A. I. O. C.
(Baroda)
Pratyāhāra in Yoga Upaniṣads

Presented by

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PRATYĀHĀRA IN YOGAUPANIŚAD

It is proposed to discuss the concept of Pratyāhāra on the basis of the yoga Upaniṣads in this paper. The term Pratyāhāra ordinarily means :- to withdraw, to retreat, holding back. But, Pāṇini in his Ṭhāḍhyai Sūtras this term in a technical sense i.e. ‘Samkṣepa’¹. In Yoga Sūtra of Patañjali Pratyāhāra is used in the sense of withdrawal of the sense organs etc., from their respective objects, which form one of the most important part of Yoga Philosophy.

In later Upaniṣads of Yoga this terms is discussed in detail. I have taken some selected Yoga Upaniṣads for analysis edited by Pandit A. Mahadeva Sastri²

The present analysis is organised as follows in following headings :

1) The definition and meaning of the term Pratyāhāra
2) The condition favourable for attaining Pratyāhāra
3) The importance of Pratyāhāra in Yoga Philosophy
4) Pratyāhāra in relation to other Aṅgās of Yoga
5) Observations.

I. Patañjali’s definition of Pratyāhāra :

Lord Patañjali in his Yoga Sūtra in Sādhana Pāda and Vibhuti Pāda describes Aṣṭāṅga Yoga, the eight stages of yoga namely Yama, Niyama, Āsana, Prāṇāyāma, Pratyāhāra, Dhāraṇā, Dhyāna, Samādhi.³ The first five angas are included in Bahiranga Sādhanā
and the rest of the three in Antaraṅga Sādhana Pratyāhāra is fifth among them which form a bridge between these two Sādhanās.

Why Pratyāhāra is the fifth stages of Yoga? Because upto that stage Patañjali in Sādhanā Pāda describes only about the physical body and its activities in which breathing is one of the activities which cannot be controlled by brain otherwise, but can be controlled by practising Prāṇāyāma, where the last stage called Keval Kumbhaka is achieved. In that the Yogi neither inhales nor exhales. And after that he says: 

धारणयुक्तञ्च मनसा योज्यति।

now onwards he starts discussing about mind

Patañjali defined Pratyāhāra as follows:

स्वविषय अस्वप्रयोगे विद्यतः स्वनिरपालिकाः इव इन्द्रियाणिप्रत्याहारः।

It means - withdrawing the senses, mind and consciousness from contact with the external objects and then drawing them inwards towards the seer is Pratyāhāra.

Now the mind is able to concentrate and the sense no longer importune the mind for their gratification. They lose interest in the tests and favours of their respective objects and are drawn back from the external world in order to help the mind in its inner quest. This is Pratyāhāra.

The Yoga Sūtra is called as Indian Psychology. So naturally it is related to the mind and its functions. Patañjali definitely knows that without controlling external limbs Yogi cannot able to go deeper
inside the body because mind is most complicated thing to understand. So, far that, yogi should have absolute control over his physical body, then only he will be able to control his mind. After achieving last stage of Prānāyāma that is Keval Kumbhaka.

The Yogi becomes very steady. Calm and stitapradya. He perceives everything but does not reply to it. Her arises the question, Where this activity of withdrawing of the sense etc.. Is forcefully made or it is a spontaneous and natural happening? Because in Darsana and Sāndilya Upanishad the definition of Pratyāhāra is given as:

विषयेतु विरचतां इन्द्रियाणां बलावहयनं प्रात्याहार ॥

Here it is significant to observe that the interpretation of the expression in the sense of withdrawing the sense organs forcefully as is done by many scholars like T.R. Srinivasa Ayyanger etc., is not very sound. Here I feel that should be interpreted as not forcefully but firmly. Because when that state of Keval Kumbhaka is achieved by the yogī where he can control his breathing also and can stay without breathing, that time he has achieved the supermost part of control; because to stay alive breathing is necessary and he can live without breathing. So his inner power becomes so high that he can control his mind easily, where he does not need to see anything or listen or taste or smell etc. It would not make difference even in the functional state of the sense organs. So withdrawing sense organs from the objects and make the mind to turn inward becomes very easy task for the yogī. Thus the
state of Pratyāhāra according to Patañjali naturally occurs after Keval Kumbhaka which is very spontaneous and natural.

