with a single effort of his will. And not only visual pictures, as our illustration might lead the reader to think. The preservation and formation of visual pictures is only the work of the luminiferous ether, the tajas tatwa. The other tattwas perform their functions as well. The akasa or soniferous ether preserves all the sounds that have ever been heard or are being heard on earth, and similarly the remaining three others preserve the records of the remaining sensations. We see, therefore, that combining all these pictures, a yogi in contemplation might have before his mind's eye any man at any distance whatsoever and might hear his voice also. Glyndon, in Italy, seeing and hearing the conversation of Viola and Zanoni in their distant home, is therefore not merely a dream of the poet; it is a scientific reality. The only thing necessary is to have a sympathetic mind. The phenomena of mental telepathy, psychometry, clairvoyance and clairaudience, are all phases of this tattwic action. Once understood, it is all a very simple affair. It may be useful in this place to offer some reflections as to how these pictorial representations of a man's present go to shape his future. I shall first attempt to show how complete the record is. At the outset I

may remind the reader of what I have said about the tatwic color of everything. It is this that gives individuality even to a piece of stone.

This pictorial whole is only the cosmic counterpart of the individual prana maya kosha (the coil of life). It is possible that anyone who may not have thoroughly understood the manner of the storing up of tatwic energy in the individual prana may more easily comprehend the phenomena in its cosmic counterpart. In fact, the macrocosmic and microcosmic phenomena are both links of the same chain, and both will conduce to the thorough understanding of the whole. Suppose a man stands on a mountain, with the finest prospect of nature stretched out before his eyes. As he stands there contemplating this wealth of beauty, his picture in this posture is at once made in the ecliptic. Not only is his external appearance pictured, but the hue of his life receives the fullest representation. If the agni tatwa prevails in him at that moment, if there is the light of satisfaction in his face, if the look in his eyes is calm, collected and pleasant, if he is so much absorbed in the gaze as to forget everything else, tatwas separate or in composite will do their duty, and all the satisfaction, calmness, pleasure, attention or inattention will be represented to the finest degree in the sphere of the eclip-

tic. If he walks or runs, comes down or jumps up or forward, the tattvic rays of prana picture the generating and the generated colors with the utmost faithfulness in the same retentive sphere.

A man stands with a weapon in his hand, with the look of cruelty in his eye, with the glow of inhumanity in his veins, his victim, man or animal, helpless or struggling before him. The whole phenomenon is instantly recorded. There stands the murderer and the victim in their truest possible colors, there is the solitary room or the jungle, the dirty shed or the filthy slaughterhouse; all are there as surely and certainly as they are in the eye of the murderer or the victim himself.

Let us again change the scene. We have a liar before us. He tells a lie, and thereby injures some brother man. No sooner is the word uttered than the akasa sets to work with all possible activity. There we have the most faithful representation. The liar is there from the reflection that the thought if the injured person throws into the individual prana; there is the injured man also. The words are there with all the energy of the contemplated wrong. And if that contemplated wrong is completed, there is also the change for the worse that his mendacity has produced in the victim. There is nothing of the surroundings, the antecedent and the

consequent postures – the causes and effects – that is not represented there.

The scene changes, and we come to a thief. Let the night be as dark as it may, let the thief be a circumspect and wary as he can; our picture is there with all its colors well defined, though perhaps not so prominent. The time, the house, the wall, the sleeping and injured inmates, the stolen property, the subsequent day, the sorrowful householders, with all the antecedent and consequent postures, are pictured. And this is not only for the murderer, the thief, or the liar, but for the adulterer, the forger, the villain who thinks his crime is hidden from every human eye. Their deeds, like all deeds that have ever been done, are vividly, clearly, exactly recorded in nature's picture gallery. Instances might be multiplied, but it is unnecessary. What has been said is sufficient to explain the principle, and the application is useful and not very difficult. But now we must bring our pictures back from our gallery.

We have seen that time and space and all the possible factors of a phenomenon receive an accurate representation there, and these tatwic rays are united to the time that saw them leaving their record on the plane of our pictorial region. When, in the course of ages, the same Time throws its shade again upon the earth, the pictorial rays, stored up long since,

energize man-producing matter, and shape it according to their own potential energy, which now begins to become active. It will be readily conceded that the sun gives life to the earth – to men as well as to vegetables and minerals. Solar life takes human shape in the womb of the mother, and this is only an infusion of some one set of our pictorial rays into the sympathetic life that already shows itself on our planet. These rays thus produce for themselves a gross human body in the womb of the mother, and then having the now somewhat different and differing maternal body, start on their terrestrial journey. As time advances, the pictorial representation changes its tattvic postures, and with it the gross body does the same.

