

SECOND THOUGHTS ON AYURVEDA

ERIK SIGDELL

P.O. Box 194m CH-4012, Basekm Switzerland

Received: 29 January 1990

Accepted: 15 July 1990

ABSTRACT: *This article takes up a few “riddles” in the theory of Ayurveda and suggests explanations. It also looks into the Mahabhutas in pharmacology and discusses the real causes of diseases starts with. An interesting graphic representation of the six **rasas**, is also presented.*

There are some ‘riddles’ in the theory of Ayurveda, some statements which at a first glances appear astonishing – even though confirmed in practice – for which no explanations are given in the classical scriptures. I do not doubt that such explanations have been known, but they will then have been lost in the tradition. Several ancient scriptures are regrettably lost and **Caraka Samhita** is only a brief reconstructive summary of the no more available **Agnivesa Tantra**. I suppose that such explanations were given in the latter and, may be in other lost scriptures. In this article, I have taken up a few such “riddles” and suggested possible explanations.

Polarities and the “seats” of the doshas

The tradition of Ayurveda states that the **sthana** or main center of **vata** is in the lower abdomen, that of **pitta** in the umbilical region and the center of **kapha** in the upper chest and also the head. This doesn’t fit very well with the activities of the **doshas**, which I mainly understand as follows:

VATA: organizing activity – supervising, organizing, coordinating and controlling the various activities and process in the body, as well as providing for communication or information exchange between organs and parts of the body.

PITTA: transforming activity - digestion, metabolism with ana – and katabolism as well as various transformations everywhere in organs and tissues.

KAPHA: supply system – providing material for the actions of **pitta**, acquired in the digestion (through other actions of **pitta**), distributed in the body and supplied at various sites of **pitta** activities – also taking care of wastes and excesses.

In a burning fire, the fire itself corresponds to **pitta**, the wood as well as the one putting it into the fire (who also scratches out ashes and unburned residues) to **kapha** and the air, but furthermore a bellows and the one using it to control the fire (who also gives orders to the person supplying wood correspond to **vata**, in this view.

This lets us compare (not identify!) the **doshas** with the following body systems:

VATA with the nervous system, but also with the hormone system and blood supply regulation (not the blood itself),

PITTA with digestion and metabolism in the widest sense (including “digestion” of sensory perceptions in order to transform them into information for the mind),

KAPHA with acquisition and supply of nutrients via blood and other body fluids as vehicles (but not the blood itself), and, furthermore, drainage and sewage, ridding body systems of wastes.

Now, how can this be made to fit with the **sthana** or “own places” of the **doshas**, as stated in Ayurveda? We would rather expect the center of **vata** to be in the head and that of **kapha** to be in the abdomen, and not the other way around.

Let us look at an organism developing a disease. The **doshas** are out of balance, they are under stress or tension, but the body tries to maintain their functions everywhere for the sake of maintaining life processes. Finally, a point is reached at which the body is no more able to do it and has to sacrifice a **dosha** activity somewhere and yield a bit to the tension. Where will it do it? Of course, where the **dosha** is least needed. It will up to the end strive to maintain the function of the **doshas** where it is most needed. Where the body yields first, we have the weak or sensitive places for the **doshas** and also the locations where the symptoms of a **dosha** disturbance will first be noted. For **vata** and **kapha**, we thus find a kind of up down polarity between the head and the abdomen:

Dosha	most need in	least needed in
VATA	head	abdomen
KAPHA	abdomen	head

Thus, the “own places” of **vata** and **pitta** really are their weak regions, where they are least needed and first yield, when the function can no more be maintained. The mentioning of the chest as the primary specific “place” of **kapha**, and the head as a secondary, may be due to the fact that the air

passages are most prone to show early symptoms of **kapha** disorders. But the hormonal functions of the thyroid and parathyroid glands play an important role in communication in the body, which gives them a special role in the **vata** system. Their location in the front of the neck at the upper chest also puts them into this polarity.