In the foregoing pages we have presented the concept of Pratyāhāra on the basis of Yoga Sūtra. Now, we may proceed to see in detail how Yoga Upaniṣads explain or to interpret this concept. We have already pointed out elsewhere that the treatment of Pratyāhāra in the Yoga Upaniṣad is more detailed, elaborate and clear. Possibly the explanation as given in those Yoga Upaniṣad will serve as an aid to better understand the concept.

There are many definitions found in following Yoga Upaniṣads: AmṛtNāda, Darśana, YogaCūḍāmani, Yogatattva and Sāṇḍilya. In some sense these definitions are similar, still there are some essential differences which are of more explanatory type in nature. I reproduce here some of the selected definitions of Pratyāhāra from those Upaniṣad. Before doing so, it may be recorded that the definitions or rather the elaborations of this concept in different Yoga Upaniṣad though vary in terminology convey the similar ideas. Darśanopaniṣad in this regard is more clear and descriptive hence. I am quoting a few definitions from that Upaniṣad.

1) इन्द्रियाणां विचरंतां विष्णुपु व्यभिचार: | बलावहारण तेषां प्रत्याहार: स उच्यते ॥
2) यत् प्रव्यति तु तत्त्व ब्रह्म प्रभृत्य तस्मात: | प्रत्याहारो भवेदेष ब्रह्मविद्ये: पुरोविद्ये: ॥
3) यदवच्चुधध्वमुधं द्वा करोत्यामरणान्तिकस् | तत्त्व ब्रह्मो कुर्यत् प्रत्याहार: स उच्यते ॥
4) अथवा नित्यकम्प्ति ब्रह्माराधानुवं वृद्धि: | काम्यानि च तथा कुर्यात् प्रत्याहार: स उच्यते ॥
As one can notice, in *Yoga Upaniṣads*, meaning of *Pratyāhāra* is not limited only to withdrawal of sense organs but they relate it to Ātman e.g. in *Amṛtināda, Śāndilya, Yogatattva* and *Darsāna* the seer says: “यदनु प्रभुतिकृत्वं तत्त्वात्मेऽति भावयते” And it is same and true in case of other sense organs as well. What actually it means is that, what one perceives through ones sense organs, that knowledge is only Ātman. In normal human behaviour, if someone perceives something external he perceives it as his self. In other words, he is indifferent towards the objective reality of the entity he perceives. This is the state of indifferenceness with regard to the natural of the object of the sense organs and that state of self is pratyāhāra.

Let me cite an example for clarification. If someone is reading a book and simultaneously listening to music, then, it is possible that either one is reading the book without paying attention to the music, or one is listening the music without following what one is reading. Now this depends where one is concentrating suppose the book is very interesting and one is fully engrossed in the book. It will so happen that one will not listen the music as if it is not there. How does this happen? Because of concentrating on a particular work. Similarly seer says a *Yogi* who is practising *Aṣṭāṅga Yoga* should become involve in his work to such a higher extend that he will feel that everything among himself is Ātman. What he hears is Ātman though he is hearing
respective object. This indeed is difficult to achieve, but for the further spiritual development it is very much necessary for him to detach himself from every worldly affairs. Then only, he will achieve upper stages like Dhyāna, Samādhi and Pratyāhāra sit he borderline of these Antaraṅgas which are more difficult to achieve therefore Yogi has to achieve Pratyāhāra which is foundation of Antarangas.

This concept of Pratyāhāra in Yoga Upaniṣad is similar to Advait Philosophy: "ब्रह्म सत्यं जगन्न मिथ्या" Yoga Upaniṣads says that one perceives through the sense organs is only Ātman. So ultimately it is same as everything in this world is false, the ultimate truth is Brahman. Yoga Upaniṣads say that Yogi cannot stop his activities so his sense organs have to work. That means, mind who is meditator of the objects and the organs involves in the result and then it again wants to do the same activity, if it gives pleasure. Therefore again involvement in the worldly matters remains the same. So how can one able to withdraw the sense from their respective objects. For that, the seer gives a tip that the Yogi should not think about the result - pain as pleasure, but he should think that all these things which he comes across are only the different forms of Ātman.

