

Origin of Sanskrit, Ayurveda and other Sciences in University of Taxila by Aryans

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ABSTRACT

This article presents an authentic review of origin and development of Ayurveda from a historian's perspective. This also throws some light upon the native Indian culture belonging to the Indo Vedic civilization which was gradually replaced by Vedic culture. This was also the period of highest prosperity of all Indian sciences including Ayurveda.

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Before we begin with the subject we need to accept that the Aryans came from Central Asia proposed by **Sarianidi, (2013)** as under-

“The Aryans in Turkmenistan (ca 2500-2000 BCE) from where they reached into Persia and India and via Bactria”. As proposed earlier, **Shah, (2015, p.28.)** before 2500 BC, the Central Asian half-nomads (Indo Aryas & Indo Iranian) possibly, moved towards South West of Karakum desert area in Turkmenistan by the banks of river Murghabi. This fact was confirmed from an archaeological excavation at Gonur Tepe, site, dating back to 2500 BC by a Greek-Russian archaeologist, **Sarianidi (2003)**. For the first time, a palace, of about the size of a football field, a fortified mud-brick enclosure, and a massive shrines, the temples with fire altars (*Havan kunda*), in which remains of ‘Sacrificed’ horses were also found (*The Ashwamedh Yaggya*). And, for the first time, the chariot remains with horses were also recovered. He also found what appears to be the boiler for the ritual drink *soma*, which is well mentioned in the Rigveda, and in the *Zend Avesta* as *haoma*. Sarianidi stated that he also found dishes with traces of cannabis, poppy and ephedrine. According to Sarianidi, (2003) this discovery

strengthens the theory that these were the ingredients of *soma*. Possibly, this was done when the true *soma* was not available to Aryans in mid Asia. The site, was abandoned about 2000 BC after the Murghabi River turned its course and moved to the west. Due to this change in river's course, the people also migrated from this place. And, Margiana was abandoned. According to Sarianidi, (2003) Margiana was the 5th oldest civilization on earth not just a culture but a lost civilization.

Reaching of Indo-Aryans (The Aryas) in India along with their memorized poetry or hymns, which they called Sruti-RgVeda (ca.1750-1500BCE): It is stated that the Aryans migrated from Margiana (Turkmenistan) towards farther west and reached Bactria in the north of Afghanistan and settled down here for some time then divided into two groups of which one migrated towards Persia (Iran) and were known as Zoroastrians, the other moved towards India known as Aryas. When they might have reached India somewhere, 1500 yrs B.C.(or 1432 yrs BC) they had not witnessed the drought of Indo Vedic Civilization(IVC) or seen the black lightning, otherwise, they would have certainly reported it in their Vedic hymns. They must have met the remnant people of IVC, in the north-west of India, who were doing their cultivation and trade and had stayed there. The Aryas must have observed

the IVC people doing farming and business of trade, and they must have took all over from them and made them their slaves. When, Aryas had moved towards south they might have actually met further remnants of lost IVC people and their cities. The *Atharvaveda* is written about ca.900-1000 BC., so we have to re-build and recapitulate the story of *Kustha* with reference to *Atharva Veda*.

The Vedic Period of Aryas in India, where they completed *Rgveda* and added *Sam veda*, *Yajurveda*, and lastly the *Atharvaveda* (ca 1300-500BCE) in which they particularly mentioned herbal and other drugs and among them the main was ‘*Kustha*’: The Aryas along with them as stated earlier brought the memorized hymns and continued chanting and practicing their oral hymns which they had well memorized. First, they had settled down by the side of the river, Indus, which they called as Sindh. The memorized hymns, were called by them the *Shruti-RgVeda*. Further, they continued in India composing the *RgVedic* verses. Therefore, in *RgVeda* there are two distinct parts one which they composed outside India and the other which they composed within India. In *Rgveda*, Ganga is referred only two times and Yamuna three times. The Aryas acclaimed and recognized the Ganga as their holy river, when they moved towards the Gangetic plains, in later period. After completing *RgVeda* they composed the other Vedas, viz., as, *Samveda*, *Yajurveda* and *Atharavaveda*. And, they simultaneously moved towards east to the Ganga–Yamuna plains, where they started establishing their, kingdoms like; Magadh, Ang Desh, Ayodhya, Mithila, Banaras (Varanasi), Pataliputra, etc. Later, they gradually, moved towards South-India. After settling down in the northern parts of India, in about 600 BC the Aryas did the following three very important things as stated below:

