Pranamaya Kosha from the View Point of Ancient and Modern Science

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ABSTRACT
Pranamaya kosha is filled with Prana (vital force). It is also the principle of our life force which holds body and mind and it is quite different from breath. Prana flows when our breath becomes slow and harmonious. In the physical body we have two types of subtle energies, one of the forms is known as Prana and the other is known as mind or awareness. Modern science also believes that every organ is also governed by two varieties of force, one has a stimulating effect and other has a relaxation effect. In yoga, the concept of Prana is very scientific. When we speak of prana, it does not mean the breath, air or oxygen. Precisely and scientifically, Prana means the original life force.

Introduction
The second Kosha as per Taitriya Upanishad is Pranamaya kosha which is the combination of three syllables viz., Prana (life force), Maya (encircled with or sheath), Kosha (sac or compartment). Therefore it is said that it is the sheath of the life or vital force which is the second layer of human existence. This Kosha is composed of Prana or life force and a component of cosmic life. In Sanskrit, again Prana is the combination of two syllables, ‘Pra’ is Prefix, ‘Ana’ is a word represents to movement, motion or vibration. Hence, ‘Prana’ is the pre-existing force found in the body as a driving force and keeps recharging the physical body.

Pranic force moves throughout the whole body and life. It is not only confined to living being but found in micro organisms and non-living objects like plant kingdom, atmosphere, oceans, mountains and rivers. The core part of the atom has Prana and it is visible and invisible also. Prana is found in the body until the last breath and it dissipates from the body either from the crown of the head or from the navel when we die.

With the advancements in Biotechnology such as Cloning, scientists are trying their best to replicate the DNA. But that has not given any output in terms of a giant success out of laboratory. This is because the vital molecules like DNA are functional only in the proximity of Prana and thus fail to serve their functions majority of the times even in the laboratory where they cannot harness the cosmic Prana without the presence of physical body. The body has been gifted with a system which can utilise the cosmic Prana available everywhere.

The Taittiriya Upanishad\(^1\) talks about the nature of human existence. According to it, the entire human existence spreads above the conventional domain of perception. It can be understood in the form of five sheaths known as ‘Pancha-koshas’ where each kosha is a manifestation of the cosmic energy having different degrees of freedom.

Scientific Understanding About Prana
As per Einstein’s equation, \(E=MC^2\), which is applicable to all particles in the Universe. The whole universe is made up
this subtle energy. When the Prana in the body is disturbed, there will be a depleting effect in the Prana in cosmos because each individual shares the same Cosmic Prana\(^2\), \(^3\). Every atomic and sub atomic particle is formed with same cosmic energy called Prana. According to the law of Thermodynamics, energy can neither be created nor destroyed and by splitting an atom, we may have the impression that the energy may be depleted but in principle this does not happen, rather the energy remains same. So, we can say that increase or decrease of Prana cannot be made possible in any atom or sub atomic particles. In no time, the energy of the sub atomic particle communicates with each other and also that is the same energy that communicates within itself. The entire universe is an infinite vibrating energy.

The energy in the body is Prana. Through voluntary control of the motion of lungs and other respiratory organs, we can control the movement of Prana that is vibrating within. By control of Prana, the speed of the mind can be easily controlled, because the mind is governed by Prana, like fuel to a fire. Just as the intensity of fire increases as we pour fuel in it and its intensity gets minimized without it or pouring a less quantity. In this case also our mind is like fire and Prana is like food or fuel for the mind. Activity of Prana is maximum during arousal or wakeful state and it keeps moving in various parts of the body and enters into a vessel or a closed pot, during deep sleep in which the activity of the body is found to be negligible.

**How does our prana move in the body?**
The movement of Prana is possible only through its channels and they are called ‘Nadis’. When we look into its deeper aspect of it, the syllable ‘Nadi’ is derived from the Sanskrit word ‘Nad’ which means to flow\(^4\). Thus we can say that these are channels that make our Prana to flow throughout the whole body. They are neither the blood vessels nor nerve fibers.

The way electricity moves in electrical fibers, the same way Prana moves through the Nadis from an instrument called as ‘Chakras’. The literal meaning of Chakras are called whirlpools or vicious circle filled with concentrated Prana. In other words they act like a Biological transformer in both step up and step down mode. It becomes step up when the concentration of Prana is less in the source (food, sun light and atmosphere) and it becomes step down when it is found to be less in source. Through the nadis, they move from various systems and sub systems from the Chakras. In our body there are about Six Chakras and seventy two thousand nadis to carry out this function.

Prana is found in different forms. Its direction changes and becomes upward at face, from the throat, found in another form called Udana. It becomes unidirectional and moves horizontally at the region of chest in the form of Prana\(^5\). In the area of abdomen it becomes bidirectional and dynamic called Samana and probably that is the reason why our stomach is able to produce strong acid Hydrochloric like acid (HCl) from the Parietal cell. Below navel its direction becomes downward called Apana. Many downward physiological functions like urination and defecation are governed by Apana and upward functions are governed by Udana like vomiting, coughing and sneezing. Its movement becomes spiral throughout the whole body and its takes care of the vital functions like circulation, immunity and endocrine functions.

**How its impaired circulation is noticed?**
Its impaired circulation is noticed in the form of \textit{Ajirnatvam} (indigestion), \textit{Kujirnatvam} (poor digestion) and \textit{Atirjirnatvam}\(^6\) (over digestion) as quoted in Yoga Vasistha. Correlating each one of the dysfunction in the digestive system, we can say that less flow of Prana through the nadis leads to poor digestion; negligible
flow causes the manifestation of indigestion and over digestion due to oversupply. If we try to understand it deeply, we can say that the constriction of the nadis lead to less flow of Prana and its dilation lead to excess flow. It is also implied that the diseases of various organs may be due to either less flow of Prana due to constriction and over supply due to dilation.

How does pranayama help for the eradication of diseases?
Pranayama is the combination of two syllables viz., Prana – life force and Ayama – expansion. It can be said that it is a technique that makes the Prana to expand everywhere in the body or with uniform circulation throughout the body. For the correction of its flow, Yogis have designed three categories of Pranayama, heating, cooling and balancing. The objective of heating Pranayama is to dilate the nadis so that the supply of Prana can be made uniform, similarly the cooling Pranayama regulates the excess flow of Prana through the nadis and balancing pranayama to establish an equilibrium state between the two vital nadis viz., Ida that carries the Prana which is cool and Pingala, carrying Prana which is warmth or hot. The idea between practicing balancing Pranayama is to bring harmony between these two and awaken the most important nadi called Sushumna and the awakening of Sushumna is absolute health and well being.

Summary
Prana is a force of your total composition and should also be dealt with in Yoga. If the Pranas are agitated or there is imbalance in Prana, there is imbalance everywhere in the body. The Pranas are in the atmosphere in the form of positive and negative ions, which keep on bouncing, migrating and reintegrating. In addition to this it is found in other sources like food, sun light. It keeps on fluctuating as we are predominated with our thoughts and emotions. Negative thoughts and emotions exhaust the Prana and make us sick and positive thoughts and emotions make us healthy and harmonious.

Acknowledgement
I hereby acknowledge Ms. Rasika Dandekar and Mr. Anirudha for their contribution in preparing this theoretical manuscript.

References