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ABSTRACT

Ayurveda now among the alternative complementary systems of medicine is over 5000 years old. Its origin and the compilation of Caraka Samhita are noted. The nature of mind as a sensory and a motor organ, its structure and functions are discussed. The concept of Tridosha theory and Trigunas are explained besides the so-called master-forms of Doshas namely. Prana, Tejas and Ojas. The constituional and tempermental types depending upon the doshas are described. These determine diagnoses and guide treatment. Ayurveda is highlighted as a holistic system with its concern for prevention of disease and promotion of health. Disease denotes failure of prophylaxis. Some methods of Ayurvedic therapy are mentioned.

Key Words: Caraka, Doshas, Gunas, 'Sadvrutta', Yoga, Aharatattva, Meditation

The ancients divided all learning into two types: The higher one-'para vidya' dealing with Reality, and the lesser one - 'apara' vidya. Ayurveda falls, under the latter variety (Chinmayananda, 1977). The idea is to point out the 'presence' of the higher in every type of lesser learning. Hence ethical importance of Ayurveda.

Ayurveda (Ayuh: Life, Veda: Science) ranks amongst the Alternative Complementary systems of Medicine that are being practised over the major part of the globe. The Alternative Complementary Medicine (CAM) is currently not a part of the dominant (conventional) biomedical system. It is to be noted that classification of a practice as CAM may change, depending upon changing attitudes, scientific data and experience according to the report of The National Centre for Complementary and Alternative Medicine, (Pelletier, 2000). However, it is also to be noted that: 'There cannot be two kinds of Medicine-conventional and alternative. There is only one Medicine that has been adequately tested and

Medicine that has not, the Medicine that works and Medicine that may or may not work. Once a treatment has been tested rigorously, it no longer matters whether it was considered alternative at the outset. If it is found to be reasonably safe and effective, it will be accepted. But assertions, speculations and testimonials do not substitute for evidence. Alternative treatment should be subjected to scientific testing no less rigorous required for conventional treatments' (Angell and Kassierer, 1998).

In 1959, the National Institute of Sciences of India (later to become Indian National Science Academy) constituted a Board for the compilation of a History of Sciences in India. Caraka Samhita was the first in the series to be published in 1965. The work of the Board was taken over by National Commission for the History of sciences in India. The Commission was inaugurated by Justice M.C. Chagla, the then Union Minister of Education. 'CARAKA' was possibly the first attempt at rendering into English the observations and several

other aspects of the art and science of medicine of ancient India (Ray and Gupta, 1965).

Origins: Ayurveda is the five thousand years old Indian system of Medical science. It is derived from Vedic concepts of health and healing and from other philosophical schools of Samkhya and Yoga, Besides, it incorporates Upanishadic thoughts. It is a comprehensive system of bodymind-spirit medicine. 'The germs of ancient Indian Medicine are found to be laid in the Vedas: In all the four Vedas there are ample references to medicinal herbs, methods of treatment, and descriptions of the different parts of the organs of the human body' (Sambasivan, 1997). Its focus is on prevention of illnesses rather than their treatment-the latter exposing a failure of prophylaxis. It likened the treating the ill to closing the doors of the stable after the horses have escaped! The focus is also on health promotion and its preservation and more importantly on increasing `self-awareness' and expansion of one's consciousness. Avurveda upholds the concept that man is a miniature universe in the sense that whatever is present in the universe is reflected in man-'vat pinde tat brahmande', it further holds that the universe with all its constituents has emerged. from a common ground and hence share a common origin. Caraka samhita is the most important compilation on Ayurvedic Medicine while Susrutha samhita on Surgical sciences. The exact date of Caraka samhitha and even of Caraka himself has been the subject of debate. Of the two dates namely 600 B.C. and 100 A.D. the latter date has been accepted for Samhita. The original material was prepared by Atreya and Agnivesa. former a pubil of the sage Bharadvaia, Caraka derived his Samhita from Dhrudabala's version. The original samhita itself is the proceedings of the discussion and deliberations of the assembly of sages who met somewhere in the Himalayan regions. Their aim was to deliberate on human health, longevity and measures for the welfare of mankind. Caraka Samhita unlike Hippocratic literature contains no case illustrations. One finds *declarative statements which represent the crystallisation of an accumulated experience

derived from observation of natural phenomena and application of logic, both inductive and deductive, to make generalisations which have a universal appeal" (Lele, 1986).