The Yoga Upaniṣads give various ways to attain Pratyāhāra e.g. in Śāṅḍilya and or in Darśana the seer describes that in every stage of Yoga namely Yama, Niyama, Āsana, Prāṇāyāma there is Pratyāhāra. Because Pratyāhāra as we see also menas holding back.
Relating to that meaning Pratyāhāra. In other stages means holding or controlling the mind. When the Yogi reaches upto the stage of Pratyāhāra, it is not that he has given up Yama, Niyama etc. But now onwards he has to follow them differently. The work he is doing, practising Āsana and Prāṇāyāma is not only for his progress but for the betterment of the society. When Yogi reaches from physical level upto spiritual level then only he will be able to practice further. That clearly means following up pratyāhāra is not a physical work but a psychological process. Yoga Cūḍāmaṇi defines Pratyāhāra as:

विकारं मानसं योगी प्रत्याहारे गुणि मुच्छित ||

The yogin gives up mentaltransformations by withdrawing the mind. But mind is not something which can be seen but it is the energy force in the body through which body activities happen. If Pratyāhāra only means as said earlier then a psychic. Person becomes Yogi because what he does he did not bother about the result but he does it unknowingly and his mind and his sense organs don’t work together and also not the intellect. But in case of Pratyāhāra body mind and intellect should work together, then only one will able to concentrate further.

In ŚāṇḍilyaUpaniṣad seer says Yogi should control eighteen marmasthanas with the breathing which is physical as well as intellectual activity अष्टादशमु ममस्थानोऽपूर्वकः प्रात्मात्रण प्रत्याहार: II\

So one should remember that according to Yoga Upaniṣad Pratyāhāra is also
the part of practice. Yoga Upaniṣads are mainly based on Haṭha Yoga which gives stress on practical than theory. So though Upaniṣads are main part of philosophy, Yoga Upaniṣads are more practical but simultaneously the also preach ultimate simple philosophy. See for example the definition of Pratyāhāra in Śāṅkilyopaniṣad, "सर्व विषय फराकमुखत्वं प्रत्याहारः" 113 i.e. turning one's face away from all sensual pleasures in Pratyāhāra. Here one can see how it is applicable to day-to-day life even.

On the basis of the discussion we have made in the foregoing pages, the following may be observed.

According to Upaniṣads Pratyāhāra means not only the control of mind which can be achieved often Keval Kumbhaka but it is continuous process which has to be followed in every step of life i.e. in one's work one has to control one's feelings; emotions one has to detach from worldly affairs without cutting off completely from Saṃsāra. That means it is not the state of Samnyas one should do all activities but doesn't expect Fal, then only one will be able to progress further and concentrate one's mind which leads one to the ultimate aim and that is liberation Kaivalya. And for that Pratyāhāra is the beginning. Therefore one has to achieve this stage of Ayāṅga Yoga. Yoga Upaniṣads elaborates very simple and easy ways of attaining it which can be followed in day to day life.

A comparison between the concept of Pratyāhāra as given in
order here. The definition in Yoga Sūtra is precised and leaves many questions unanswered to. Thus it becomes difficult to understand and to follow as well for a common seeker to grasp and attain it e.g. Yoga Sūtra prescribes to withdraw the mind, senses, the consciousness inward but it doesn’t prescribe how? It says Pratyāhāra is the state of being within one ownself which is not a simple task to achieve. And here lies the importance and significance of Yoga Upaniṣads which suggest the mans along with the goal. One has to perform his duty without any attachment to it, without expecting any reward for it i.e. ‘निष्काम कर्म
नित्यविहित कर्म फलत्यागः प्रत्याहारः’ 14

and of course having or rather maintaining absolute control over ones sense organs. Thus in conclusions it would be apt to observe, that one can understand properly and easily the Yoga Sūtras with the help of Yoga Upaniṣad