In the case of the rebirth of the man we saw gazing on the mountains, the calm, watchful, contented attitude of the mind that he cultivated then has its influence upon the organism now, and once more the man enjoys the beauty of nature and so is pleased and happy.

But now take the case of the cruel murderer. He is by nature cruel, and he still yearns to murder and destroy, and he could not be restrained from his horrible practices; but the picture of the ebbing life of his victim is now part and parcel of his constitution, the pain, the terror, and the feeling of

despair and helplessness are there in all their strength. Occasionally he feels as if the blood of life were leaving his very veins. There is no apparent cause, and yet he suffers pain; he is subject to unaccountable fits of terror, despair and helplessness. His life is miserable; slowly but surely it wanes away.

Let the curtain fall on this stage. The incarnated thief now comes on the stage. His friends leave him one by one or he is driven away from them. The picture of the lonely house must assert its power over him. He is doomed to a lonely house. The picture of somebody coming into the house through some unfrequented part and stealing some of his property, makes its appearance with the fullest strength. The man is doomed to eternal cowardice. He draws towards himself the same grief and heart-rending that he caused to others long ago. This posture of heart-rending grief has its influence upon him in the ordinary way, and it creates its surrounding under the same influence.

These illustrations are sufficient to explain the law according to which these cosmic pictures govern our future lives. Whatever other sins may be committed under the innumerable circumstance of life, their tatwic effects can be

traced easily through the pictorial representations of the cosmos.

It is not difficult to understand that the picture of each individual organism upon the face of the earth is pictured in prana, and it is these pictures, in my opinion, that correspond to the ideas of Plato on the highest plane of existence. A very interesting question arises at this point. Are these pictures of eternal existence, or do they only come into existence after formations have taken place on the terrestrial plane? *Ex nihilo nihil fit* is a well-known doctrine of philosophy, and I hold with Vyasa that the representations (what we now call pictures) of all objects in their generic, specific, and individual capacities have been existing forever in the universal mind. Swara, or what may be called the Breath of God, the Breath of Life, is nothing more or less than abstract intelligence, as has been explained, or intelligent motion, if such an expression is better understood. Our book says:

“In the swara are pictured, or represented, the Vedas and the Sastras, in the swara the highest Gandharvas, and in the swara all the three worlds; the swara is atma itself.”

It is not necessary to enter more thoroughly into a discussion of this problem; the suggestion is sufficient. It might be said, however, that all formation in progress on the face of

our planet is the assuming by everything under the influence of solar ideas of the shape of these ideas. The process is quite similar to the process of wet earth taking impressions of anything that is pressed upon it. The idea of anything is its soul.

Human souls (prana maya kosha) exist in this sphere just like the souls of other things, and are affected in that home of theirs by terrestrial experience in the manner mentioned above.

In the course of ages, these ideas make their appearance in the physical plane again and again, according to the laws hinted at previously.

I have also said that these pictures have their counterparts in the mental and the higher atmospheres. Now it might be said that just as these solar pictures recur again and again, there are times at which these mental pictures also recur. The ordinary deaths known to us are terrestrial deaths. This means to say that the influence of the solar pictures is withdrawn for some time from the earth. After some time, the duration depending upon the colors of the picture, they throw their influence again upon the earth, and we have terrestrial rebirth. We may die any number of terrestrial deaths, and yet our solar life might not be extinct.

But men of the present manwantara might die solar deaths under certain circumstances. Then they pass out of the influence of the sun and are born again only in the region of the second Manu. Men who now die solar deaths will remain in the state of bliss all through the present manwantara. Their rebirth might also be delayed for more than one manwantara. All these pictures remain in the bosom of Manu during the manwantarapralaya. In the same way, men might undergo higher deaths, and pass their time in a state of even higher and more enduring bliss. The mental coil may be broken, too, just as the gross, the terrestrial, and the solar might be, and then the blessed soul remains in bliss and unborn until the dawn of the second day of Brahma. Higher still and longer still is the state that follows Brahmic death. Then the spirit is at rest for the remaining Kalpa and the Mahapralaya that follows. After this it will be easy to understand the meaning of the Hindu doctrine, that during the night of Brahma the human soul and the whole of the universe is hidden in the bosom of Brahma like the tree in the seed.