Mind - A Sense and A Motor Organ; The mind is treated as the sixth sense organ with a control over the other five sense organs taking a place higher than them (Sarvendriya Param). The Lord in Bhagavadgita (Vibhuti yoga) says `indriyanam manaschasmi' - 'Of the sense organs I am the mind' (Chapter X 22). Besides controlling and coordinating the sense impressions from the external world, the mind functions as a motor organ - enabling activities through speech and other actions. Thus mind is both a sensory as well as a motor organ (Frawley, 1998). In Ayurveda the body is the realm of molecules while the mind is the field of thoughts. The senses act only when the mind exists or directs the oher organs : Brahadarnyaka upanishad puts it: "if the mind is else where. I do not see: I do not hear". Self is the witness or sakshi to all the body does along with the mind. Similar idea is expresed in some way by Eccles and Popper (Pillai, 2001) who explain that self is what supervises in a person and the brain is but an organ of the self. Such a view approximates the Ayurvedic concept that refers to the self as a mere saksi or a witness.

Caraka suggests that he who has his mind under control does not contract any disease (satwam vidheyam). Caraka also states "manasastu cinthyamarthah": "mind is: what thinks, it is its very nature to think; its field of roaming about is what the senses feed it upon; "do not allow it roam about; detach the mind from the senses and one has to control the mind oneself; "citte calati samsarah-niscale mohsya uchyate" samsara starts when the thinking mind moves about, if it stops doing so liberation or release is achieved (Krishnamurthy, 1991).

The significant observation of Caraka and other Ayurvedic authors is that mind is material in nature and is made up of primordial panchabutas-and its birth is in the food that one ingests. Unlike the Western concept, Ayurveda does not subscribe to the dichotomy of mind and

body. This separation of body and mind we owe to Descartes and earlier to Plato and recently to Eccles (Pillai, 2001). Ayurveda implies that whatever affects the body has its effects on the mind and vice versa. However, a changing attitude is being noted in this regard. For example: "Our medical services separate physical from mental problems as if they do not occur at the same time in the same person and as if one can be easily separated from the other (Carter & Carter, 1995). In Ayurveda, there is no map or topography of the body but only an 'economy' meaning that fluids going in or coming out residing in some asrya (recipient) or flowing through some channels (Zimmermann, 1979).

The sensory part (nonself) of the mind is located in the brain while the deeper layers of the mind namely the 'self' - is centered in the 'spiritual' heart (differing from the anatomical heart) situated to the right of the latter. Though Ayurveda does not recognise the dichotomy between the mind and body holding them as unitary, dichotomy exists between the 'non-self' part of the mind and the 'self the so-called consciousness or the atman which is the spiritual portion of mental field. The modern Science does not admit the spiritual component. The Sankhyan philosophy attributes the evolution of the mind from the 'material' prakriti while the spiritual part-purusha is the non-material self. Modern neuro science research indicates that all mental functions are the projections of the brain functions (Kendal, 1998). The controversy whether brain functioning adequately explains mental functioning is not yet settled. Neuroscience research has indeed suggested that there are spiritual centre, god centre and religious spots in the frontal and temporal lobes of the brain (Ramachandran and Blakeslee, 1999). Nevertheless the occurence of symptoms in disease or on stimulation does not by itself indicate the areas to be their loci 'in vivo'.

The brain (Mastishka) as different from the head was recognised even in the Atharva Veda. The earlier writings held the heart to be the seat of mind (manas). However, Bhela, a contemporary of Caraka considered the brain as the centre of 'mind' which he said 'is the highest of all senses,

and has its seat between the head and palate'. Bhela samhita distinguishes between manas (mind) which is the cause of cognition, with its seat in the brain; and the chitta (consciousness) as the cause of all activities: feelings and judgement with its seat in the heart; and buddhi (intellect) which is considered a special function of the chitta (conscioiusness) (Keswani, 1974).

