

# BRAHMI AKSHARAS AND THE ALPHABET

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Most of the alphabet systems used in the world as of today can be traced to either of two scripts - the Brahmi script of India, and the Phoenician script of the Middle East. Naturally, it has always been a topic of interest to researchers to see if the two may be related to each other in some manner.

Brahmi script in its exclusivity has been traced to Ashokan age edicts from 5th century BC. On this basis, among many theories proposed for the origin of Brahmi, was the hypothesis by Buhler, Falk and others, that the Phoenician-Aramaic alphabet might have been brought into India as Brahmi. The evidence here is similarity with in letters between Brahmi and Aramaic scripts. [See [https://en.wikipedia.org/wiki/Brahmi\\_script](https://en.wikipedia.org/wiki/Brahmi_script) with cited references]

However, writing has been in India earlier than that, most notably the Indus script. Among a collection of more than 500 characters in this script, the 50 Brahmi letters can clearly be spotted. This is the theory by Marshall, Kak, Feuerstein, Frawley and others, that Brahmi is derived from the Indus Script.

I had earlier proved this theory, by publishing the results of feature wise comparison between the Brahmi, Indus and Aramaic scripts, and the Brahmi were found to be significantly closer to the Indus, rather than the Aramaic alphabet. Brahmi included in or derived from Indus makes one point clear: it is older than the Aramaic alphabet, since Indus script is dated to 3500BC, whereas even the oldest source of western writing ie, the Egyptian Hieroglyphics only go back as far as 3200BC.

If this is the case, how does one explain the similarity between Brahmi and Aramaic? It surely isn't coincidence, and this article explores the connection, building upon few facts from an earlier article, which are briefly outlined here: [See <http://vixra.org/abs/1808.0115> for full details with references]

1. Vedic language is the origin of all languages in the world, including Sanskrit, Tamil and Hebrew. This was a statement made by Mahaperiyava Kanchi Shankaracharya to a group of researchers on the subject. He also went on to prove how Vedic phonemes or Aksharas transformed and mutated into multiple forms worldwide. Another statement of Mahaperiyava records that the Adam and Eve of Genesis is a reproduction of the Vedic narrative of Atma and Jiva, even the names being derived therein.
2. In the subcontinent, as six languages, including Tamil grew out of the Vedic culture, people started losing identity and connection with Vedas and their information. However, the sages present in this time were very alert and aware of this fact, since they were regularly reciting the Vedas which had within them error correction against transformations and mispronunciations using rules of Shiksha and Chandas.

Consequently, sages noted the growing difference between Vedic recitations and the 6 spoken languages, and knew that this trend would result in losing the Vedas altogether. For this reason, they distilled the Vedic language and created what would be known as Sanskrit. As the very name Kṛit indicated, it is a well created, synthesized language, taking vocabulary from the Vedic language. This is why Mahaperiyava said that Sanskrit too was a derivative of Vedic language.

3. Apart from the Brahmins who were entrusted with reciting Vedas, Sanskrit was also used as a link language. Kings who learnt from sages in Gurukulas learnt Sanskrit. This was the lingua franca used between regions and cultures in military and trade contexts.
4. India from ancient history was always well known for its resource richness, and was always a hotspot for trade. However, this would largely be dictated by India's location and borders. Throughout the north and East were the impenetrable Himalayas. Most of the south was a peninsula, bordered by seas, and the Indian Ocean which was known for its turbulence. This only left the northwest, which was plain land and the Indus river, and this was the gateway for trade, with regions in central Asia and Europe. These names are mentioned in Mahabharata - Afghanistan and Kandahar as Gandhara, Persia as Pahlava, Baluchistan as Rishika, Bactria as Bahlika, Xinjiang and Xion as Huna, Saka as Scythia, and Yavana as Ionian Greece and Anatolia.
5. Since Sanskrit was the communication language, and since there were frequent interactions between India and these regions, there was a prevalence of Sanskrit literacy among these regions. But side by side, the Vedic language was also evolving into the regional languages in those regions. Thus, we see Sanskrit as a key source of influence in this development of languages. As a result, we see the languages such as Armenian, Persian, Tocharian, Greek and Anatolian, all grouped linguistically as the Indo European languages, because of the similarities with Sanskrit.
6. The next stage in history is the Indus Valley Civilization, whose artefacts are available starting around 3300BC. There are stark differences between the Kuru and Indus cultures. First, Kuru, descending from Vedic culture, abided in preferences to minimal materialism. Construction was made often using mud, wood and straw, which would easily disintegrate into nature. Even weapons of war involved more usage of energy vibration rather than material resources, for example Ashvathama invoking the Brahmastra using a blade of grass. However, one sees copious usage of stone and metal in the Indus culture. Thus this is a post Mahabharata offshoot culture characterised by more inclination towards materialism, which was also seen in other cultures in the same time period, such as Sumeria.
7. The Indus people were contemporary or successive to the Kuru culture. Thus, they mostly spoke Tamil along with Sanskrit as a lingua franca. But it is clearly seen that the Indus people traded with Sumeria, Mesopotamia and possibly Egypt - a feature we particularly do not see among the people of Mahabharata. We do not know what prompted this relation - Whether it was adventurous land and sea exploration, or climatic changes, or thirst for more money, or a more liberal outlook towards people who were called "Mlecchas".

8. The areas of West Asia such as Sumeria started civilizations as early as 5000 or 4000BC, and by the time the Indus Valley developed, these were flourishing with their own languages derived from Vedic. So the question is, in what language did the Indus people communicate to them? Certainly they couldn't use Sanskrit, since west Asia wasn't exposed to Sanskrit and the trade practices, unlike Greece or central Asia. It is this reason that prompted and fueled the development of Indus Script- a pictographic sign language of sorts used for trade with these regions. Of course, Brahmi Aksharas were Incorporated whenever names would be written. And since Sanskrit was close to useless in the context of West Asian trade, the pictographic symbols communicated the Dravidian language Tamil, just as many researchers such as Parpola had concluded.
9. From various studies, one understands unfavorable climatic changes occurred in the region, and this spelt doom to the Indus Valley Civilization. Once in its decline, the area became ripe for military conquest, especially being the gateway to the resource rich India. This attracted waves of invasions from Central Asia and Europe, which has been recorded very well through Y-DNA Haplogroups. Invasions continued over centuries, even until the times of Alexander. This section of history is well studied under the misnomer "Aryan Migration".

I had earlier written articles (<http://vixra.org/abs/1510.0484>,<http://vixra.org/abs/1601.0116>) which depicts results of a small scale cymatic experiment, proving a remarkable match between the sounds of Aksharas and corresponding Brahmi alphabet patterns. This would make Brahmi impossible to derive from any earlier script except the sounds of the Aksharas themselves.

In my earlier article (<http://vixra.org/abs/1808.0061>) I had written on how the 50 Aksharas had a fundamental connection to the Sri Yantra, in describing a functional map of the universe, and the concepts and meanings of each Akshara in this connection. This means that each of the 50 alphabets of Brahmi is laden with meaning, which is seen from the names of Akshara Devatas, as well as Avarana Devatas of Sri Yantra mapped to the Akshara. The related meanings can be seen in the very shapes of the Aksharas, which are in reality, the cymatic signatures made by the sounds themselves.

Thus, in summary, one understands that the Brahmi-Indus Script is older than any west Asian script, and that it has such depth in concept that it is not possible to derive Brahmi from anything but fundamental sound itself.






Then, how does one explain the connection between Brahmi and Aramaic-Phoenician alphabets that some researchers have shown? There is only one answer to this - the middle Eastern scripts have been derived from Brahmi.






Middle Eastern scripts have conventionally been traced to the Egyptian Hieroglyphics as their ultimate source, and one might wonder how to reconcile Brahmi with this. However, it isn't surprising, since the Indus Script was also a pictographic script, and much like the latter had the 50 Brahmi letters as its subset, the similar may be said of the Egyptian too.

There have been worldwide, writing systems evolved from pictograms, such as the Chinese, which exists to this day as pictographic, without any sort of phonetic alphabet. Why then, would the Egyptian writing system go contrary to such trend and transform to include phonetic characters rather than continue with pictographs? The reason most likely is external influence, by India, through trade. Indeed, Indus Valley artefacts have been found in Egypt, and active trade did go on between the two.



It is possible that there was some exchange of scholars and ideas from Egypt to India or vice versa, and through these, the Egyptians learnt of the phonetic system ie Brahmi used in the Indus Scripts. The practicality of this system in writing names etc must have been apparent, leading to the Egyptians adopting the script eventually, as a subset of the Egyptian Hieroglyphics. The Brahmi had close to 50 letters, however most middle Eastern languages have between 20 and 30 alphabets. Thus only the existent sounds, closest in pronunciation, were taken from the Brahmi set.

The Vedas had staunch rules of pronunciation such as Shiksha, Chandas etc, as well as great respect given to the shapes of the scripts, which were often inscribed in Yantras etc. Thus, when this knowledge was carried over to Egypt, these factors, ie sound and shape were regarded as paramount, needed to be preserved. Liberty could be taken though, with respect to meaning. Further, as the script evolved to Phoenician, Aramaic and Hebrew, the spiritual wisdom of these letters were carried forward, and formed a major part of Judaic mysticism. [See <http://www.walkingkabbalah.com/hebrew-alphabet-letter-meanings/>]





For example, the second alphabet Beth, seen as Phoenician , Aramaic , and Hebrew , all derive from the Egyptian Hieroglyphic  for a house, which further traces back to Brahmi , which is the Ba letter defined by Akshara Devata Bandhini. The meaning of Bandhini is to capture, imprison, enclose or contain - the same meaning implied by house.









