## THE FIVE SOULS OF INDIAN MEDICINE

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Greek medicine recognised three souls, one in the head, a second in the chest, and a third in the abdomen. Indian humorology has the tridosa doctrine with three elements, vayu (air), kapha (water), and pitta (heat). This doctrine can be scientifically justified as three pairs of biochemical processes—air=oxidation-reduction; water=hydration-dehydration and heat=exothermic-endothermic. Indian medicine recognises five souls in each of these three humours but virtually abides by those belonging only to air. Thus, instead of 15 souls practically—there are only five. Of these five, three are the same as in the Greek medicine. Of the extra two one is assigned to the lower part of the abdomen and the other governs the bodily movement as a whole. There is no question of considering all the fifteen souls named.

In an earlier article<sup>1</sup> I discussed Galen recognizing three souls in Greek medicine. It was shown that Galen borrowed this idea from Plato who in turn got it from some Semitic source. The original author obviously depended upon his common sense and realizing that the main body consists of three parts, head, chest, and abdomen, believed that each part must have a soul of its own. Accordingly the three souls with their sites in the body would be as given below. I have also added provisionally what may probably be their other counterparts.

In Greek Medicine	Sites in the human body.	In Indian Medicine.	In <i>Tridoșa</i>
1. Animal spirits	Head (Brain)	Udāna	Fire (Pītta)
2. Vital spirits	Chest (Heart and Lungs)	Prāṇa	Air (Vāyu)
3. Natural spirits	Abdomen (Liver)	Apāna	Water (Kapha)

Indian humorology recognises three humours and the doctrine is called Tridosa. The three elements here are  $v\bar{a}yu$  (air), kapha (water), and pitta (fire). I have explained them scientifically as:

- 1. Air=Oxidation, Reduction 2. Water=Hydration, Dehydration and
- 3. Fire=Heat=Exothermic Endothermic.

If we classify the enzymes or the important biochemical reactions in the body these would be one of only four viz., oxidation, reduction, hydration and dehydration. It then means that they are the results of only two cosmic elements, air and water. In fact van Helmont had actually recognised these two as far more important than fire and earth. According to Reveda and also the holy Ouran, the element water was the first to be created. Moreover, Rgveda call fire apāmnapāt, the grandson of water, thus reducing the importance of fire. I have shown that the Tridosa doctrine implies six biochemical reactions mentioned above as three-pairs which can be scientifically justified. It then amounts to saying that the Tridosa doctrine otherwise interpreted would imply the existence also of three souls, though not identical with those of Galen. The human system contains (1) the nervous system, (2) the respiratory system which is intimately associated with the circulatory system, and (3) the digestive system. Galen's three souls can be conceived as belonging to the above three systems. The reproductive system, though important otherwise, is not indispensable for the life of the individual. Nevertheless the above discussion does point out that Galen's three souls do not explain the make-up of a normal healthy man.

We now turn to Indian physiology to understand its attempts to explain the biochemical processes of the human system. From Jolly we learn that each of the humours of *Tridosa* has five souls. That every one of the three humours should have exactly five souls each, strikes as though its author tried to solve the problem rather mechanically. I give below the list of the souls belonging to the three humours as found in Jolly.

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Vāta——— (1) Udāna (in throat)
(2) Prāṇa (in heart)
(3) Samāna (in stomach and intestines)
(4) Apāna (in lower body, anus, bladder)
(5) Vyāna (in whole body)

Pitta——— (1) Pācaka (between stomach and intestines)
(2) Rajaka (in liver and spleen)
(3) Sādhaka (in heart)
(4) Ālocaka (in eyes)
(5) Bhrajaka (in skin)

Kapha—— (1) Kledaka (in stomach)
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(2) Avalambaka (in heart)

- (3) Rasana (in tongue)
- (4) Sucana (in head)
- (5) Slesmana (in joints)

Filliozat has also made a special study of Indian medicine. The Tridosa doctrine of Indian medicine comprises Vayu (air), kapha (water) and pitta (heat as fire). Of these three vavu is by far the most important. Filliozat writes (p.28) that "the wind, vayu, introduces into the body in its own form, that of a breath, prāna". "The prāna is divided into (1) prāna proper, breath of the front, which stays in the mouth and ensures respiration, (2) udana, breath which goes upwards and produces speech. (3) samāna, concentrated breath, provides necessary amount of air (to produce internal warmth) for the process of digestion, (4) apana, breath which goes downwards, ensures excretion and delivery. Finally (5) vyana, diffused breath, circulates in all the limbs and explains their movement." He writes empahtically that "all the movements of the body are related to the action of the wind, this is by analogy with what passes in the universe where the wind is the motor par excellence." Then equating movement to life, of the three humours of Tridosa air and water are both matter and energy but air is by far the most mobile. Scientifically interpreted, air would be most responsible for oxidation, and among the biochemical processes occuring in a life-form oxidation would be the leading reaction. Thus physically and biochemically air comes foremost in considering the physiology of a life-form, above all of man.

Of the five souls that belong to vata or vayu or Tridosa three are those which Galen had recognised and which have been indicated at the beginning. These three are udana, the soul in the head, prana, the soul in the heart and lung, and apāna, the soul in abdomen. We are left with samāna and vyāna. When the abdomen is divided, the upper region would contain stomach and intestine which would be under the control of samana, while the lower portion with bladder and anus will be under the control of apana. Now, there would be an integrating system which controls all parts of the body as parts of a whole. This power is exercised by the soul called vyana. Thus the Indian medicine divides the abdomen in two parts and also recognises a power over the body as whole. From the above list we understand that heart above contains prana belonging to vata, and would be a soul of the nature of wind, then sadhaka, belonging to pitta, when it would be a soul generating warmth, and finally avalambaka, belonging to kapha, a soul regulating intake and output of water. No other organ has the representative souls of all the three humours of Tridosa. Moreover, eyes alone has alocaka, the soul of the class pitta and slesmana is only in the joints and it belongs to the class kapha or water. It was expected that all the important organs and tissues of the body would have a soul each.

Altogether these fifteen souls cannot be scientifically or even logically explained. The earlier thinkers must have realized as much so that of the

Tridoṣa system they selected the souls belonging only to  $v\bar{a}ta$  division. This preference, I feel I can explain. In a previous study I have shown that as a life-form man contains breath and breath is a vapour as also the volatile fraction of freshly spilt blood. The presence of soul confers life upon its recipient and life is nothing if it is not essentially movement. Additions of these two, samāna and  $vy\bar{a}na$ , therefore, appear reasonable and are improvements upon the three souls of Greek medicine. However, while Tridoṣa system can be scientifically explained, these five souls of the  $v\bar{a}ta$  division of Tridoṣa cannot be. In fact if the five souls of  $v\bar{a}ta$  division can be justified then there should be more than fifteen souls in the body. The conception of fifteen souls seems arbitrary and conceived mechanically without assigning each a specified function or a specified organ.

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