Though the mind is said to belong to the domain of matter, it is of 'subtle' nature, whereas the body is derived from 'gross' matter. After receiving impressions from the sensory part of mind the Buddhi (intelligence) translates them into actions discriminating what is good and not good. Gita interposes the mind between the senses and the intellect. This is brought out figuratively in Kathopanishad (III-3) and repeated in Gita: "Know that the soul is the master of the chariot, who sits within it and the body is the chariot; consider the intellect as the charioteer and the mind as the reins; and the senses may be said to be the horses and their roads the sense objects'. The close working of the body and the spirit is brought out in a story in Sankhyan philosophy: the body is compared to the blind and spirit to a lame person. The lame rides on the blind directing the path while the blind follows the direction. This brings out the indispensability of one to the other for spiritual iournev.

<u>Tridosha Theory:</u> The doctrine of 'Tridoshas' is fundamental for Ayurvedic Medical Sciences, developing from the Vedic times and finding copious references in Upanishads and Mahabharata (Sambasivan, 1997).

It enunciates the role of the three biological humours namely: vata, pitta and kapha. These correspond to Air, Fire and Water respectively. These determine the constitutional and temperamental types of the individuals thereby categorising them. Such generalisation of categories is necessary although Ayurveda recognizes the uniqueness of each individual. Did not Shakespeare express: 'All men are not alike, clay and clay differs in dignity, whose dust is both alike' (Cymbeline, II-2). The predisposition to illness is determined by the predominant humour that prevails. Plato's aphorism too is relevant in

this context: 'It is far more important to know as to what type of a person suffers from a disease rather than what disease the person is suffering from". This is the postulate of constitutional medicine. A harmonious blending and functioning of the three doshas ensures a state of good health while any disturbance in their balance ensues in morbidity.

Vata: Vata literally means 'what blows' representing air or wind. The air has either as its field of action. It is present in the cavities of the head, spaces in the bones and the joints and the lower intestinal tract-colon where gas generally collects. Among the sensations, it mediates the sense of touch and hearing. Vata is necessary for movement and dynamism and the vata type of people are active, adaptive, alert with easy activities. They are generally of nervous type prone to functional indigestion, aches and pains especially in the joints and head. They are described as chronic 'worriers'. They are capable of mastering diverse activities but without any deep understanding - 'jack of all trades but master of none'. They accumulate information on diverse subjects but organize them poorly. Their noise tolerence is low. They sleep poorly and insomnia is their common complaint. They sweat poorly and are comfortable in a damp and warm weather. They have thin bones that tend to break and they are prone to injuries.

The will power of the vata type is generally unsteady and indecisive. Fear often haunts them. and this is their reaction to any novel or strange incidents or situations. They tend to tire easily from over-work or over-exercise. Their memory is short lived and quite erratic. They are good as communicators, as teachers, computer programmers and excel in mass media. Most musicians are of this type as are the creative individuals and artists. Though they can be very social and talkative, they turn loners when the air element is too high when they tend to be oversensitive. Avoiding either to be leaders or followers they become rebels. Nevertheless they are the most adjustable of the three constitutional types and realize what is expected of them and they tend to be adaptable.

In the event of the humoral imbalance, the important psychological consequences of air excess are fear and anxiety.

Pitta: The literal meaning of the word 'pitta' is what cooks'. Pitta is the 'fire-humour' and it resides in the system as heat in fluids like blood. digestive fluids and cerebrospinal fluid. It has the secondary aspect of water for its field and action. It predominates in the liver region, small intestines and governs digestion and assimilation of nutrition for the body and also for the ideas in the mind. Its role is at the cellular level its metabolic mechanisms contributing to energy and heat. It governs the visual system by furnishing the background of light-a corollary of fire. At the psychological level, pitta controls the faculty of reason, intelligence, discrimination and judgement-the so-called illuminating capacity of the mind. Imbalance in pitta results in anger, which is of fiery nature enabling one to defend oneself against external onslaughts. The pitta types have good appetite but are prone to hyperacidity and gastric ulcers. Their sleep is moderate and are likely to be disturbed by dreams which may be colourful and violent. They are competitive and participate in sports and other exercises. They love to win but hate to lose. They are sensitive to sunlight and heat.