The meaning of the alphabets are not always physically explicit, and are often symbolisms alluding to subtler and more abstract concepts, and these are beautifully explained and captured in Jewish mystic understanding. For example, the sixth alphabet, Vav seen as , , , derived from , represents a hook or peg. The real meaning of the letter, is the extension, particularly of Divine Grace, toward mankind, and a tall standing peg is only a pictorial approximation of this idea. The Brahmi source for this letter is Va , and the Akshara Devata is Varada, representing the concept of Divine Grace or Vara.



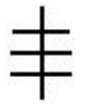





From these examples one can see how Egyptians integrated the Brahmi letters from India, into their hieroglyphics. First, the Brahmi letters corresponding to the 22 Egyptian phonemes were spotted. Next, the meaning of the Brahmi Akshara Devata is studied, and the word closest in meaning containing the concerned phoneme was chosen. Assuming a meagre 2200 words in a language also, one would end up with as many as 100 words on average starting with each letter. Thus, finding one among the 100, that would give closest meaning, wouldn't be a challenge. Since the Akshara Devata meanings are reinforced in the very shape of the Aksharas, they could easily be adopted as pictographs for the chosen Egyptian words.

In the above example, the concept depicted by Va, ie Divine Grace, was represented by the word Vav for peg, since it could be taken pictorially as an extension of God's grace into Earth. The shape of Va , only reinforced the meaning of Divine Grace, since it represented a shower drop falling from the skies, as blessing from God, Va known very well in sanskrit as Water or Jala Bija. This vertical fall, seen as the vertical line, lends itself conveniently to describing the peg, in Egyptian, with the same image turned upside down as .

The following Table gives a description of the correspondences for all 22 alphabets as used in the Hebrew Bible, with their meanings, approximate and subtle.

Phoen.	Aram.	Hebrew	Egyptian	Brahmi	Meaning
Ⲁ A	Ⲱ	א	 Aleph - Ox Head	ॐ A - Amrutha	God as Alakh- ultimate origin, as supreme Creative power, represented by head.
Ⲁ B	ⲱ	ב	 Beth - House	□ Ba - Bandhini	Bandhini means to enclose, contain, life contained within body.
Ⲁ G	Ⲳ	ג	 Gimel - Throwing Stick	∧ Ga - Gayathri Dhumra	Pervading nature of Dhumra (smoke) indicates mobility and movement. 2 Lines in Gimel also show feet.
Ⲁ D	ⲳ	ד	 Daleth - Door	⌈ Da - Damari	Damari represents Pingala the physical channel, which is a door for spiritual progress.

𐌆 H	𐌆	𐌆	 He - Man Prays	𐌆 Ha - Hamsavathi	Hamsa is primordial Chidakasha or God, as Ajapa, the breath chant. He represents breath.
𐌚 V	𐌚	𐌚	 Vav - Hook, Peg	𐌚 Va - Varadha	Vara is grace of God. Extension pictorially shown as peg.
𐌗 Z	𐌗	𐌗	 Zayin - Axe	𐌗 Ja - Jaya Bhogada	Two curves represent swords. Victory over obstacles implied. Same concept with axe.
𐌘 X	𐌘	𐌘	 Heh - Fence	𐌘 Ah - Akshara	Visarga Ah followed by Ka gives guttural sound of Heh. Heh means indestructible soul, as in A+kshara.
𐌛 TH	𐌛	𐌛	 Teth - Wheel	𐌛 Tha - Sthanvi Neelakanta	Represents purifying nature (removing poison etc is Neelakanta). Represents eternity - restore to primordial purity.
𐌜 I	𐌜	𐌜	 Yod - Arm	𐌜 Ya - Yashasvini	Ya is Vayu Bija, represents fundamental life force - foundation for life and creation - the Divine Spark that is Yod.
𐌝 K	𐌝	𐌝	 Kaph - Palm	𐌝 Ka - Kalaratri Bhutavinyasini	Bhutavinyasini is concentration/convergence of elements, or origin from where all diverges. Cupped palm denotes receiving, concentrating in one place.
𐌞 L	𐌞	𐌞	 Lamed - Goad	𐌞 La - Lamboshti	Lamba meaning length, to rise high from ground, where La is Prithvi Bija. Represents Jnana or wisdom, symbolised by Ankusha or goad.

מ M	מ	מ	 Mim - Water	מ Ma - Mahamaya	Mahamaya is fundamental creative state, the primordial waters. Open and closed Ma/Mim represent liberation and delusion respectively.
נ N	נ	נ	 Nun - Snake	נ Na - Narya Anantha Shakti	Nun symbol as snake or sprout indicates growth. Anantha is infinite indicating expansion, growth aspect.
ש Sh	ש	ש	 Samekh - Fish	ש Shha - Shhanda Anukriya	Anukriya means supportive, which is the real meaning of Samekh. Support from God to rise.
א A	א	א	 'Ayin - Eye	א Ai - Aishwaryatmika	Aim is Saraswathi Bija - responsible for knowledge. Same is represented by the eye.
פ P	פ	פ	 Pe - Mouth	פ Pa - Parvati Icchashakti	Iccha is fundamental Divine Will as Life, whose essence is speech - "Word Soul".
צ C	צ	צ	 Tsade - Plant	צ Cha - Chamunda Sushuma	Chamunda is destruction, negation of activity etc. Tsade means to hunt down.
ק Q	ק	ק	 Qoph - Monkey	ק Kha - Khandita Kadyothini	Khandita means separation or distinction - necessity to differentiate real from unreal to rise from monkey - animalistic level to God.
ר R	ר	ר	 Resh - Head	ר Ra - Raktha	Ra is Agni Bija, representing Jnana, Jyotirlinga etc - fundamental state of existence - seen as head

W S	𑀓	𑀕	𑀖 Shin - Bow	𑀘 Sha - Shridevi Mangalagauri	Shin represents bringing of three Gunas together. Breaking down large obstacles through sheer determination. This transcendence is Sridevi.
X T	𑀔	𑀗	𑀙 Taw - Mark	𑀚 Tha - Thamasya	Thamasya means darkness, inertness, night, as the end of day, referring to end of all activity, symbolised with a mark - Taw, until next cycle starts.

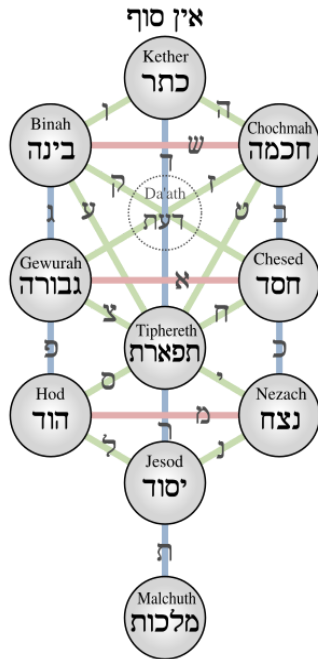
Thus, one can see that the Brahmi Aksharas were taken and adopted into the Egyptian Hieroglyphics - in shape, sound and meaning, to form a phonetic subset, which later evolved into many alphabets such as Phoenician, Aramaic, Hebrew, Arabic, Greek and Latin. One can also see the importance and significance given to these Aksharas in Abrahamic religion, because of the concepts they represented. On this basis one can understand that phonetic based writing systems all around the world, can be traced back to a single alphabet source - Brahmi, and this in turn traces back to the cymatic patterns of the phonemes themselves.

The 22 alphabets mentioned here are much more than a mere random subset of the Brahmi character set. The 22 are laden with spiritual significance and properties, and this is the factor that leads to the selection of the 22 alphabets. Fundamentally, one finds the 22 as describing the various connection paths within the 10 Sefirot, which are manifestations of the Divine, as seen in the Kabbalistic Tree of Life.

The uniqueness of this Sefirot Akshara subset can be seen in nature, as the DNA. The genetic code is the set of rules used by living cells to translate information encoded within genetic material (DNA or mRNA sequences) into proteins. Translation is accomplished by the ribosome, which links amino acids in an order specified by messenger RNA (mRNA), using transfer RNA (tRNA) molecules to carry amino acids and to read the mRNA three nucleotides at a time. The genetic code is highly similar among all organisms and can be expressed in a simple table with 64 entries. The code defines how sequences of nucleotide triplets, called codons, specify which amino acid will be added next during protein synthesis.

One can see that of the total DNA in humans, about 2% contribute to the genetic codon, encoding the amino acids in trios of nucleotides. The rest 98% comprises of varying length codons whose purposes have not yet been fully understood by science.