For **pitta**, the polarity is different. It is no more between the upper and lower ends of the trunk, but it is **central** versus **peripheral**. Metabolic activities in certain vital organs, more or less peripheral to the umbilical region, have to be maintained under almost any circumstances. However, the digestion can be sacrificed for a period of time without grave consequences for the body. The activities of the brain can stop only for very few minutes, or human functions will deteriorate irreversibly, but the digestion activities can be arrested for several days without major consequences. The weak place of **pitta** is, therefore, the umbilical region. This is where it is the least needed – for the moment – whereas it is desperately needed in certain organs, which are “peripheral” to the region.

Vipakas

The “reduction” of the six **rasas** to only three in the digestion, called **vipakas**, is another case where it seems that explanations have been lost in the tradition. It is difficult to understand, why and how this should occur, and also, why the original six **rasas**, should have so much importance if, at the end, only three of them remain.

According to Caraka and others, the **vipakas** are **madhura**, **amla** and **katu**. Now, we find the same as stages of digestion” **madhura bhava**, **amla bhava** and **katu bhava**. This parallelism is striking, too striking to be just a coincidence.....

Could it be that **vipaka** does not really have to do with modification of tastes in the substance itself, due to digestive processes, but rather with the stage in the digestive sequence, where the substance is mainly digested and absorbed into the system? If this is so, **madhura vipaka** – for example – would not mean that a salty substance becomes sweet – anyway difficult to conceive chemically – but that it is mainly absorbed into the system already in the **madhura** or sweet stage of the digestive process. Thus, it would retain its **rasa** characteristic after absorption, which, therefore, would still be of pharmaceutical importance. In addition, it will then have a certain pharmaceutical relevance that the absorption takes place here and not in another stage.

A substance having **madhura vipaka** would then be absorbed in a very early stage of the digestion and become almost directly available to **kapha** with a minimum of digestive transformation, which could explain why it promotes **kapha**. An **amla-vipaka** substance reaches the main stage of digestion, in which its transformed or released parts may even participate in or aid the digestive transformations, taking place here, which could explain why it promotes **pitta**. A substance with **katu vipaka** would then undergo a more elaborate transformation before it is absorbed towards the end of the digestive process. This could involve that certain of the constituents are refined to a higher degree. More refined nutrients are likely to be the ones needed for the activities of **vata**. This may give some idea about why such a substance promotes **vata**.

Susruta's view of only two **vipakas** could with reference to the above be seen as simply another division of the alimentary

tract in this respect in an upper and a lower part.

The eight viryas.

Besides the pair of two **viryas**, which are **saumya** and **agneya**, resp., another view relating to eight **viryas** is mentioned. According to Charaka and others, they are:

Saumya virya	avneya virya
guru	laghu
sita	usna
snigdha	ruksha
	Tiksana
	Mrdu

The division into **saumya** and **agneya viryas** is according to Dwarakanath (1), deduced from the **pancabhautic** compositions.

The question has already been raised in ayurvedic literature (2), why **mrdu** appears here and not **manda**, instead. **Manda** would pair **tiksna** as a corresponding pair **saumya virya** and we would then have four **viryas** in each group. It has also been suggested (3) that this should be the case and that **mrdu** instead of **manda** could be a mistake come where in handing down in tradition. I find it difficult to believe that such a mistake could have taken place and remained undiscovered by some many prominent vidyas.

If we now again take a look at the **vipakas**, they are said to have the following **gunas**:

MADHURA VIPAKA: guru, sita, snigdha, mrdu

AMLA VIPAKA: laghu, usna, snigdha, tiksna

KATU VIPAKA: laghu, usna, ruksa, tiksna

According to dwarakanath (4), apparently from considerations of the commentaries by Hemadri and Arunadatta. These are the same **gunas** as those which are mentioned as eight **viryas**. Here, **mrdu** is included, but not **manda**. The striking parallelism will not be without meaning. The view of eight **viryas** is likely to have some connection with the **vipakas**. But how? If we assume the above hypothesis concerning the **vipakas**, this would mean that substances absorbed in the corresponding stages of digestion would primarily have those **gunas**, putting them in a special position

Certainly, many questions are still open concerning both the **vipakas** and the view of eight **viryas**, but these ideas could hopefully be an impulse for further studies.

The pancamahabhutas and the classification of drugs.