Kapha: The water-humor is 'kapha' literally meaning 'what sticks'. It has a secondary aspect of earth as its field of action with the mucous membranes and skin forming its boundaries. It is responsible for weight, cohesion and constitutes as it were the "internal ocean" in which the other two humours freely circulate. It provides for proper lubrication, discharge of secretions and cushioning for the nerves, mind and senses. Kapha predominates in the upperpart of the bodystomach, lungs and head where mucus tends to accumulate. At the psychological level kapha governs feelings, emotion and the capacity of the mind to hold on to forms. Though contributing to calmness to the mind and thereby stability, mental growth and expansion may be retarded. Emotional imbalance results in holding on to things in the mind thereby over-burdening it. The Kaphas tend to be corpulent and over-weight and to water

loading. It is hard for them to lose weight even with effort. They like sweets and may run the risk of developing diabetes later in life. They get into sleep easily and find it difficult to keep awake. Being water type, they tend to suffer from congestive symptoms, obesity, glandular swellings, asthma, oedema and tumours. Kaphas prefer to be sedentary but once active they would sustain it. Consistency and perseverance help them to succeed rather than their skill and cunning. Physically they suffer from inaction and they lack a sense of discipline. They are emotional and are imbibed with love, devotion and loyalty. On the other hand, they harbour too many desires, and get attached and become possessive. Slower to learn than the other two types, they do retain what has been learnt. Neither creative nor original, they are good in finishing rather than starting. They are traditional and conventional in beliefs and behaviour. Seldom rebellious they are good followers. They find difficult to change and would prefer to remain stagnant. They are usually good parents and providers and kapha women make good mothers and wives. With large chest, good lungs and good voice they become popular singers. They tend to accumulate wealth in every form and cling to it. Real estate and banking are the areas in which they tend to excel. Once motivated they are hard workers and consistent in their application (Frawley, 1998).

It needs to be mentioned that the theory of tridosha, which is the pivot of physiology and pathology of Ayurveda has been misunderstood by many scholars to mean literally the elements of air, bile and phlegm. The ancients used these terms in a broad sense with variable meanings depending upon the context. For example the term vata implies all phenomena of motion that come under the function of life, the cell development in general and the central nervous system in particular; pitta signifies the function of metabolism and thermogenesis, including digestion, blood formation and secretions and excretions; kapha implies the function of cooling, preservation thermotaxis and heat regulation and protection of fluids like mucus and synovial fluid (Keswani,

1974).

Vata, pitta and kapha are relevant in Ayurvedic practice. The modern medicine while abandoning the humoural theory has relied on anatomical, physiological and biochemical pathological knowledge instead. As a frame of reference for diagnostic and therapeutic purposes, Modern medicine offers no correlates or equivalents for these humours although attempts were made to equate them with the neurohumoural transmission hypothesis. Certain writers of Modern medicine on Avurveda have abandoned these terms altogether (Lele, 1986). It has been suggested that the concept of Dhatu samvakriva is close to the 'homeostasis'. The Tridosha theory needs to be researched thoroughly and its usefulness and its utilitarian aspects are to be objectively demonstrated.

Prana Tejas Ojas: The master forms of the biological humours vata, pitta and kapha are respectively prana, tejas and ojas. They form the vital essences of the three humours that sustain positive health. While excess of biological humours causes pathology, an increase in the essences promote positive health. These three forces are the key to vitality, clarity and endurance and prerequisites for healthy, fearless and confident state. The prana, the subtle energy of air is behind all mind-body functions. Being responsible for coordination of breath, senses and mind, it governs the higher states of consciousness. Tejas confers inner radiance and is the subtle energy of fire that digests impressions and thoughts and enables higher perceptual capacities. Ojas the primal vigour the subtle energy of water is the vital energy reserve, the essence of digested food and impressions and thoughts. It provides calmness and supports and nourishes all higher levels of consciousness. At the mental level prana enables the mind to move and respond to the challenges of life; tejas permits a correct perception, fearlessness and vigor to accomplish extraordinary activities; ojas provides peace, calmness and contentment. Prana is a propeller of enthusiasm and expressions of the psyche and in its absence depression and fatigue result. Tejas governs mental digestion and

These triple layers of mind follow the model of vata, pitta and kapha or air, fire and water at deeper level (Frawley, 1998).

The Inner mind or Deeper consciousness harbours air which confers the capacity for the mind to relate, identify itself and feel 'alive'. It constitutes the core or the heart of the consciousness which is never evident at the surface. It is the motivating force or the springboard for the remaining functions of the mind. Most of what goes as unconscious, subconscious and superconcious falls under the realm of Inner Mind. The deeper part of the mind is inaccessible and remains dark to the ordinary mind. However distinct from this is the pure or unconditioned consciousness which is one's true Self. The Inner mind forms the 'conditioned consciousness'.