1st base	2nd base							3rd base
	U	C	A	G				
U	UUU (Phe/F)	UCU	UAU (Tyr/Y) Tyrosine	UGU (Cys/C) Cysteine	U			
	UUC Phenylalanine	UCC	UAC	UGC	C			
	UUA	UCA (Ser/S) Serine	UAA <sup>[B]</sup> Stop (Ochre)	UGA <sup>[B]</sup> Stop (Opal)	A			
	UUG	UCG	UAG <sup>[B]</sup> Stop (Amber)	UGG (Trp/W) Tryptophan	G			
C	CUU (Leu/L) Leucine	CCU	CAU (His/H) Histidine	CGU	U			
	CUC	CCC (Pro/P) Proline	CAC	CGC	C			
	CUA	CCA	CAA (Gln/Q) Glutamine	CGA	A			
	CUG	CCG	CAG	CGG	G			
A	AUU	ACU	AAU (Asn/N)	AGU (Ser/S) Serine	U			
	AUC (Ile/I) Isoleucine	ACC (Thr/T)	AAC Asparagine	AGC	C			
	AUA	ACA Threonine	AAA	AGA	A			
	AUG <sup>[A]</sup> (Met/M) Methionine	ACG	AAG	AGG	G			
G	GUU	GCU	GAU (Asp/D) Aspartic acid	GGU	U			
	GUC (Val/V) Valine	GCC	GAC	GGC	C			
	GUA	GCA (Ala/A) Alanine	GAA (Glu/E) Glutamic acid	GGA	A			
	GUG	GCG	GAG	GGG	G			

Nucleotides are organic molecules that serve as the monomer units for forming the nucleic acid polymers deoxyribonucleic acid (DNA) and ribonucleic acid (RNA), both of which are essential biomolecules within all life-forms on Earth. Nucleotides are the building blocks of nucleic acids; they are composed of three subunit molecules: a nitrogenous base, a five-carbon sugar (ribose or deoxyribose), and at least one phosphate group.

DNA is a molecule composed of two chains (made of nucleotides) which coil around each other to form a double helix carrying the genetic instructions used in the growth, development, functioning and reproduction of all known living organisms and many viruses. DNA and ribonucleic acid (RNA) are nucleic acids; alongside proteins, lipids and complex carbohydrates (polysaccharides), nucleic acids are one of the four major types of macromolecules that are essential for all known forms of life.

The two DNA strands are also known as polynucleotides since they are composed of simpler monomeric units called nucleotides. Each nucleotide is composed of one of four nitrogen-containing nucleobases (cytosine [C], guanine [G], adenine [A] or thymine [T]), a sugar called deoxyribose, and a phosphate group. The nucleotides are joined to one another in a chain by covalent bonds between the sugar of one nucleotide and the phosphate of the next, resulting in an alternating sugar-phosphate backbone. The nitrogenous bases of the two separate polynucleotide strands are bound together, according to base pairing rules (A with T and C with G), with hydrogen bonds to make double-stranded DNA. It is the sequence of these four nucleobases that encodes genetic information. RNA strands are created using DNA strands as a template in a process called transcription. Under the genetic code, these RNA strands are translated to specify the sequence of amino acids within proteins in a process called translation.

Each of the amino acids can thus be specified as a three lettered code, which contains the nucleobases that generate it, such as AGG, CAG, CUG etc. A, C and G represent Adenine, Cytosine and Guanine as mentioned earlier. However, Uracil represented by U takes the place of Thymine, in context of RNA translation into proteins.

It is a remarkable fact that the number of proteinogenic amino acids generated by the genetic code is 22 - exactly the same number of the Hebrew alphabet. Of course, the 22 includes Pyrrolysine and Selenocysteine, which are generated from codes UAG and UGA, which are in most cases stop codons, where transcription stops.

The correspondence gets even stronger if the 22 amino acids are seen as belonging to constituent subsets. Specifically, the seven hydrophobic non-polar amino acids Val, Ile, Pro, Phe, Leu, Trp and Ala directly correspond with the seven double Hebrew letters Bet, Gimel, Dalet, Kaf, Pe, Resh and Tav. Furthermore, the twelve hydrophilic polar amino acids (Thr, Tyr, His, Gin, Asn, Lys, Asp, Clu, Cys, Arg, Ser, Gly) map to the 12 simple Hebrew letters of Tet, He, Nun, Tsadi, Het, Ayin, Yod, Samekh, Vav, Lamed, Zayin and Qof. Finally, the three stop codons for Met, Pyr and Sel correspond to the "Mother" Hebrew Alphabets Mem, Shin and Aleph.

In the Indian system, there is a schematic grouping of Aksharas called Katapayadi, where Aksharas are viewed as belonging to one of 5 groups or Vargas - A, Ka/Cha, Ta/Tha, Pa, Ya/Sha. Studying the patterns of the genetic codon, one finds remarkable correspondence with the 22 alphabets in context of the Katapayadi, and more significantly, one finds certain clear connections as follows:

1. The first letter in the 3 lettered code specifies the Varga. A denotes Ya/Sha Varga. G denotes Ka/Cha Varga. U denotes Ta/Tha Varga, and C denotes A and Pa Vargas.
2. The second letter in the 3 lettered codon specifies the position within each Varga as Purvanga or Uttaranga; ie in a Varga, for example Ka Varga, Aksharas Ka and Kha would be Purvanga, while Ga, Gha and Nga would be Uttaranga. Similar rule applies to all other Vargas. Thus codon second letters A and U denote Purvanga, while G and C denote Uttaranga.
3. The third letter in the 3 lettered codon helps to distinguish between multiple groups of Aksharas within the same Varga, such as between Ka and Cha groups within the Ka/Cha Varga. The letters A and G denote the first subgroup ie Ka group, while letters C and U denote second subgroup ie Cha group.
4. The second letter also specifies beginning or end Akshara within each Anga. For example, in Ka and Tha Vargas, A signifies Ka or Tha, U for Kha or Thha, C for Ga or Dha and G for Nga or Na. In Cha and Ta Vargas the mapping is reverse, ie U, A, G and C in place of A, U, C and G described above.

With these rules, one can understand the mapping of any codon to its Akshara. For example, take a codon GAU. The first G denotes this is Ka/Cha Varga. A denotes that within this varga, the Akshara is Purvanga ie Ka, Kha, Cha or Chha. The third U denotes this is the second

subgroup, narrowing down to Cha and Chha. From the list of 22 alphabets mentioned earlier, we do find Cha. Thus, Cha is the Akshara for the Aspartic Acid generating codon GAU.

Thus, one can see that the 4 bases and their positions in a codon determine the various Aksharas. Interestingly, one can see that the complete set of 64 Aksharas cannot be represented using 3 lettered codons. This is particularly the case for Uttarangas. For example, a codon such as UGG or UGC will narrow down to Aksharas Da, Dha and Na. However, there are three Aksharas and only 2 codons, which can map to these. Similarly in the case of A Varga or vowels, there are 16 vowels, from A to Ah. However, the only valid codons for the vowels are CAA, CAG, CGA, CGG, CCA, CCG, CUA and CUG, which can only encode 8 of the 16 vowels. Thus, for the full set of 64 Aksharas, one needs a codon with length more than 3, atleast for some Aksharas, while remaining at 3 for other Aksharas, ie the word length is variable, similar to actual spoken languages.

([https://www.researchgate.net/publication/13233725\\_Linguistic\\_Features\\_of\\_Noncoding\\_DNA\\_Sequences](https://www.researchgate.net/publication/13233725_Linguistic_Features_of_Noncoding_DNA_Sequences))

Research has found that this is indeed the case for noncoding DNA, erroneously called Junk DNA, making up 98% of the human genome. Research, particularly the ENCODE project has shown that the junk DNA performs atleast 3 vital tasks:

1. It acts as an epigenetic system, turning on or off regions of coding DNA. Sometimes these mutations result in serious diseases.
2. It acts to bind together two proteins generated by the coding DNA.
3. It acts as a GPS system, sending the generated proteins to specific regions within the body. This is what distinguishes cells by functionality, such as a skin cell apart from a nerve cell, even though the base DNA of both are the same.

With respect to coding DNA however, one only needs 22 distinguishable sequences, corresponding to the 22 proteins. This can be achieved with 3 length codons. Thus, using the rules, one maps the codons to the 22 Aksharas of Hebrew alphabet. As specified in the table earlier, duplicate codons do exist for each Akshara as well. However, one observes that these rules do not apply to the 3 stop codons corresponding to Aksharas A, Sha and Ma. This is clearly an in-built feature to not just recognize proteins for the codons but also to start or stop DNA transcription, and for this reason, the three codons may be hardwired into the system.

The mapping between Aksharas and Proteinogenic Amino Acid codons are as follows. X denotes common placeholder that can be substituted with any of the 4 bases - A C, G or U.

Protein	Codon	Alphabet	Akshara Name
Phenylalanine	UUU UUC	T	Thamasya
Leucine	CUX UUA UUG	P	Parvathi
Isoleucine	AUU AUC AUA	R	Raktha
Methionine	AUG	A	Amrutha
Valine	GUX	K	Kalaratri
Serine	AGU AGC UCX	H	Hamsavathi
Proline	CCX	B	Bandhini
Threonine	ACX	V	Varadha
Alanine	GCX	G	Gayathri
Tyrosine	UAU UAC	Th	Sthanvi
Pyrrolysine	UAA UAG	M	Mahamaya
Histidine	CAU CAC	X	Akshara
Glutamine	CAA CAG	'	Ekapada
Asparagine	AAU AAC	I	Yashasvini
Lysine	AAA AAG	L	Lamboshti
Aspartic Acid	GAU GAC	C	Chamunda
Glutamic Acid	GAA GAG	Q	Khanditha
Cysteine	UGU UGC	N	Anantha
Selenocysteine	UGA	S	Shridevi
Tryptophan	UGG	D	Damari
Arginine	AGA AGG CGX	Sh	Shhanda
Glycine	GGX	Z	Jaya

Thus, one can see how the Brahmi alphabet subset of 22 Aksharas accurately describes the coding part of DNA. Similarly, one can understand the non-coding part of DNA through the Aksharas both included and excluded from this subset, in terms of codons. To put these into

perspective, one must first understand the scope of the Aksharas, and the alphabet set as its subset.