The system of drug classification in Ayurveda has put it into the unique position to have **systematic pharmacology of natural substances**. Except related systems like Sidda and Tibetan Medicine (the latter adopted these aspects from Ayurveda.) no other medical system has such a systematic approach, but is mainly based on empirical knowledge of actions of herbs and other substances. An attempt for systematization was tried in medieval European medicine, leading to the theory of signatures, which however, turned out to have quite a limited applicability. Even allopathy is to a great extent empirical in its pharmacology. Though today guidelines are set by acquired biochemical knowledge, actions of drugs cannot be more than roughly or presumably predicted and experimental studies are necessary, which over and over again reveal

unexpected actions, or also the lack of expected actions. The necessary “cut-and-try” is actually a dilemma of the chemical pharmaceutical industry, since the experimental studies which have to be performed are time consuming and very expensive. It has been estimated that of 5000 chemical compositions chosen as potentially effective on a theoretical basis, only one turns out to have the desired effect – not to speak of simultaneous side effects..... Still, the medical industry in the West sticks to this path for certain reasons. One is that it offers vastly higher profits than can be had with natural remedies, since synthesized preparations can be **patented** (at least through their synthetization procedures) and thus put the manufacturer in a monopolistic situation, in which he can dictate prices. This, I believe, is even the main reason and it has heavily politicized the market in Europe. Manufacturers are influencing politicians to introduce legislation in favour of allopathy, working at eradicate the uncomfortable competition of natural remedies from the market – so much more since the public increasingly prefers the latter. After all, money, and not humanitarianism nor common sense, is what rules the world.

Since everything is based on the five elements and has them to the corresponding state of balance in normal and healthy conditions, a disorder in the biological system can be associated with a disorder of the elements. They have in that case come out of balance and there is excess or deficiency of one or more of them. The diagnosis strives at determining such imbalances. The action this leads to is to reconstitute the balance through decreasing or increasing the corresponding elements. If herbs and minerals are classified in terms of their compositions of elements this reconstitution can be achieved through an

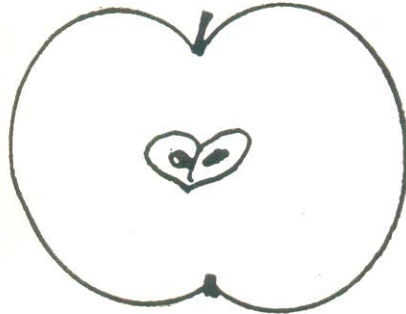
appropriate choice of them. We, therefore, have the following sequence of actions.

DIAGNOSIS – EXCESSES OR DEFICIENCIES OF MAHABHUTAS – SPECIFICATION OF MAHABHUTAS TO BE REDUCED OR INCREASED – SELECTION OF SUBSTANCES HAVING LITTLE OR MUCH OF SUCH MAHABHUTAS.

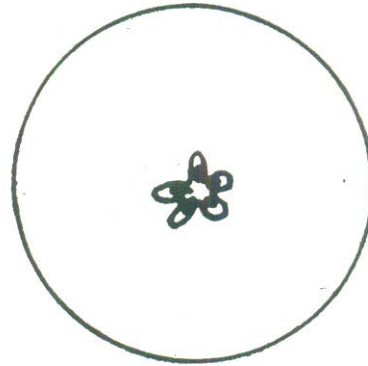
Thus, the specification of the remedy needed can be deduced from the diagnosis in an almost mathematical manner! No other medical system has this extraordinary features (except for the above – mentioned related systems). Furthermore, this leaves a freedom of choice. There will be several herbs, minerals and other natural products

which fulfill the specifications arrived at, and that substance can be chosen which is available at the actual time and place. Not all herbs are available throughout the year and everywhere, but there will always be something available which corresponds to the actual specification.