The Intermediate Mind called Intelligence has fire as its basis and serves the function of reasoning, judgement, perceiving what is right or otherwise, measuring and evaluating the data brought from the outer mind. This is the part of the mental field that comes into play during most of one's life.

The outer Mind which is directed to the sensory world of the external environment has water as its chief element. Water is the formative aspect of the mind that enables a construction of one's reality after gathering impression from out side. It is with the outer mind that one lives and transacts with the external world. This is the part of mind with which one is familiar with and knows as the mind. With its expressive capacity, functioning in the sensory world is rendered possible and enables one to become a part of the world of affairs.

Levels of Self: There are two levels of the Self the outer self identifying with the body that determines one's physical identity. As against this the inner self is the pure consciousness, the subjectivity, the pure 'I am' that lies beyond physical identity.

The element earth exists in the mind as 'ego' that confers a sense of personal identity and identification with physical equipment and activities in the physical world. It confers a sense of individual self in the transactional world. It operates through the self-image implying a subject-object

combination. Through the ego the person becomes somebody and obtains something distinct in the objective world of matter. The outer self is in short 'consciousness objectified'.

The Inner Self is constituted by the element of ether and represents the soul or the self. This contains the so-called inner space from which one can observe oneself, the faculty that is uniquely human. At this level one transcends body consciousness to identify and merge with the highest self. The Inner self can be conceived as pure subjectivity 'I am' 'That I am' (the upanishadic Aham Brahmasmi' / 'Tatvam Asi') while the outer self as 'I am this' or 'this is mine'. In upanishadic terms, 'this stands for the individual self (Atman) while 'that' stands for universal self (Brahman). While the outer self separates one from the rest of the world owing to its individuality, the Inner self unites one with the cosmic self. While the form is grasped by the outer self, the inner self catches the essence. Yet the Inner self is linked with the body-mind complex, from which it can delink itself to merge with cosmic self.

The five levels of the mind are charged by different elements. The higher self ether; Inner consciousness - Air; Intelligence or Buddhi-Fire; Sense mind-Water; and Ego-Earth.

Psychological Disturbances: The psychological disturbances result when the elements in the mind are in a state of disequilibrium. According to Ayurveda the psychological problems arise at the level of the outer-mind since happiness is sought in the physical world of things. The nature of the mind is subtle and unless cleared of its gross elements especially the element of earth (ego) the disturbances cannot be got rid of. This is not achievable by a mere balancing the mental elements but spiritualizing the mind. The lower functions of the mind are to be subdued in favour of the higher. The healing of the mind consists of purifying the mind and the refining the elements that compose it.

The importance of environment and the ecosystem in health and illness has been highlighted in the Vedas and so too in Ayurveda. Taittireya Aranyaka (7.7.1) states: `Earth, atmosphere, heavens, directions, fire, air, sun, moon and stars

as well as water, herbs, trees and sky and soulall these influence the very existence of all life. Changes in them result in suffering' (Sambasivan, 1997).

In Nature, vayu serves as an envelope of the earth and maintains the division of seasons. In its abnormal state in Nature, it may cause storms and winds. When activated at the microcosmic level if produces physical and mental illnesses. Depression of seasonal variety described in recent years is of this category (Rosenthal et al., 1984).

In keeping with the times, in Ayurvedic writings karma is listed as aetiological in the occurrence of disease. The laws of Karma are not considered immutable by Caraka who grants a limited degree of freedom to human efforts in arresting the fruits of ordinary non-moral actions. These can be averted by effort of human intelligence, wisdom and a virtuous conduct (Sad Vrutta) and with proper medications. However the effects of very good or very bad actions cannot be avoided or modified by human actions (Ray and Gupta, 1965).