II ॐ तत सत् II

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DESCRIPTION OF NĀḌĪS &
NĀḌĪSTHĀNAS IN YOGA UPANIṢADAS

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Description of Nāḍīs and Nāḍīsthānās in Yoga Upaniṣad

In this paper, I propose to describe the significance of Nāḍīs and Nāḍīsthānās in the Yoga Upaniṣads. In the ordinary sense, Nāḍī means the tubular stalk of any plant, a pipe flute, etc. In Ayurveda, Nāḍī means a pulse at the foot or hand; it also means any tubular organ of the body, such as an artery or vein. In Jyotish Śāstra, Nāḍī means a measure of time equal to twenty-four minutes or equal to half a Mahurta. But in yoga philosophy, this term Nāḍī occurs under the description of Prāṇāyāma in Hathayoga. Nāḍīsthāhana Prāṇāyāma is the beginning of the practice of Prāṇāyāma, in which the yogi should first purify the Nāḍīs, then practice Prāṇāyāma in the advanced stage.

In the Yoga Upaniṣads, one finds detailed discussion about the names, places, and functions of Nāḍīs. Mostly, it is believed that Nāḍīs, as found in the Yoga Upaniṣads, can not be identified in the human body. Even the names, the loci, etc., are argued to be more imaginary and conventional, rather than realities.

Here is an attempt, on the basis of some selected Yoga Upaniṣads, to argue in favor of the thesis that the description of Nāḍī, their place, nature, functions, etc., are facts that can be verified and attested to not only by mere experience but by scientific analysis as well.

The current discussion is organized according to the following headings:

1. A theoretical description of Nāḍīs, i.e., numbers, names, places, etc.
2. Identification of Nāḍīs in the human body according to modern medicine.
3. Nāḍīs vis-à-vis the nervous system.
5. Observations and closing comments.
1. Theoretical description.

I have selected four Yoga Upanisads through which to illustrate the salient points about Nādiś just described. They are Kṣurikopanisad, Darsānopanisad, Yogacūḍāmaṇī Upanisad, and Sāndilyopanisad. In these Yoga Upanisads, Nādiś are depicted in detail, but each Upaniṣad gives different information about Nādiś. For example, in Kṣurikā, we find a discussion of the color of Nādiś, which is very uncommon, but there is no scientific evidence provided to support this description. The seer says, "

तत नादी स्वप्नामा तु नाक भिन्दीभिन्नता ।
तत स्कतो न पीता च कुंडा तार्था विलोकिता ॥ ३॥

The seer also characterizes शुष्मिण्या as,

अविश्वसनीया दिगंबरीशत्ती शुष्मोरोचिता
ती शुष्मिणा शुष्मोराणिता समाप्तेऽ॥ ४॥

In Darsānopanisad, the seer describes Nādiś as well as the deities of every Nādi.

षुष्मिणाय: शिवो देव इद्या देवाय देवाय दारी: |
पेडलाया विनिर्विच: स्वात शरणव्या विराममुने ॥ ५॥

And similarly, the seer gives the name of the deity for other remaining Nādiś. In Yogacūḍāmaṇī, the seer provides the names and their positions in the body very clearly. In Sāndilya, though, the seer gives details about the places of the Nādi, but this information is not clearly understandable.

Now, let us turn to the discussion of the names and numbers of Nādiś. On this transparency, you will find a chart illustrating the supposed location of these Nādiś. According to Hathayoga, there are seventy-two thousand Nādiś in the human body, out of which fourteen are more prominent and well-recognized. They are: 1) Iḍā; 2) Pingalā; 3) Gāndhāri; 4) Hastijhāṭha; 5) Piṣā; 6) Yasāsvini; 7) Kuhā; 8) Sānkhiṇī; 9) Alambusa; 10) Sarasvati; 11) Vāraṇi; 12) Payasvini; 13) Visvōdārā; and the main and most important Nādi is 14) Saṃśītā. Many scholars say that Saṃśītā is a Mārg and not a Nādi, but in these Upaniṣads, it is clearly described as a Nādi. In some Upaniṣads, however, Nādiś are ten in number.
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There are 72,000 Nādīs.
PHYSIOLOGY OF YOGA