The Establishment of University of Taxila (600 BC to 326 AD): Taxila was also known as Takshashila, which flourished from 600 BC to 326 AD, as a centre for research in various subjects, in the kingdom of Gandhar, dealt in detail, (Shah,2016,p.450). However, according to Thorwald Jurgan (1962) Taxila University origin, as a city goes back to ca.1000 BCE. In this university 68 subjects were taught and the minimum entry age, ancient

texts show, was 16. At one stage, it had 10,500 students including those from Babylon, Greece, Syria, and China. Experienced masters of that period were the great teachers of all times. The university was established at the pivotal junction of the Indian subcontinent and Central Asia. In present day, Punjab, in Pakistan, about 35 km northwest of Rawalpindi and was named Taxila, after the name of son of Bharat, the brother of Rama. (<http://veda.wikidot.com/tip:world-first-university-takshila>). At Taxila University a wide range of subjects were taught by experienced masters: mainly the Language, Grammar of the newly created script of Sanskrit, by which four Vedas were scripted and other important subjects which in this University was the Science of Ayurveda, Medicine, Surgery and Philosophy, Archery, Politics, Warfare, Astronomy, Astrology, Accounts, Commerce, Futurology, Documentation, Occult, Music, Dance, etc.

Coining & establishing the Sanskrit script as an Arayas language: It is presumed that the first research at this university conducted was coining of a perfect phonological script under the rules of grammar to preserve the memorized hymns of four Vedas in form of a language, which was known as Sanskrit, the language of the Aryas. According to Narain (1986,p.25) the history of writing in India, like early Indian history, is shrouded in mystery. It is known that the Indo-Aryans were illiterate but had created philosophical and sophisticated poetry over thousand hymns of *RgVeda*. Elaborate repetition techniques developed to assist in accurate memorization have safe guarded the hazards of oral transmission. Learning the *RgVeda* by heart takes five years of hard work in early youth, requiring daily recitation and repetition. This way, the repository of *RgVeda* used to be preserved, when they reached India. Then they thought to preserve it in the form of some script. After, the establishment of Taxilla university, the Aryas were often visiting the middle-east countries, and at that time a number of scripts were evolving. They wanted to develop a very elaborate and scientific phonological Indian script which could sound their hymns phonologically correctly. So, a script was brought from the Middle-East, where, many scripts were emerging, and coined one, as to fit in its original phonetically correct language. The roots and shoots of the

languages was of Greek and Latin, Kelt, Teuton and Slavonian. The script so evolved known as *Nagri* (Later called *Devanagri*) and was coined to write especially Sanskrit. The stalwarts of Grammar sage Panini was in this university. According to Panini's 14 sutras set out in *Ashtadhyayi*, the original letters of *varnamala* numbered only 42. Vedic literature says that all sounds are indestructible or *sabda brahman*, (Narain,1986,p.25). Panini would have been certainly contributed, in development of Sanskrit script in which all the Vedas and later works like; Puranas, Brahmanas, etc. were scripted and written.

Taxilla University, the seat of the Ayurvedic research and other sciences: Taxilla University is not only the seat for the development of science of *Ayurveda* but also in other fields. If we go through *Atharvaveda*, we find the names of single medicinal plants, and the names of the diseases which is said to be cured by the single drug plant. Neither, the poly-herbal formulas are present in *Atharvaveda*, nor the philosophy of Ayurveda, is vividly described. It is very certain that this exhaustive and time taking research and experiments must have been done at the Taxilla University, where, Ayurvedic stalwarts like; Bhikshu Atreya and his disciples; Agnivesa, Jatukarna, Bhela, Harita, Ksharpani, and Parasara and later Agnivesa and his disciples, Caraka and Drudhbala had been the stalwarts engaged in developing Ayurveda into one of the most respectable medical sciences of the world. It is also stated that Atreya was also the court-physician with the King of Gandhara. Caraka revised *Agnivesa tantra* which was later known as *Caraka samhita*. It is to be noted here that Caraka was also the court-physician of the celebrated Indo Scythian Buddhist king Kanishka and his period is given to be 125-150 AD stated by **Bhandarkar in 1906 quoted Laximi Rajgopal (2008)**.