An earlier article elaborated upon the concepts of the Sri Yantra, which is a conceptual map of the entirety of existence. It was seen that these concepts, when invoked using vibrations, particularly sound energy, formed the various phonemes of the Universal Vedic language, each one powerful to invoke the energies represented by the phonemes. This set was known as the Aksharas, and formed the fundamental building blocks of words and Mantras contained in the Vedas. ([viXra:1808.0061](#))

However, as languages developed, cultivating individual civilizations, there was a threat of the Vedic wisdom being lost, and for this reason, the seers or Rishis, made an attempt to preserve the Vedas for posterity. For this purpose, they introduced Sanskrit - a distilled form of the Vedic language, comprising 50 of the 60+ phonemes. These 50 Aksharas were written using the Brahmi script, which is derived from the cymatic patterns obtained when voicing these Aksharas, as shown in the end of this article.

This subset of 50 Aksharas is a complete subset, in that it can encompass all of the concepts in nature using one or more Aksharas. It can also express the other Aksharas of Vedic language as combinations or derivatives of the 50. However, there is no better evidence for its completeness than in the Brahmi script. Particularly, one takes the inner three enclosures of the Sri Yantra, which by itself forms the Bala Yantra. One can then verify that all the 50 Akshara Brahmi shapes can be derived from the Bala Yantra.

From this one can understand that this set of 50 Aksharas has a geometrical as well as conceptual basis, and is self-contained as well as a comprehensive set. It is this set that manifests as the genetic codes for the noncoding regions of the DNA.



† 𑌒 𑌓 𑌔 𑌕

ka kha ga gha ña

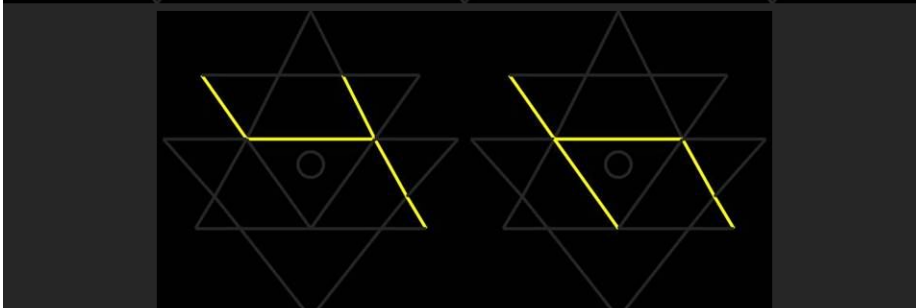
[kə] [kʰə] [gə] [gʰə] [ɲə]



𑌖 𑌗 𑌘 𑌙 𑌚

ca cha ja jha ña

[cə] [cʰə] [tə] [tʰə] [ɲə]



᳚	᳛	᳜	᳝	᳞
ta	tha	da	dha	ṇa
[tə]	[tʰə]	[d̪ə]	[dʱə]	[ɲə]

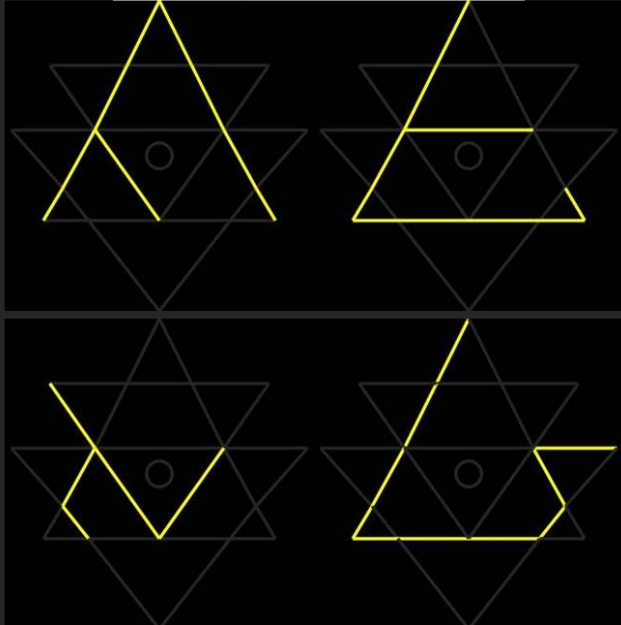
᳟	᳠	᳡	᳢	᳣
ta	tha	da	dha	na
[tə]	[tʰə]	[d̪ə]	[dʱə]	[nə]

𑌒	𑌔	𑌖	𑌘	𑌚
pa	pha	ba	bha	ma
[pə]	[pʰə]	[bə]	[bʰə]	[mə]

𑌛	𑌜	𑌝	𑌞
ya	ra	la	va
[jə]	[rə]	[lə]	[və]



𐌱	𐌳	𐌶	𐌹
śa	şa	sa	ha
[ɕə]	[ʂə]	[sə]	[fə]



𐌿	𐌺	𐌾	𐌿	𐌻	𐌼
a	ā	i	ī	u	ū
[ə]	[a:]	[i]	[i:]	[u]	[u:]



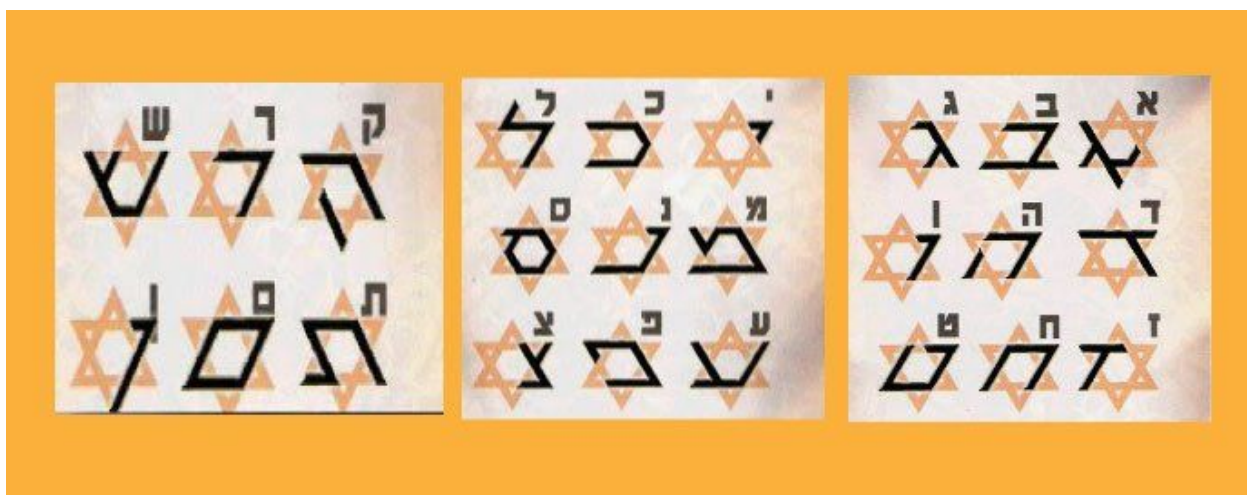
x	ɣ	ʔ	ʔ̄
r	r̄	l	l̄
[r]	[r:]	[l]	[l:]

The vowel chart shows articulation paths for four consonants. The first row shows [r] and [r:] starting from the center and moving to the right edge. The second row shows [l] and [l:] starting from the center and moving to the right edge.

Δ	Δ̄	ɿ	ɿ̄	ɿ̄	ɿ̄:
e	ai	o	au	aɪ	aɪ̄
[e/ɛ]	[əy]	[o/ɔ]	[aʊ]	[aɪ]	[eɪ̄]

The vowel chart shows articulation paths for six different vowel movements. The first row shows [e/ɛ] moving from the center to the left edge, [əy] moving from the center to the top edge, [o/ɔ] moving from the center to the right edge, [aʊ] moving from the bottom to the top edge, [aɪ] moving from the bottom to the top edge, and [eɪ̄] moving from the center to the top edge.