RIGHT

PUSHA
HASTIJIHVA
PINGALA

LEFT
YASHASWINI
HYPOTHALAMUS
GANDHARI
IDA
ALAMBUSA

PRANA
UDANA
SAMANA
APANA
VYANA

SHANKHINI

POSSIBLE BODY POSITIONS OF FIVE VITAL ENERGIES & TEN PATHWAYS

COMPOSED BY-
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After introducing the names of the prominent Ādīs, I will now present their position in the human body according to these Upaniṣads. Here, we can observe that these Ādīs are described in pairs; they are equal in number and opposite in sides, so they are the mirror images of each other, e.g., 1) the first pair, Īḍā and Pingalā, are situated in the left and right nostrils respectively, where Gaṇḍhāri represents the left eye and Hastijihvā the right eye. The next pair is of Puṣā and Yasāsvinī, which are related to the right and left ears. In the mouth cavity, there are two Ādīs called Alambusā and Sarasvatī, but Sasasvatī is not shown in the transparency because it is not stated in every Upaniṣad. However, the location of Sarasvatī is the tip of the tongue, and Alambusā is situated in the mouth cavity. At the base of the torso, which is Nābhikanda or the lower part of the abdomen or pelvis, are located the Kuhū and Śāṅkhini. Kuhū is situated at the genital organs, and Śāṅkhini is in front of the anal mouth. And, finally, the most important Ādī called Saṃyuddha is at the center and stretches from the mulādhāra to the saharāra.

The discussion of Ādī comes under the description of Prāṇāyāma; therefore, the five vital airs also have an important role in this illustration. In this transparency, one can see the positions of the five vital energies called ॐ।।।।।। They are, 1. ॐ।।।।।। 2. ॐ।।।।।। 3. ॐ।।।।।। 4. ॐ।।।।।। 5. ॐ।।।।।।. They play a major role in the practice of Prāṇāyāma because they are important for the attainment of intellectual control over inhalation, exhalation, and retention. Prāṇāyāma itself means the controlling of the breath. So with the help of this transparency, we can visualize the positions of the Ādīs, the doors (outlets) of the body through which the energy enters and exits, through which it flows out and comes in. And to maintain the function of these organs or Indriyās in the body, these outlets must remain open and alert; they must remain clean. This cleansing or purification through the control over breathing is called Nādīsodhana, i.e., the purification of the Ādīs. In other words, through the understanding and the maintenance of the functioning of these Ādīs, the yogi cleanses his organs and systems. So it is that through the
practice of the Āsanaś, one masters one's own physical body, and through Prāṇāyāma one learns to master one's breathing process, a goal not ordinarily achieved by the common man. To develop this skill, to enable one to purify one's own body from within, one has to understand the exact locations of Nādiś. These Nādiś are the pathways through which one enters the body from the inside. It is with the help of the five vital airs or energies that one masters Prāṇāyāma.

2. Identification of Nādiś in the human body according to modern medicine:

Now, in the second part of my presentation, I would like to describe the relationship between Nādiś and the organs of the body in terms of modern medical anatomy and physiology. This approach offers the scientific evidence necessary to support any theoretical discussion of Nādiś.

The word Nādi signifies "Hollowness." The practical symbol of Nādi is of a flute carved out of bamboo. In scientific terminology, one can say that Nādi is a pathway, an invisible route which is the mental connection between two organs of the body. This connection is required for proper functioning of both organs by synchronizing their functioning in the body.

In the Yoga Upaniṣads, ten Nādiś are described in two categories: 1) organs involved in the representation of a particular Nādi; and, 2) the exact central location of the same organs in the brain. The most important factors among them are the names given to each Nādi as this explains its function. Now, on this next transparency, one can see how the Nādiś are stretched from one end of the body to the other. For the current discussion, I will limit my comments to the four Nādiś I have studied in greatest detail.