This system has one difficulty for us. We are not able to judge the **mahabhautic** composition of a substance like the ancient **rishis** could. Therefore, they devised an alternative classification principle, more adapted to our sensory organs, as an intermediate step. The properties in terms of **mahabhautic** can be translated into terms. Of **gunas**, **rasas**, **viryas** and **vipakas**, mainly stating the same in “another language”. As a simile, we may



Pañcamahābhūtas



Rasa - guṇa - vīrya
- vipāka

an apple in different sections, as drawn in fig. 1. The **rishi** is able to see the whole apple, but we are not and have to be satisfied with a section. The one section is vertical, the other horizontal. The one illustrates the aspect according to the five **mahabhutas**, the other according to **gunas** etc. They show the same thing in different aspects,

only optically different. Since in one aspect a few details are not seen, which appear in the other aspect, there will be some exceptions: **prabhavas**. However, one aspect is much easier for us to handle (even though it still requires a lot of training), being especially adapted to our sensory organs:

GUNAS: touch and observation

RASAS: taste

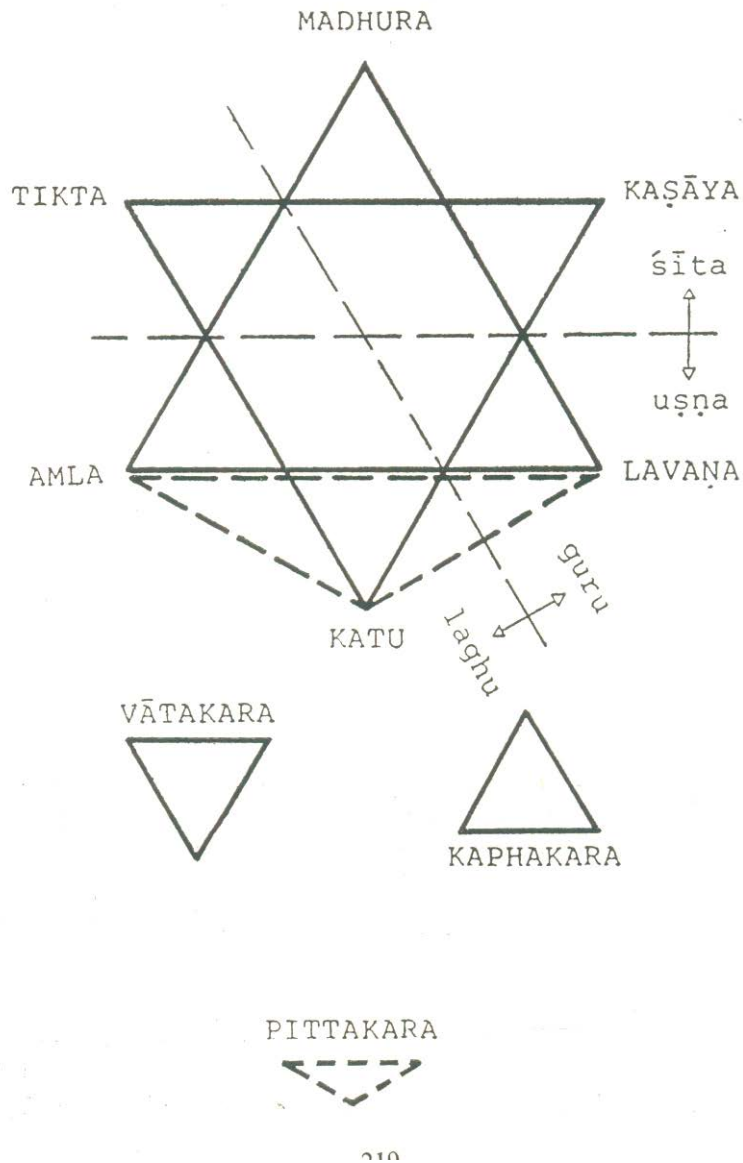
VIRYAS: thermal sensations.

VIPAKAS: sensed or observed behavior in our digestive process.

Interestingly enough, there is no

classification aspect based on smell or sound (even though some **gunas** could be remotely associated with sonic behavior, such as

“hard” and “soft”). Perhaps the discovery in the West of aroma therapy could add something to this, but it is – again – empirically based. Also, the beneficial influence of music and bhajans is known from other scriptures. It has been independently investigated in the West as “music therapy” (mainly of a psychological nature). Both these Western approaches are what is called “alternative” – i.e., they do not fall within the framework of allopathy.