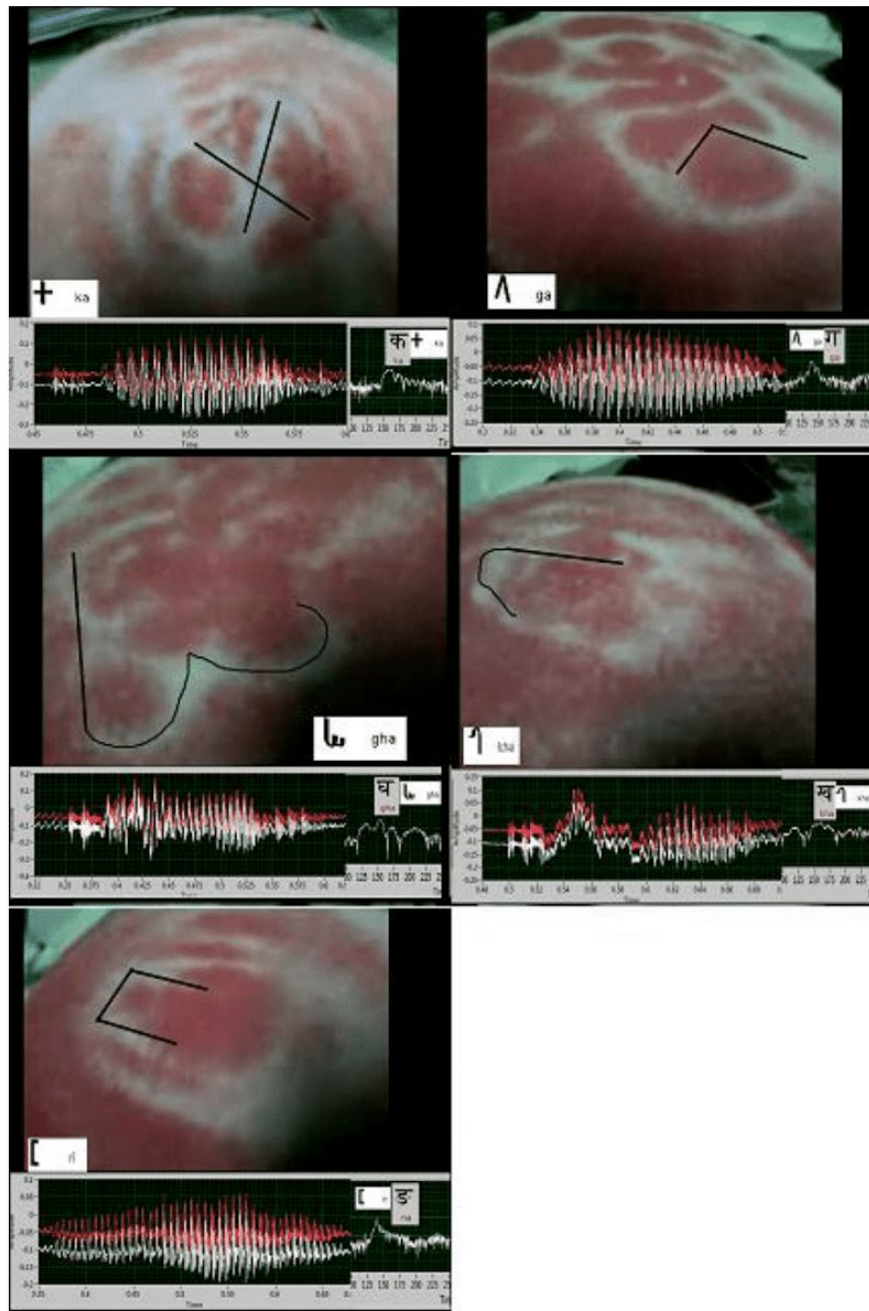
A subset of this set of the 50 Aksharas yields the 22 alphabet set of Egyptian or Hebrew. It is important to know that just like the 50, the 22 alphabet set is also a complete self-contained comprehensive set, having a geometric and thus conceptual basis. In particular, the geometric basis is the hexagram figure known as Star of David or Shatkona, which is formed by taking just one upward and one downward triangle from the Bala Yantra, and interlocking them. Thus, as a subset of Bala Yantra, one can extract the 22 alphabets of the Hebrew script from the Star of David, and this is an aspect well studied.



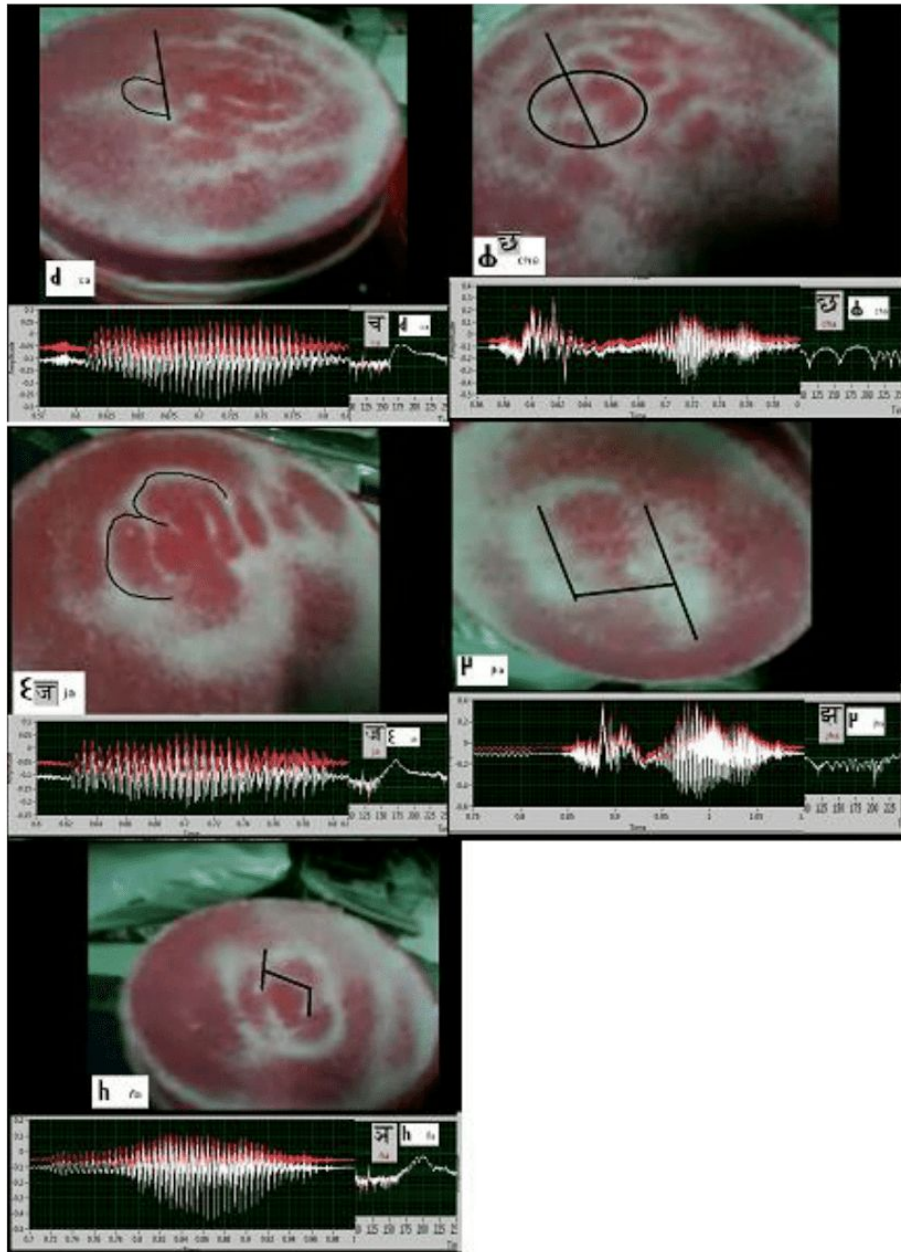
Thus the basis of the 22 proteins and the coding DNA is this 22 alphabet set, which is a comprehensive subset of Brahmi and thus of the vedic Aksharas. Thus, one can understand the foundations of the genetic code in Aksharas, the set of concepts underlying the entire universe.