Not only this, another genius Jivaka was also a teacher in this University, (Thorwald Jurgan, 1962). According to Gananath Sen, Panini was not only a Sanskrit Grammarian but he was also a physician and an expert in Pulse-reading. He also studied Ayurveda for seven years and his area of specialization was *Panch-karma, marma gyan* (Acupuncture type) and surgery, (**Mukhopadhyaya 1923**).

It has recently been stated from Pakistan that Chanakya also studied at this University, and Two books are attributed to Chanakya: *Arthashastra* and *Neetishastra* (also known as *Chanakya Niti*), which, discusses monetary and fiscal policies, welfare, international relations, and war strategies in detail, (<http://storyofpakistan.com/chanakya-350-275-bc>)

Two prominent schools of research in Ayurveda, Taxilla & Varanasi: According to modern research it has been found that there were two schools of Ayurvedic research, one at Taxilla started by Atreya (8-7 B.C), Agnivesa (not recorded by modern research) possibly, during his time the university was destroyed. It is stated that Caraka (125-150 A.D.) was the physician with the king Kanishka of Gandhar, who ruled over the northern part of India. Caraka has given the history of the earlier physicians, like Brahma, Daksha, Bharadwaja, Asvini Kumar, Indra , There are mentioned a number of sages who researched and developed Ayurveda such as, Angira, Jamadgni, Vashishta Kasyapa, Bhruugu, Atryeya, Gautama, Sankhya, Pulastya (the guru of Ravana), Agastya, Narada, and about 41 more Rishis. It is stated that they assembled at the foot hills of Himalayas to discuss the matters pertaining to Ayurveda.

The second school : The second school was established by the king of Varanasi generally known as Deodasa or Kashiraja. , He was so learned in surgery that he was recalled as Dhanwantari. His disciple was the great surgeon Sushruta .According to **Laximi Rajgopal, (2008,161-168,Vol.I)** there were two main centers for development of Ayurveda in India, one at Taxilla under the Punarvasu Atreya, etc. in the West, and other in the East at Kasi (Varanasi) under Divodasa or Kashiraja and then to Sushruta as stated by Hoernle,1907 quoted by Laximi Rajgopal,(2008,161-168,Vol.I) and according to him in the West, Atreya was the professor of Medicine, and in the East Sushruta, was the master of surgery. Actually speaking, the science of Ayurveda in a systematic way emerged from Taxila University and from the palace of Banaras (Varanasi).

The National Institute of Science accepted the date of

Caraka as 100 A.D. and Sushruta 200-500 A.D. So Sushruta was about 100 to 400 yrs after Caraka.

The prescription of famous physicians or named after them according to Mukhopadhyaya (1923) are the following:

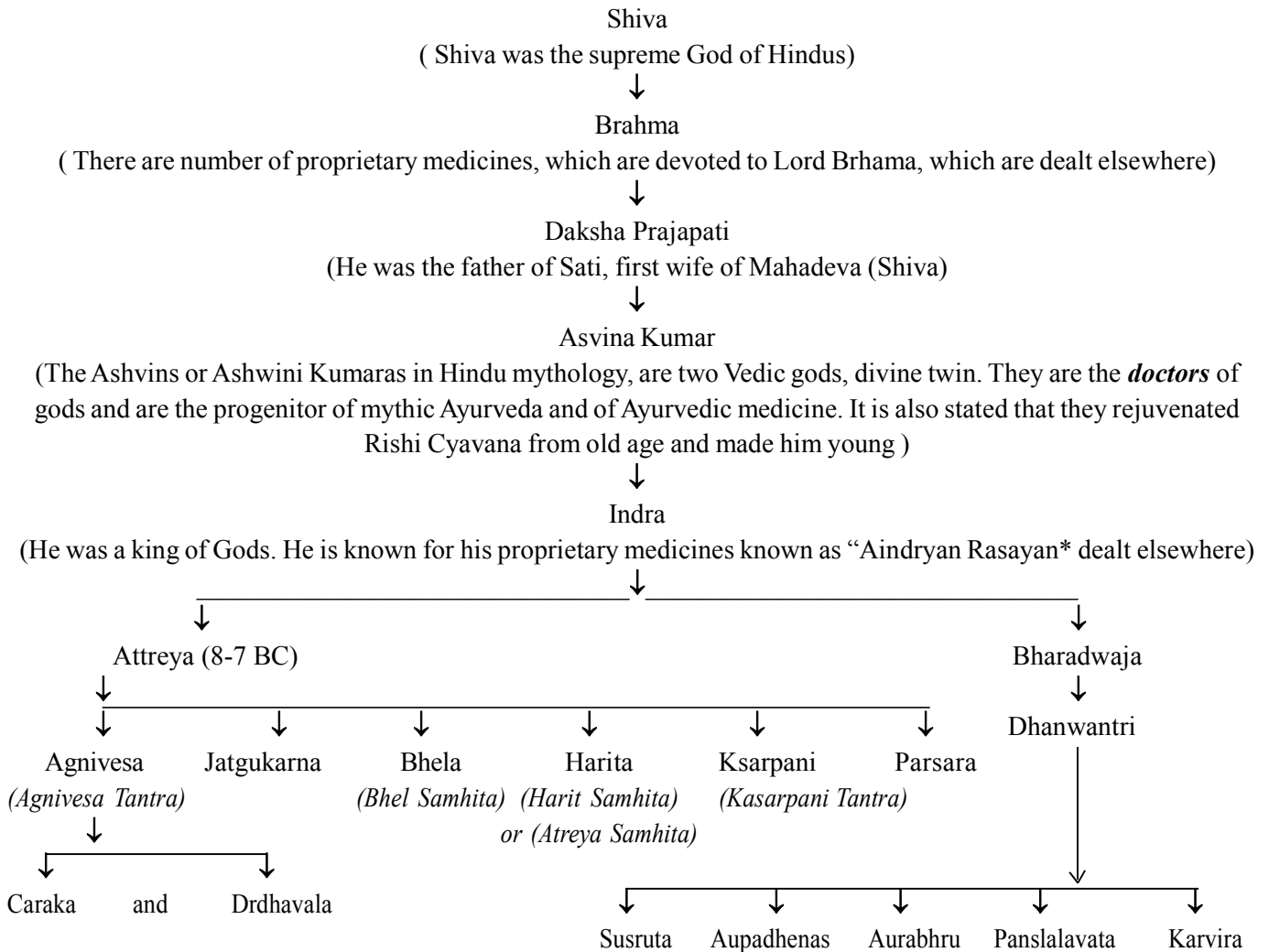
Brahma: *Sarvanga Sunder Ras, Vata kulantaka, Caturmmukha ras, Amvatakagajsingh modak, Vijyaanda,, Sutikhagana ras, Vrahata, Saraswata churna, Chandra prabha gutika, Sayambhuva guggul, Machikasava, Dasasar sarpi, Karnamrita telam.*

Visnu: *Narayana tela, Satavari tela, Swaalpa Vishnu telam Vrahatsringara abraha, Nityodaya ras, Amvateswaras, Sarvanga sundar ras.*

Indra: *Aindra rasayan.*

Ravana: He was a great scholar of Ayurveda and it is mentioned an 11th-century Sanskrit work for the treatment of children's diseases. It is also known as the *Ravanaproktabalacikitsasutra* ("Sutra Spoken by Ravana on the Curing of Children's Diseases.") .Apart from Ayurveda he was a great

Table- I. The genealogy of teacher-physicians of Ayurveda and their works



Tantrik and the *Ravanakumara Tantra* is a part of the tantric rituals of the *Kriyakalagunottara Tantra* attributed to him. Ravana is also the composer of the 16th century C.E. scriptures *Nadi Pariksa* and *Nadi Vijnana* on knowledge about the veins. Ravana appears as the composer of the 16th century C.E. text, *Arka Prakasa*, which is a dialogue between the king of Lanka and his wife Mandodhari about which herbs and chemicals can be used in a mixture to cure illnesses, such as syphilis (Wikipedia Ravana).