The rasa star

An interesting graphic arrangement of the **rasas**, in relation to their effects was independently discovered by the author and O. M. Hinze (5) along somewhat different lines. It is shown in Fig. 2. It was furthermore found that this figure has certain axes of division, marked with dashed straight lines, which relate to **gunas** and **viryas**. A third axis of division, separating, on one side, **madhura**, **tikta** and **amla** from, on the other side, **katu**, **lavana** and **kasaya**, could so far not be related to **gunas** or other properties.

Hinze points out that this is the same figure, a hexagram, as the planet Mercury produces in the sky between points or conjunction with the sun (6). This is interesting since “**rasa**” also means the metal mercury, which in Alchemy is associated with the planet Mercury, and since this planet and its hexagram are associated with the **Cakra Svadhithana** (6, 7), related to the **mahabhuta ap** or water. **Ap** or **rasa tanmatra** is associated with taste. Furthermore, the planet Mercury is the one that governs taste and the tongue according to medieval European astrology.

The author’s line of reasoning was to find a symmetrical arrangement, being inspired by the heptagram and the seven-pointed star relating the order of the planets to their associated week-days, as known in astrology. Since the **rasas** are six and, furthermore, their effects on the **doshas** relate to groups of three, the figure can only be a hexagram, and the lines of division then defined the exact positions. Hinze’s line of reasoning started from the association of the planet Mercury with taste, mentioned above, wanting to find an allocation of the **rasas**, on the Mercury hexagram. The associated 6-etaled **cakra**, **Svadhithana**, has a

structure 3 + 3 in its petal syllables (6) – three labials: **ba**, **bha**, **ma**, and three semi-vowels: **ya**, **ra** **la**. Correspondingly, we have another structure 3+3 in the **rasa**-star: three **vata**-promoting and three **kapha**-promoting **rasas**.

Hinze has also looked into the sequence of the **rasas**. Two different sequences **are given in the literature**:

Madhura – amla – lavana – tikta – katu – kasaya (seq. 1)

Madhura – amla – lavana – katu – tikta – kasaya (seq. 2)

Seq.2 can be motivated by the fact that adjacent **rasas** promote the same **doshas**, resp. Seq. 1 by the fact that it is also the sequence of the relative strengths of the **rasas**,. Furthermore, seq . 1 along the hexagram corresponds to the temporal order of the points of the Mercury hexagram, as it is formed in the sky. This shows that the first sequence is the correct one.

The virya-axis of division was pointed out by Dr. L. M. Singh (Varanasi) as the author showed him this arrangement during a course he gave in Europe in 1979. The other axis was found by the author. There axis define the order of the **rasas**, along the star. Hinze arrived at the same order from the discussed relation to the way the Mercury hexagram is formed.

The real cause of disease.

A disease begins in the body with a disturbance of the balance of the **doshas** – but what causes such a disturbance? What comes before it, while the **doshas** are still in balance? It is always a conflict, and thus has to do with karma in the widest sense. A **conflict** with:

- spiritual realities or the Divine: ignorance, atheism, hypocrisy, blasphemy etc.,
- other persons: egoism, greed, aggressiveness, pride, untruthfulness, arrogance, discrimination, racism, abuse, caste-repression, cheating and so on,
- nature (with its animals and plants): greedy and destructive exploitation, carelessness, neglect, environmental destruction, materialism.....
- ourselves (at present): psychological self-conflicts, complex fears, feeling of guilt, cowardness....
- Our past, i.e., conventional **karma**: consequences of past actions; what we did that we shouldn't have done, but also what we shouldn't have done but did not do, especially in relation to others.

This can also be related to the seven fold classification of **dukkhas**.

We can put it all in a simple formula: Whatever you do unto others will be done unto you! (Including failure of action as a special aspect of action). The others are the human beings around us, irrespective of race, caste, creed, sex, culture, religious views and so on – but also other life forms: animals, plants and even nature itself as a gross system of life. Our actions hit back on ourselves. Sometimes in the same way as we did it, sometimes in a different but representative way. This is what great **avatars** have always taught – various Indian **avatars**, Buddha and Jesus.

And why is that? As punishment? No, as a lesson? So that we can change our behavior and develop our ethic and morality,

overcome our egos and finally begin to understand the essential. There is no **karma** for pure punishment but always as a blow that hits out another piece of the rock, so that it at the end becomes a beautiful sculpture. The stubbornness of our egos usually makes us choose this painful way out of ignorance. The ego does not want to understand the uncomfortable but essential truths. We do not want to change and learn the lessons deliberately, so that we then must have it the hard way, when no other alternative is left.