## Observed Cymatic patterns - Cymatic patterns of the Brahmi Alphabet

### 1. Velar Consonants – Ka, Kha, Ga, Gha and Nga

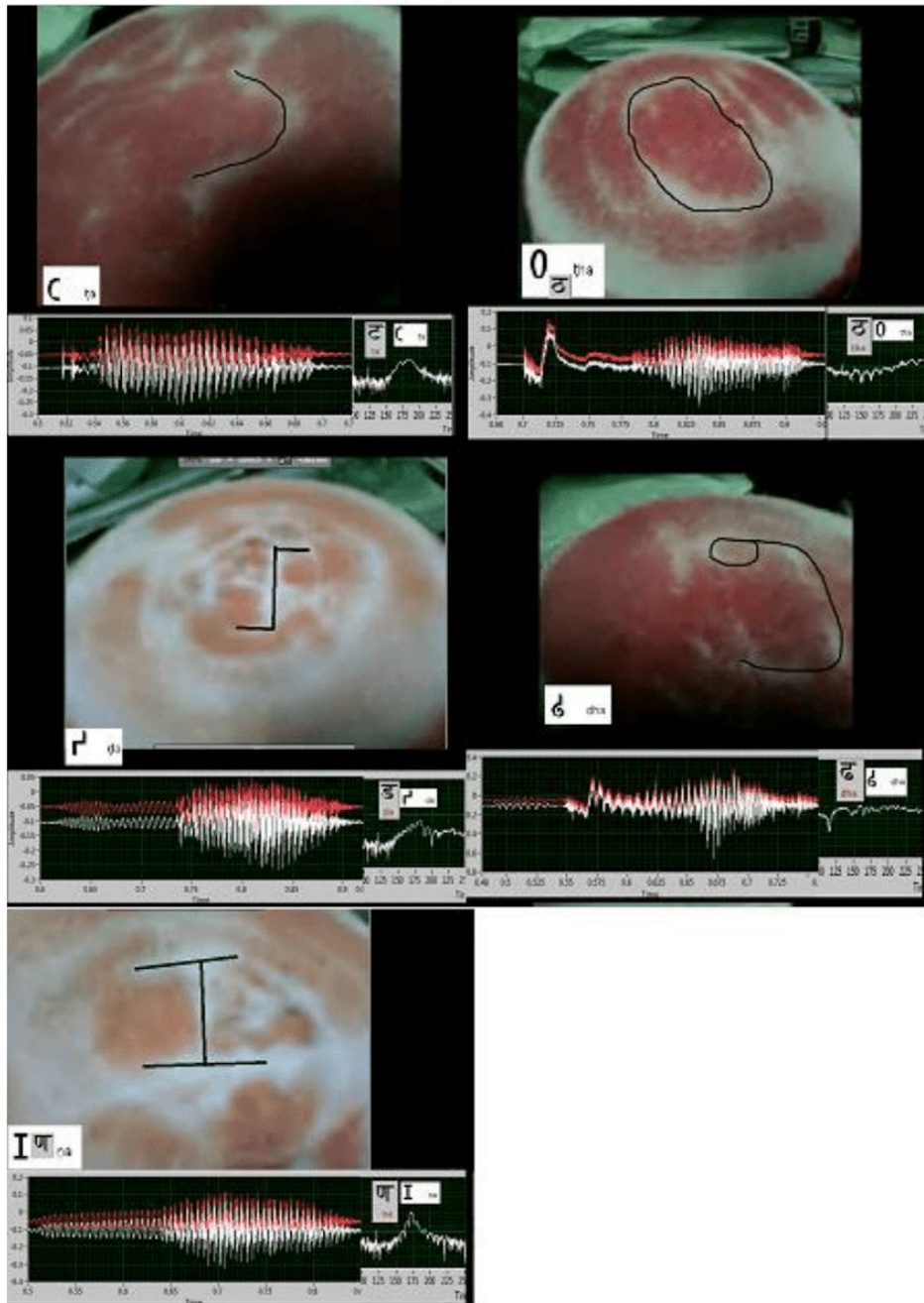


## 2. Palatal Consonants – Cha, Chha, Ja, Jha and Nja

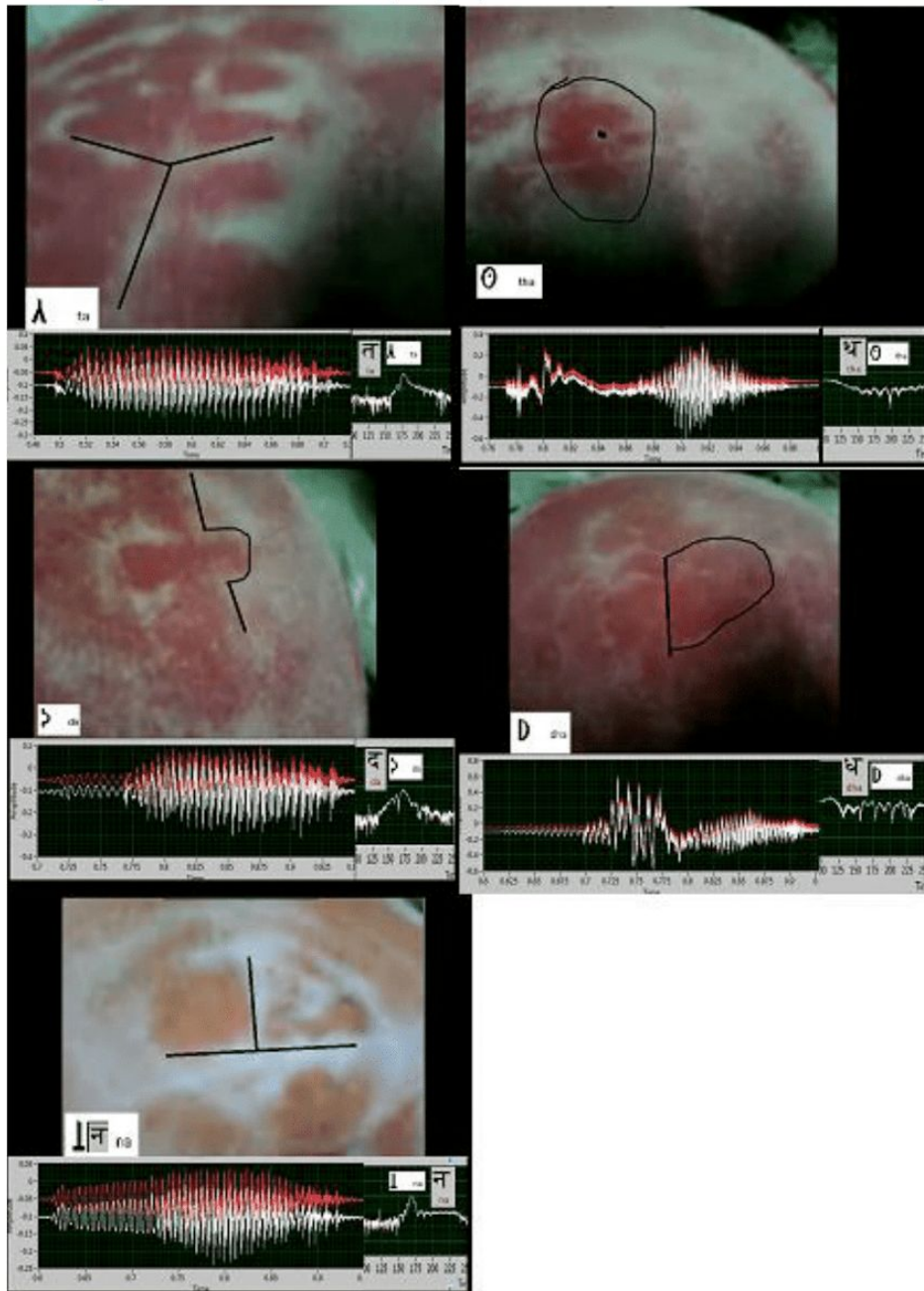




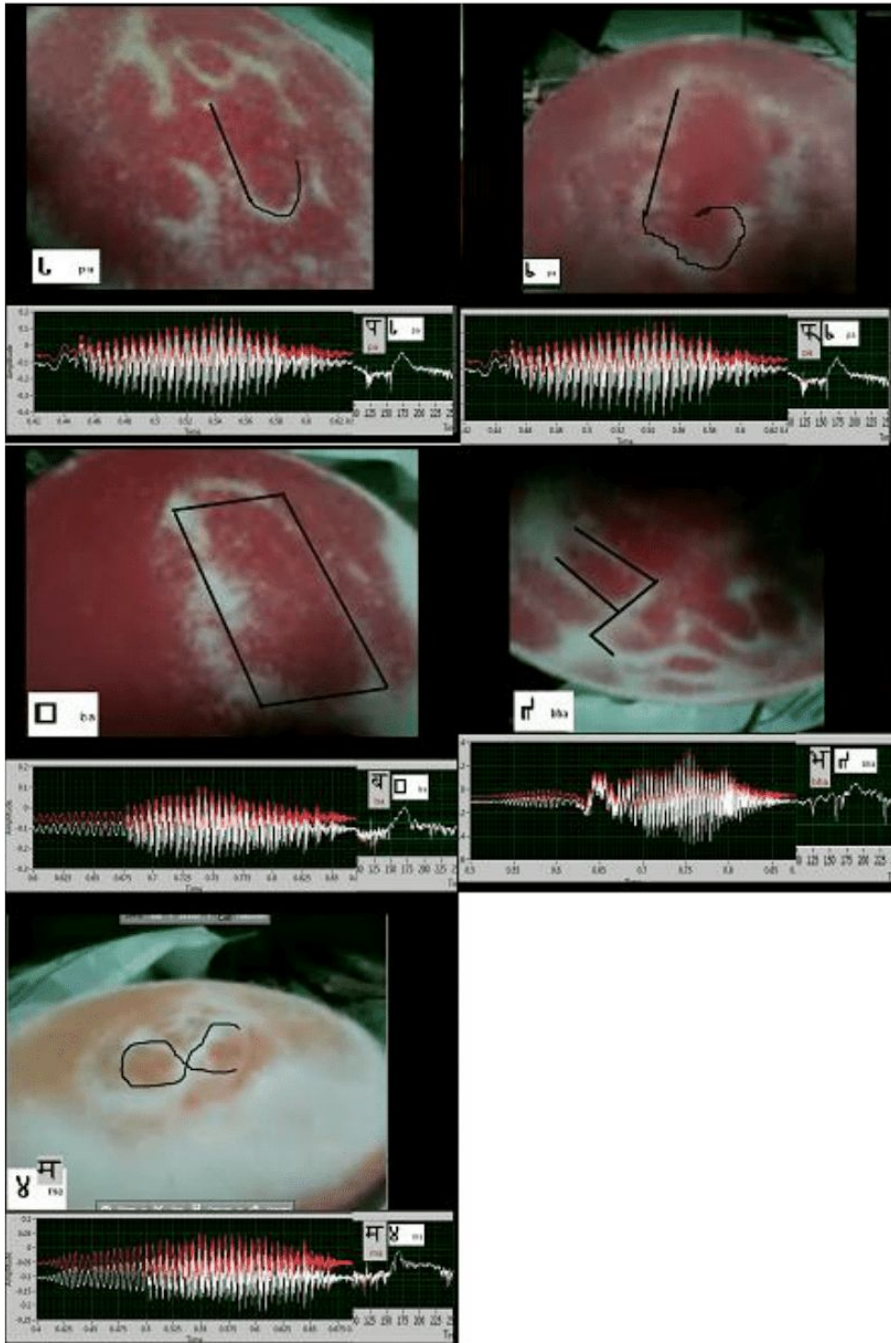
### 3. Retroflex Consonants – Ta, Tha, Da, Dha and Na