Firstly, I will explain the two Nādiś: Hastijíhvā and Gandhāri. 1) Hastijíhvā is composed of two words—one is Hasta, which means hand or full length upper extremity (a measure of distance), and the second is Jíhvā meaning the location of the flame of a fire (an object). The Hastijíhvā stretches from the right eye up to the left great toe. If one analyzes these four words in the two pairs, these pairs would be a) the right eye and the flame of a fire; and, b) the full length of upper extremity and the great toe of the left foot.
PROBABLE LOCATIONS OF NADIS IN THE HUMAN BODY

COLOUR CODE:

- SUSUMNA
- IDA
- PINGALA
- ALAMBUSA
- SAנקHINI
- KUHU
- HASTHVAYA
- GAMDHARI
- YASASVINI
- PURA
Now, let us see the significance of the two words of the first pair, namely the right eye, which means the sensory organ of vision and flame which depicts the object to be seen in the absence of sunlight. So one can conclude that part 1 of this discussion explains vision of an object at night. And for the second pair, i.e. the full length of the upper extremity denotes the measure of distance, and the great toe denotes the position and place of the person. So Hasti and Jīhaḥ together give us knowledge of the distance between oneself and the object at night. Now, to explain the position of oneself. The word “left” denotes the nerve connection between the left foot and the right eye, the mechanism of understanding that is wired in a criss-cross manner.

Let me now proceed to explain another Nādi, Gamdhāri, which is paired with Hastijīvaḥ. The Nādi is connected from the left eye to the great toe of the right foot. This is the mirror image of Hastijīvaḥ. In the word Gamdhāri, Gamdhā means the smell of the minutest particle of an element. Earth is the medium of understanding. In a blind person the sense of smell, vibrations, and touch are highly developed, and through these three senses, the blind person can recognize and understand his surroundings, circumstances, and environments, i.e., the relationship between the person and the place. So in Hastijīvaḥ, the medium of understanding is vision as opposed to Gamdhāri, for which it is smell and vibrations, i.e., the functions of the nose and the ears.

Therefore, a position of a person is fixed by the left and right great toes and is connected to the eyes with the help of the nose and the ears. And the information is perceived in the brain through a criss-crossing of the nervous stimuli. But in the case of another pair of Nādis called Pūdad and Yaśasvinī, the connection is from the ear to the great toe of the same side. They carry the information through the labyrinth mechanism of the internal ears. This information is carried to the same side of the brain.

Now, I will give an example to explain how these above four Nādis are playing an important role in some skillful activities like a game, e.g. basketball. In order to put the basketball through the basket, a player who is carrying a basketball, must never take his sight from ball and basket both; his visual sensory mechanism is synchronized by the rhythmic
movements of his legs while running. Through his understanding of the ground, by his keeping of his feet on the ground, this skillful movement is exercised. It is by synchronizing the understanding of knowledge gathered from the vision of the eyes and the touch of the feet on the ground. So, the perception of posture in this case is binocular, single vision. These Nādīs help in the execution of the movement of the head and the neck for fixing the object in front of the eyes during the movement of the body.

So by now, we have seen that information gathered through Nādīs is analyzed and understood in the brain, which enables the control of the flow of actions as well as the control of the brain. This is not fiction, but scientifically based. Therefore, some yoga scholars have tried to interpret the meaning of Nādīs as the nerve tracks along with motor and sensory impulses. These travel in the form of vayus and perform different physical and psychological functions, which can not be shown in the human body, but they can be experienced with the practice of yoga.

In the above discussion, I have tried to establish the connection between yoga philosophy and physiology. I am aware that my findings and conclusions need discussion and debate. It is my humble effort to start this dialogue so that the hidden realities expressed in the “words” of philosophy can be experienced through experimental physiology. Nādīs can be termed as Ākāsh Mārg, the space connection between different organs in the body. As of today, modern human physiology has not satisfactorily unlocked the secrets of Nādīs, which I have tried to explain.