The primary path to health is therefore, not simply caring for the balance of the **doshas** – which can even become quite selfish in attitude and therefore fail by itself... - but much more the avoidance of conflicts. The development of our understanding for others, that we in reality are all brothers and sisters out of the same one and only Divine. As long as we reject to realize such truths, so uncomfortable to the ego, the white will become black, the **brahmana** a **sudra**, the man a woman, the rich a poor, and so on (or reversed), as results of our own discriminative actions and attitudes. Here, also the hate of a victim to its aggressor is an attitude producing karma, as long as we cannot replace it with the forgiveness we have to learn. This is what Buddha will have meant when he said, that we shall regard everyone doing harm to us as our teacher, and Jesus when he said: “Father, forgive them, because they don't understand what they are doing”. Not only does **karma** lead to reversal of the roles as a result of what we did to others, but we will also attract diseases and accidents according to our attitudes and wrong ways of thinking.

Our basic mistake is to believe that we are independent from the rest of the creation and can act without respect to it. The **Samkhya** theory of creation clearly shows

that this is an ignorant attitude. Emerging from one source, we are all part of it and therewith of our environment, of the people and nature around us and everywhere on earth. Even though we develop individuality, it is an illusion to confuse it with independence. The primary **maya** arises with the belief that we could emancipate ourselves in the creation. Once fallen into this trap, we have to live it out with all its consequences. For this reason, our consciousness became split in a conscious ego and an unconscious self. The ego goes through this **maya**, believing itself independent, and the true knowledge of our roles and origin is suppressed to the unconscious self, so that this game becomes possible. Only thus will we act according to our ignorance and darker impulses, no more being conscious of the consequences, so that we can experience the latter and learn the lessons. If we would see clearly, we would not act out what needs correction, and if we keep refusing to change it, the corrective experience would need long to escape from the wheel of rebirth.

If we would consequently emancipate our self from the creation, we would have to stop eating, since our food connects us with nature. This is a slow death. We would also have to stop breathing, since the breath joins us with everything that breathes. This is a fast death. We would actually have to cut ourselves off from the divine flow of life energy in the universe, basic to creation, and that would be the immediate annihilation of

REFERENCES.

1. Dwarakanath, C.: **Digestion and metabolism in ayurved**, Baidyanath, Calcutta, p. 270, Table 1 (1976).
2. Sharma, P.V.: **Introduction to Dravyaguna**, Chaukhambha Orientalia, Varanasi, (1976).
3. Sharma, P.V.: as above, p. 48, foot note 1.

our existence, as if we had never been. To enable us to live through our **maya** of erroneous belief that we could emancipate our self in the creation, the knowledge of such basic facts of existence had to become unconscious, making this illusory game possible for the ego.

The royal path to health is therefore, to realize this and live accordingly. The ultimate remedy is **peace** – not only of the mind but so much more with others and with nature. When this is understood and lived, nothing can disturb the balance, not even the worst impurities. Such a person ultimately becomes a rishi and then no more needs to worry about precautions. He is then beyond the possibilities for **dosha** imbalance and has reached total immunity.

The way to reach such peace is a yogic way in love and compassion. We can never avoid to act and therefore never avoid karma. If we try to disassociate with other in order to stay away from conflicts, this is also an action, trying to escape confrontation, and it has its corresponding **karma**. It is by itself a kind of conflict. Since we this cannot avoid action, the only solution is to make all actions as positive as possible. The most positive way to act is to always do it out of love and compassion.

“You can see well only with your heart. The essential is invisible to the eyes.” (Antony de saint-Exupery: “The Little Prince”)

4. Dwarakanath, C.: as above, pp. 273 and 278.
5. Hinze, O.M.: personal communication.
6. Hinze, O.M.: **Tantra Vidya**, Motilal Banarsidass, Delhi, pp. 57-58, (1979).
7. Sigdell, J.E.: "The Cakras in the body", in **Ancient Science of Life**, Vol. VIII, Nos, 3 & 4, 1989, pp. 241- 249, (1989).