The city of Varanasi as the seat of great learning and research

Varanasi was not only the seat of learning of Ayurveda but also of Sanskrit, where scholars of South India used to visit even Guru Shankaracharya visited Varanasi for debates. At Varanasi, the Aryas established their new Gods, Shiva, Vishnu and later Rama & Hanuman. According to **Sherring, (1868,)** Megesthenes also refers the city of Varanasi further he writes that during the time of attack of Mahmood Gaznavi 1017 AD defeated Raja Banar, who was the king of Banaras, at that time. Later, Raja Banar rebuilt Banaras (Varanasi). Further, he states that Varanasi is mentioned in Patanjali Mahabhasya, Vishnupurana, etc. even it is mentioned in Mahabharata once. The purpose of this is to claim Kashi or Banaras or Varanasi, as the oldest living city in India.

Destruction of Taxilla University

Being near the north-west frontier of India, Taxila had to face number of destroying attacks and invasions from the north and the west. Thus the Persians, Greeks, Parthians, Shakas and Kushanas laid their destructive marks on this institution. The final blow, however, came from the Huns (also the destroyers of the Roman Empire) who, 450 ca. A.D., razed the institution. When the Chinese traveler. Huen T'sang (603-64 A.D.) visited Taxilla, the town had lost all its former grandeur and international character.

Discussion and Conclusion

It is a mystery as what had happened to the IVC people.

There are six main theories such as; Killing by the *Aryas*; 'Black lightening' theory; Climate change theory; the Slow southward migration of the monsoons across; the Change of course of the river Indus; the Decline in trade with Egypt and Mesopotamia and lastly, the Climate change theory caused the collapse of the Indus Civilization.

It is certain that when the Aryas arrived in India they did not witness the good days of the IVC people. Possibly, they had seen the last days. Despite of being hostile to them they adopted their culture, agriculture, business of trade and export business, etc. The Aryas completed the hymns of Rgveda and created three new other Vedas; *Samveda*, *Yajur veda* and *Atharva veda*. It is known that the IVC people had their own script and language, whether the *Aryas* knew about it or not? But, it is certain that they adopted their supreme god Pashupatinath and re-named it as Shiva and other names and made him their supreme god?

Later, after settling down here for about thousand years or so they established Taxilla University and scripted all their Vedas, in a new language which, they called Sanskrit. They wanted to develop a very elaborate and scientific phonological Indian script, which could chant their hymns phonologically correctly. So, they brought a script from the Middle-East and coined one, as to fit in its original phonetically absolute language. The great Grammarian Panini was also at the university. Second important thing which they did was to conduct research and develop the science of Ayurveda. The philosophy of *Kapha*, *Vayu* and *Pitta* to diagnose the disease and testing of the drugs (plant, animal & minerals) to know the ethno-pharmacology of the drugs, i.e., *Ras*, *Guna*, *Virya Vipak* and *Prabhava* and their set action on different parts of the body and further the use of poly herbal drugs. In *Atharvaveda* only the single drug (plant, animal and minerals) and their uses are described. When the Taxilla university was ruined by the attackers they shifted the place of Ayurvedic research to Kashi under the king of Kashi known as Kashiraj known also as Divodasa and then to his disciple Sushruta, the great master of surgery. Sharma (1969,p.62-74) has

described a list of 162 herbal drugs of *Atharvaveda* in which, only *Kustha* is the foremost and important herbal drug to cure at least all known diseases of that period and there are 20 hymns on *Kustha*.

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