

# The Need to Recast the *Dosha* Theory as a Heuristic

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Ayurveda, India's traditional medicine, is an ancient science that developed when the methods of evidence-based reasoning were still nascent. Simple-minded observations on health and illness coupled with commonsensical reasoning served as tools in building this medical system. Thanks to New Age popularisers of complementary and alternative medicine (CAM), Ayurveda's *dosha* theory has aroused considerable interest among lay readers of science.

The *dosha* theory is a rough-and-ready model that the Ayurvedic sage-physicians devised to systematise their medical observations and experience. Akin to the ancient Greek idea of interpreting bodily functions and therapies in terms of four primary qualities (hot, cold, dry, and wet), the *dosha* theory attempts to classify physiological functions, pathological syndromes, and therapies in terms of a few basic qualities.

The theory has its roots in the Vedic world-view of seeing the human body primarily as a nutritive process. Ill-health is simply an upset in this process. There is an interesting story in the *Charaka-Samhita*, a 2000-year-old Ayurvedic classic, about the origins of ill-health. Sages who lived active lives in the holy Himalayas descended towards the urban centres of the plains and felt gradually lured by the sedentary habits of the people there. They began eating much, exercising little, and amassing wealth. Over a period of time, these habits lessened their physical vigour and made them plump and lethargic. Ill-health is said to have had its origins here. The sages, alarmed by these changes, promptly ascended back to the mountains where Indra, the king of gods, is said to have instructed them about the Ayurvedic ways of healthy living.<sup>[1]</sup>

Tracing the cause of illnesses to wrong food habits is a deeply enshrined idea in Ayurveda. Illnesses in this paradigm are principally of two types: those that require nourishing measures to ameliorate them and

others that require famishing ones.<sup>[2,3]</sup> *Vata* and *Kapha* were conjectured to be the *doshas* (literally, bodily faults) respectively underlying these two types of illnesses. Although the Ayurvedic texts posit that these 'bodily faults' are biological substances, they are invariably defined in terms of their qualities.<sup>[4]</sup> *Vata* was dry, and therefore needed nourishing (wet) measures to neutralise it. *Kapha* was wet, and therefore required famishing (dry) measures to reduce it. Hot and cold, the other set of basic qualities, were accommodated into the scheme by introducing *Pitta* as the *dosha* of heat; diminution of *pitta* meant illnesses due to cold. Thus, *Vata*, *Pitta*, and *Kapha* came to be regarded as the three basic illness-causing factors underlying multifarious human ailments.<sup>[5]</sup> Essentially, the scheme meant to interpret and classify all bodily functions, malfunctions, and therapies in terms of a few complementary qualities—principally, wet and dry, and hot and cold.

Ayurveda constructs an elaborate theory around *doshas* and their qualities. The lure of the theory is that it facilitates a synthetic interpretation (*yukti*) of diverse components related to diagnosis and therapy. Such diverse elements as body-types, foods, and mental states can all be interpreted in terms of *doshas*.<sup>[6]</sup> For instance, a lean body-type is due to *Vata*; milk is a *Kapha*-enhancing food; and, anger is due to *Pitta*. The interpretation is not haphazard; it is built on a scheme that is the product of informal (intuitive) reasoning.

The limitations of intuitive reasoning and the rough-and-ready models built upon it are well known. Inaccuracies and misfires are not uncommon when such models are employed.<sup>[7]</sup> Ayurvedic classics acknowledge such misfires but try to explain them away by resorting to ad hoc conjectures. Seeing the world through the lenses of such models often lead one to simply ignore facts that are dissonant with the theory.<sup>[8]</sup>

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While many aspects of the *dosha* theory are clearly the products of simple observations threaded together by intuitive reasoning, there are also aspects that are outright conjectural. The Ayurvedic pioneers fully recognised the importance of biological understanding of health and illness for rational medical practice; their grasp of the subject though, was rudimentary. Their physiology could go only so far as general observations permitted. Elsewhere, they advanced conjectures mostly revolving around the *dosha* idea. Blood was supposed to acquire its redness in the stomach under the influence of a type of pitta; ejaculation of semen, menstrual discharge, defecation, and urination were all similar physiological processes governed by the same type of *vata*; taste-reception was attributed to a type of *kapha*.<sup>[9]</sup> Such flights of physiological conjecture are ubiquitous in ancient medical texts. Sifting genuine observations from such conjectures and then recasting the theory as a heuristic\* technique is a long-pending work in Ayurveda's theoretical research.

Disregarding the need to recast the *dosha* theory in the light of current scientific understanding and dogmatically assuming instead that its classical version is still relevant, in its entirety, as a sophisticated law of pathophysiology has severely dented Ayurveda's trustworthiness as a medical system. Many in India's Ayurvedic academia believe that the theory's supposed mystical origins guard it against falsifiability. They hold that science has yet to advance to be able to adequately evaluate such mystical insights! These grave epistemological misconceptions have been elaborately discussed in the papers entitled 'The history of a superstition'<sup>[10]</sup> and 'Ayurveda awaits a new dawn.'<sup>[11]</sup>

A simple proto-scientific idea has, thus, degenerated into crass pseudoscience. New Age enthusiasts in the US have only worsened the crassness by eloquently suggesting silly parallels between ancient Ayurvedic theories and modern quantum physics.<sup>[12]</sup> Hamlet perhaps foresaw such enthusiasts when he cautioned: "Thus has he—and many more of the same bevy that I know the drossy age dotes on—only got the tune of the

time and outward habit of encounter, a kind of yeasty collection, which carries them through and through the most fond and winnowed opinions; and do but blow them to their trial, the bubbles are out."

Ayurveda, to be sure, houses a rich repertoire of researchable, if not employable, medical observations relating to both health-promotion and illness-management. An evidence-based appraisal of these observations would facilitate a fuller utilisation of this culturally-rooted medical system in meeting India's health-care needs, especially at the level of primary care. Such an appraisal has the potential to stretch the frontiers of current science and medical practice too. Demystifying Ayurveda's theoretical framework is a vital first step in this direction.

**Note: The views expressed in this article are entirely the author's own.**

#### References

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\*The Oxford Dictionary of Psychology defines a heuristic as "A rough-and-ready procedure or rule of thumb for making a decision, forming a judgement, or solving a problem without the application of an algorithm or an exhaustive comparison of all available options, and hence without any guarantee of obtaining a correct or optimal result." Heuristics are appropriate to use in safe and low-risk situations that do not require precision in decision making. Where such precision is needed, their use would be imprudent.