Now I shall proceed to discuss Nādīs in relation to Prāṇāyāma. Prāṇāyāma is a technique by which one understands the functioning of the autonomous nervous system. Here, the medium used is inhalation, exhalation, and retention of breath through which one tries to understand the cyclical changes in the body during the act of respiration. The act of respiration is vital for the existence of the human being because through the respiratory system one is able to supply the abundant oxygen necessary during inhalation, which is required for the existence of the body. In the process of exhalation, the body is purified by throwing out accumulated carbon.
dioxide an end product of cellular metabolism. The functioning of the respiratory system is fully automatic, working on the principle of demand and supply. As the demand increases, the supply is also accelerated through an increased rate of respiration.

Modern physiology has not yet understood the functions of Iḍā and Pingalā as conceptualized in the Science of Yoga presented above. Iḍā represents the left side of the body and Pingalā the right side of body. During 24 hours, Iḍā denotes the breath inhaled through the left nostril while Pingalā describes the breath inhaled through the right nostril. These keep on alternating every 1 and ½ hours, approximately throughout a 24 hour period except at the major junctions.

At these junctions, i.e., at sunrise and sunset, midnoon and midnight, Iḍa and Pingala are supposed to be functioning equally. To understand the secrets of the functioning of Iḍā and Pingalā, the Science of Yoga had formulated a technique in Prāṇāyāma called Nādiśodhana, which mean the cleansing of the right and left pathways of inhalation and exhalation in the nose. In all Yoga Upaniṣads, there is uniformity about the location of the Iḍā in the left nostril and the Pingala in the right nostril. In one Prāṇāyāma technique called Digital Prāṇāyāma, one uses the fingers of the right hand to obstruct the functioning of each nostril.

Nādiśodhana Prāṇāyāma is probably designed to equalize the functioning of the Iḍā and Pingalā. These Nādis are in equilibrium four times in 24 hours, namely sunrise, sunset, midnoon and midnight, i.e., 6 a.m. and 6 p.m. and 12 noon and midnight. If a yogi desires to practice Dhārāna, Dhyāna, and Samādhi to achieve this superhuman posture, the Science of Yoga has designed Nādiśodhana Prāṇāyāma.

I do not want to enter into the intricacies of this technique in this paper, but I would like to summarize the relationship between Nādis and Prāṇāyāma, which I have presented in the above information.

In my closing remarks, I would like to return to the observations I have made and conclusions, which I have drawn during my study. These are as follows:
Conclusions and Observations:

1. **Nādis** are pathways in space connecting the brain with the periphery.

2. The human being's position as a biped is unique because he has on the right the *Pingalā* and on the left the *Idā*, both suspended between the two heads of the thigh bones and functioning as a reverse pendulum.

3. To maintain this equilibrium of *Idā* and *Pingalā*, the body requires assistance from the eyes, (*Hastijihvā* and *Gamdhāni*), ears (*Paśā* and *Yasśavinī*), and the whole digestive tract from the mouth to the anal opening. All of these pathways play a major role.

4. In Chapter VI of the *Bhagavad Gītā*, the supreme state of the yogi is described as the point at which the *Idā* and *Pingalā* are at equilibrium, and the brain and body are maintained in space through *Sūryānā.*

5. The exercise known as *Kundalini Yoga* describes the dissolution of the five elements of the body into their respective sources. For example, water from the ocean passes through its state of existence as a cloud and returns back to its source, i.e., to the ocean as rain.

In short, I would like to say that debates and discussion must take place to reveal the secrets of Nādis. More medical doctors, physicists, and philosophers must come together to find out the truth, which has been evading us until today because of our ignorance.

I thank you all for patiently listening to my presentation.

At the end, may I express my sincerest gratitude toward my teacher-guide, Dr. Dalai, at Pune University and my father, Dr. Karandikar, for his relentless efforts to put these words into my mouth. I also thank Dr. Pingale, who helped me with the transparencies. This paper has been sponsored by the research wing of "Manav Sansadhan Vikas Manch," Kabir Baug Matha Samsthā, Pune 30. Thank you all.
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