#### 4. Apico-Dental Consonants - Ta, Tha, Da, Dha and Na

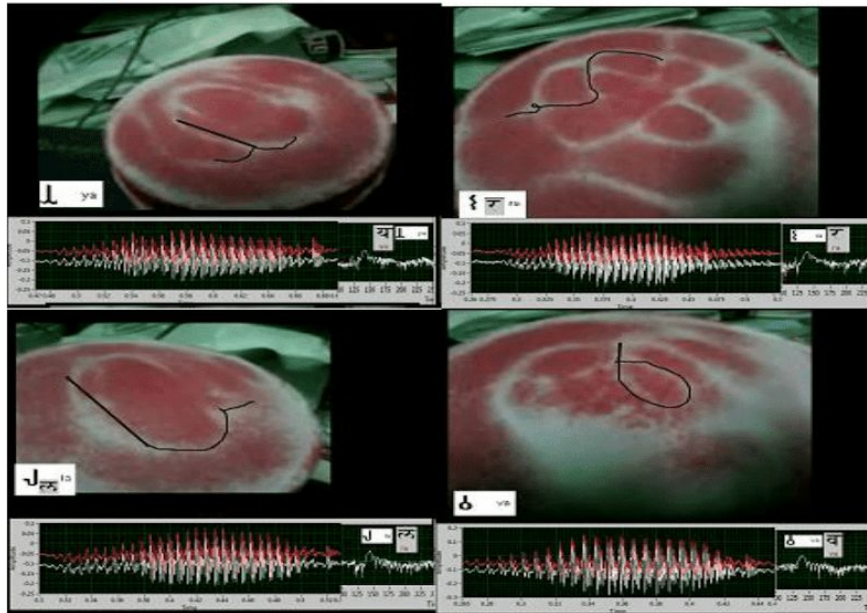


5. Labial Consonants - Pa, Pha, Ba, Bha and Ma

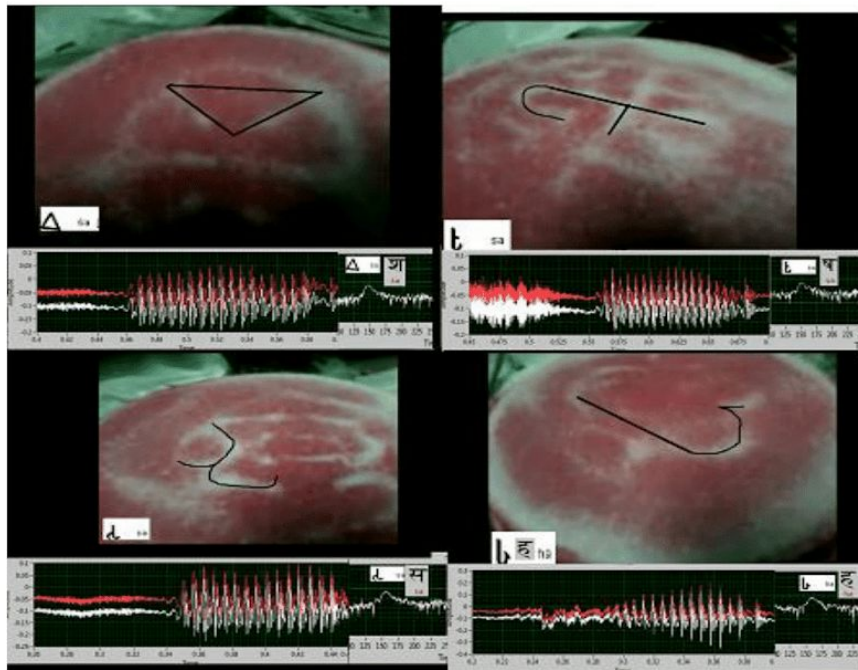




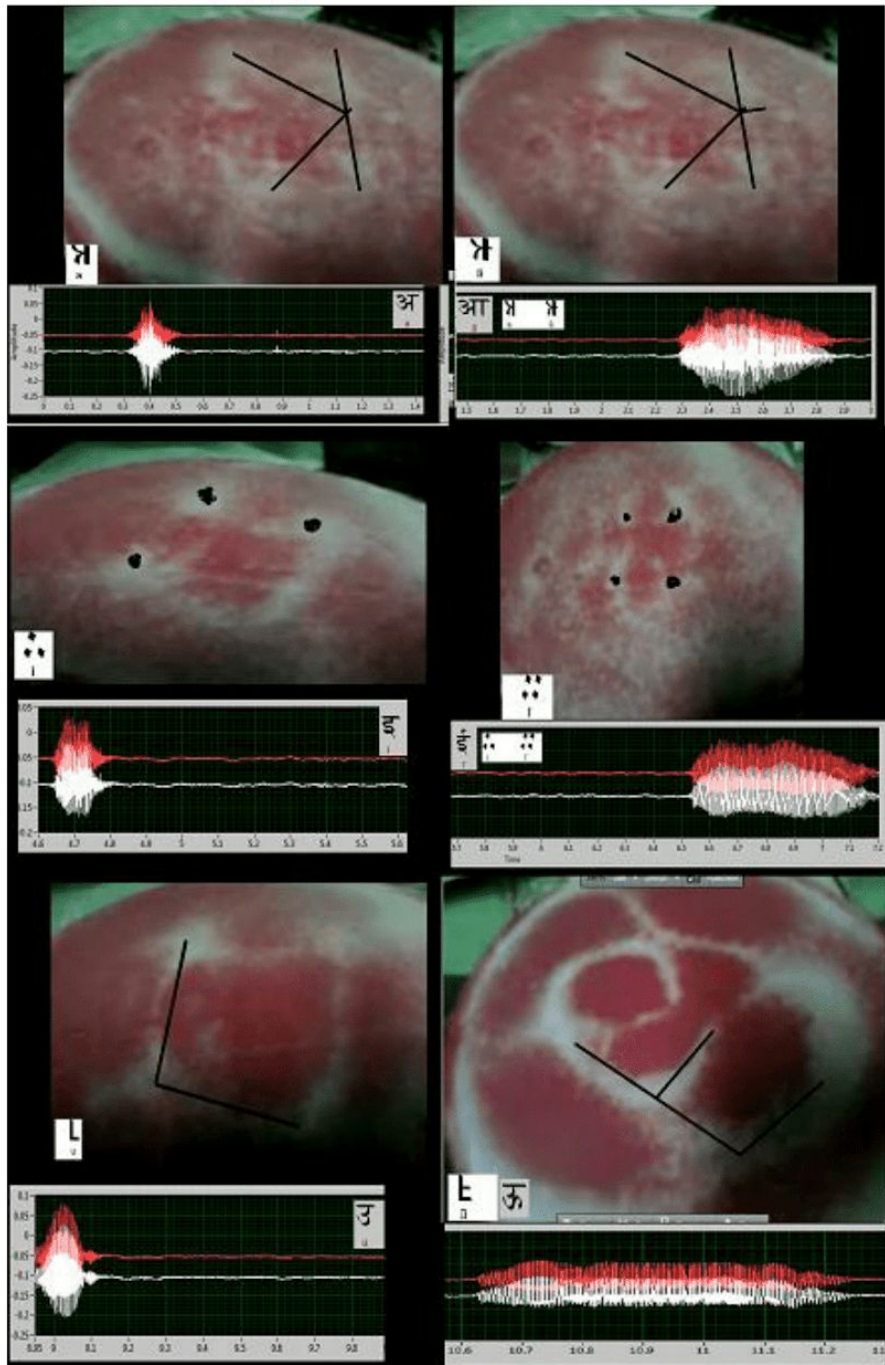
## 6. Approximants - Ya, Ra, La and Va



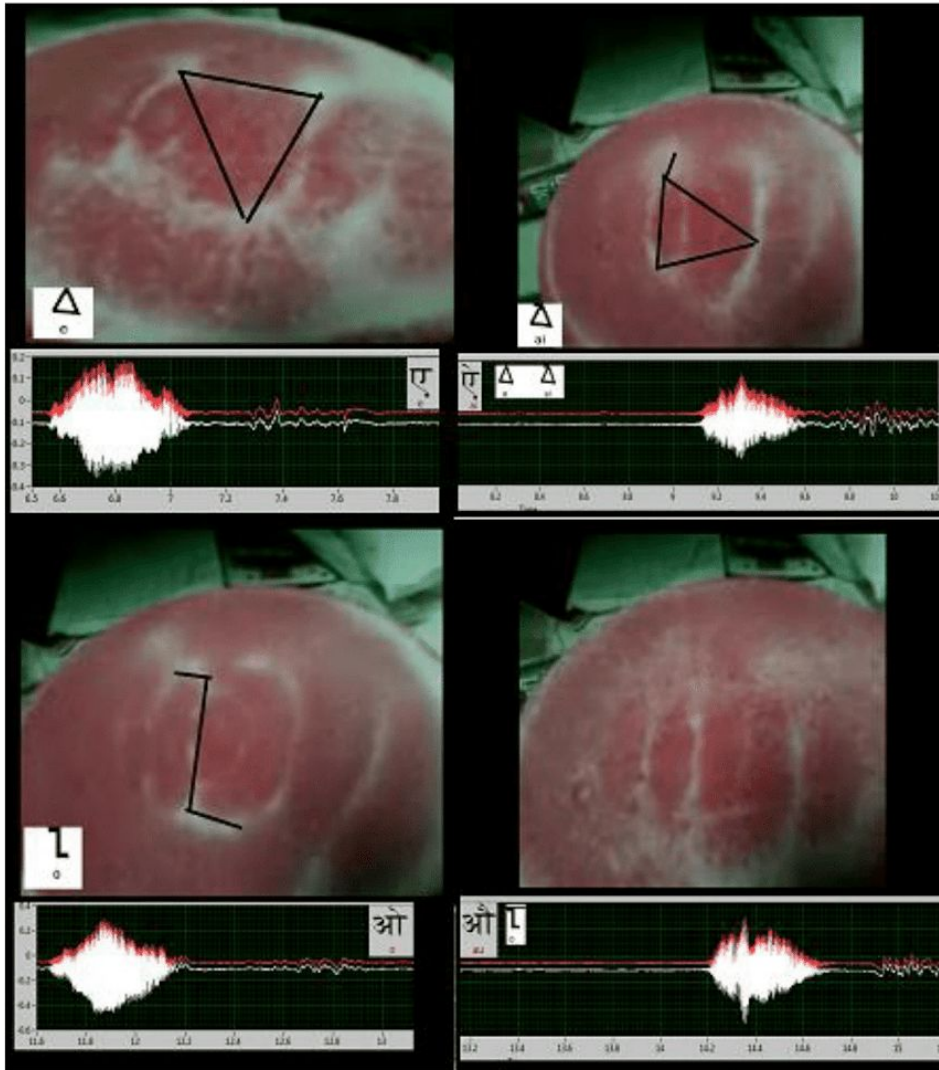