Preventive Measures: Ayurveda considers the occurrence of disease as a failure of medical science in preventing the disease. Hence its stress on prevention of illness, promotion of health and longevity. Towards this Ayurvedic celebrities like Caraka, Susruta recommended a particular life-style consisting of Dina charya (daily) and Ritucharya (Seasonal activities), involving Diet (Ahara tatva), Vyayam (exercise), meditation and virtuous qualities (Sadvrutta), and activities of sleep and sex. The importance of bodily health and mental health was stressed together with practice of spirituality. Caraka has stated: "The healthy life has three main pillars; a balanced diet, proper sleep and a healthy sex and mental hygiene". Sushrutta also defines healthy life as follows: "One whose doshas, agni, body elements and excretory functions are harmonious and whose self, mind and senses are cheerful-he is said to be healthy". Caraka samhitha states "Measured diet not only does not impair one's health but positively promotes one's strength, complexion, health and life". However, excess of vegetables is not

conducive to good health. Bhagvadgita too stresses on the different types of food. "The foods that augment vitality, energy, vigour, health, joy and cheerfulness, which are savoury and oleaginous, substantial and agreeable are liked by the sattvika" (XVII-8). "The foods that are bitter, sour, saline, over-hot, pungent, dry, and burning are liked by the Rajasikas, and are productive of pain, grief and disease" (XVII-9). "That which is stale, tasteless, stinking, cooked over-night, refuse and impure is the food liked by the tamasikas" (XVII-10).

The role of Self the inmost layer of the mind has been stressed to attain a sense of inner peace and happiness. The life in Ayurvedic is divided into Sukha Ayuh and Dhukha ayuh (Happy and Unhappy) and Hita Ayuh and Ahita Ayuh (good and bad life). The outer layers of mind especially the sense-mind, Intelligence (buddhi) and the ego can be influenced by the diet and external agencies, while the deeper layer of the inner self is not accessible to the sense organs. Meditation alone enables one to reach this layer of the mind. Hence meditation and other spiritual exercises like mantras. This aspect of healing is drawn from the philosophy and psychology of the Yoga school (Yoga darsana). It has been said 'Ayurveda is the healing branch of the Yogic science while the yoga. is the spiritual aspect of Ayurveda, Ayurveda is the therapeutic branch of yoga (Frawley, 1998). Yoga in its original sense extends beyond asanas or postures and comprises science of spiritual development leading to self-discovery.

The psychiatric disturbances are determined by the imbalances of the biological humours-vata, pitta and kapha. Many of the nervous and psychiatric disturbances result from Vata imbalance; Anxiety symptoms, features of hallucinations, defusions and psychosis of schizophrenia and Manic depression. It has been reported that the late consequences of child abuse are vata type of disorders. The pitta types are marked by aggression, violence and antisocial behaviours, irritability and anger episodes. The kapha types are least disturbing and are generally marked by withdrawal, apathy, laziness, passivity. At psychological level, thoughts tend to stick and

the individual finds it hard to get out of the process something akin to obsessionality. The clinical description of psychiatric disorders in Ayurveda and their treatment are beyond the scope of this write up. They have been discussed earlier (Venkoba Rao, 1975).

The therapeutic measures consist of counselling, elimination procedures (Pancha Karma) to restore balance of the disturbed humours, exercise, impressions of visual and sound type and spiritual methods like meditation. 'Ahara tattva' plays an important role in Ayurvedic remedies both for physical and mental disturbances. Ayurveda holds the view that the remedy to be effective should reach beyond the sense and buddhi level of the mental apparatus. The inner self should be reached to achieve a radical relief tackling the root of the problem. The modern Avurvedic practitioners hold that administration of drugs in psychiatric practice is of tamasic nature that sedates and dullens the individual. Psychoanalysis according to Ayurveda. is of rajasic type bringing to surface the suppressed forces. Adopting a sattvic method for mental healing is advocated in Ayurveda and reaching the deeper layers of the mind releases the healing powers of the mind. This contrasts with the mere symptom relief from drugs.

Conclusion: Ayurveda recognised disease as manifestation of a failure to fulfil "the values of life". The body and mind are equally involved in the causation of disease. Besides the contributory role of the mind in disease, the system takes into account the required attitude which can hasten the cure. This Ayurvedic tenet becomes significant in the context of the prevailing dichotomy of bodymind view. Such an attitude has contributed to the waning of interest in the area of mental health in Ayurveda. "To help modern medicine breakthrough the impasse, Ayurveda may shed valuable light and provide insights of far reaching importance" (Ramachandra Rao, 1990).

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