## 7. Sibilants - Sha, Shha, Sa and Ha



8. Vowels 1 – A, Aa, I, Ii, U and Uu



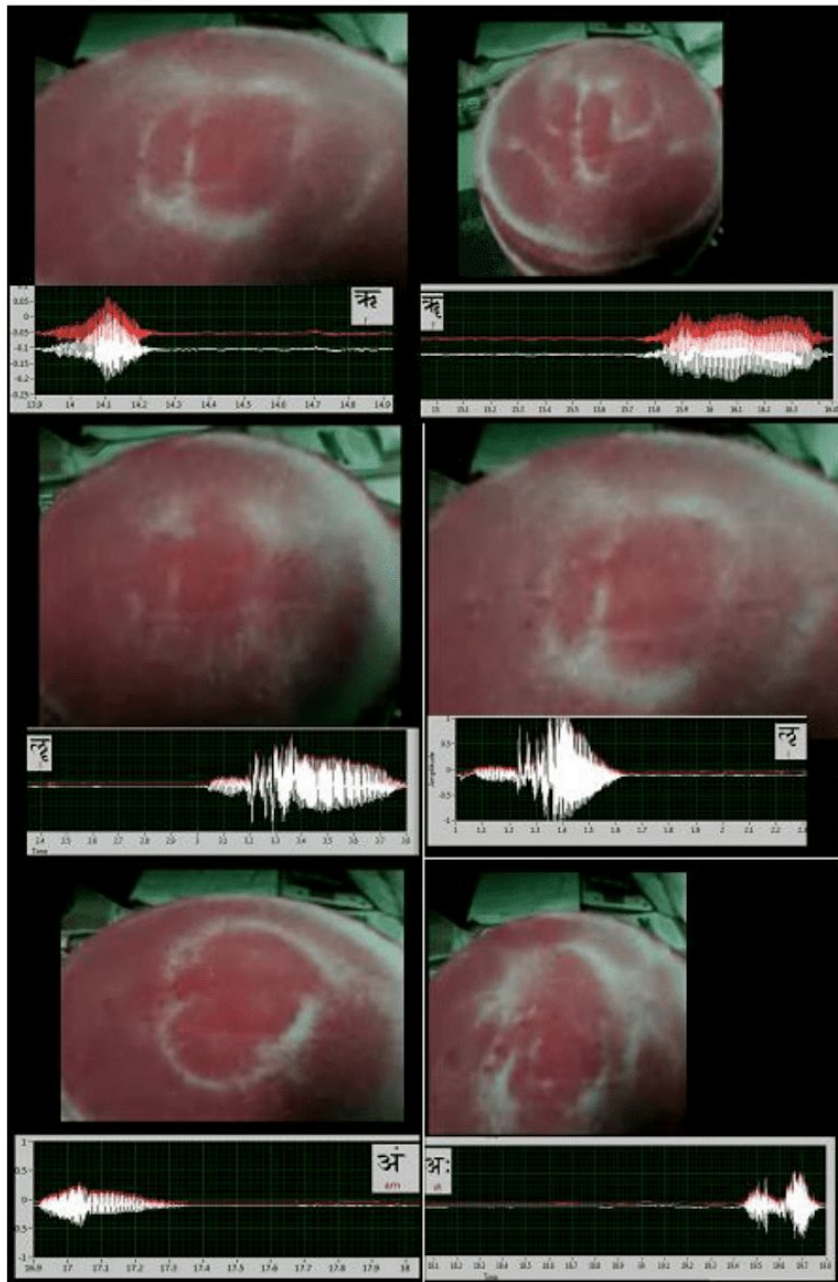
9. Vowels 2 – E, Ai, O and Au



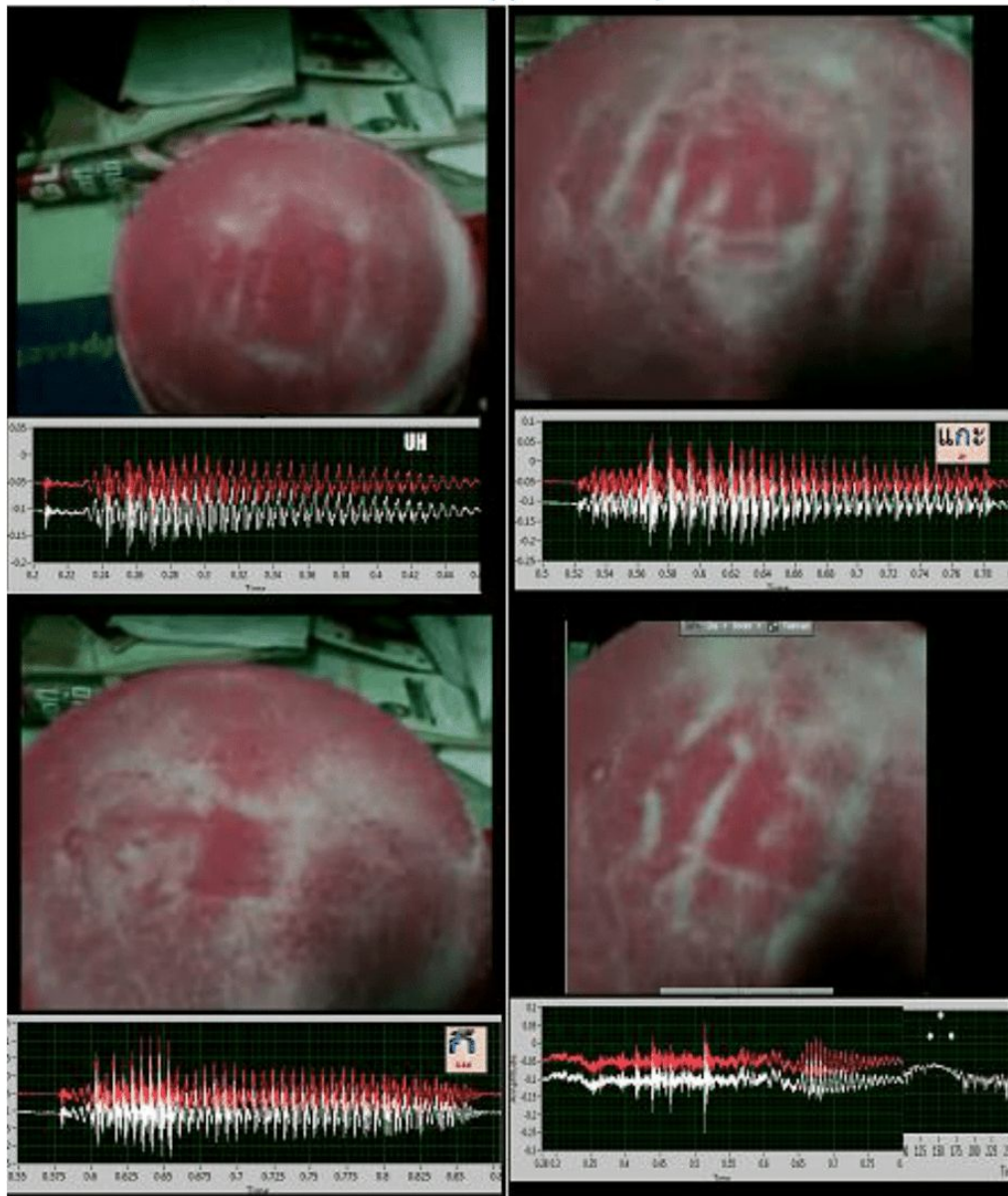


Observed Cymatic patterns - Cymatic patterns of select phonemes not found in the Brahmi Alphabet

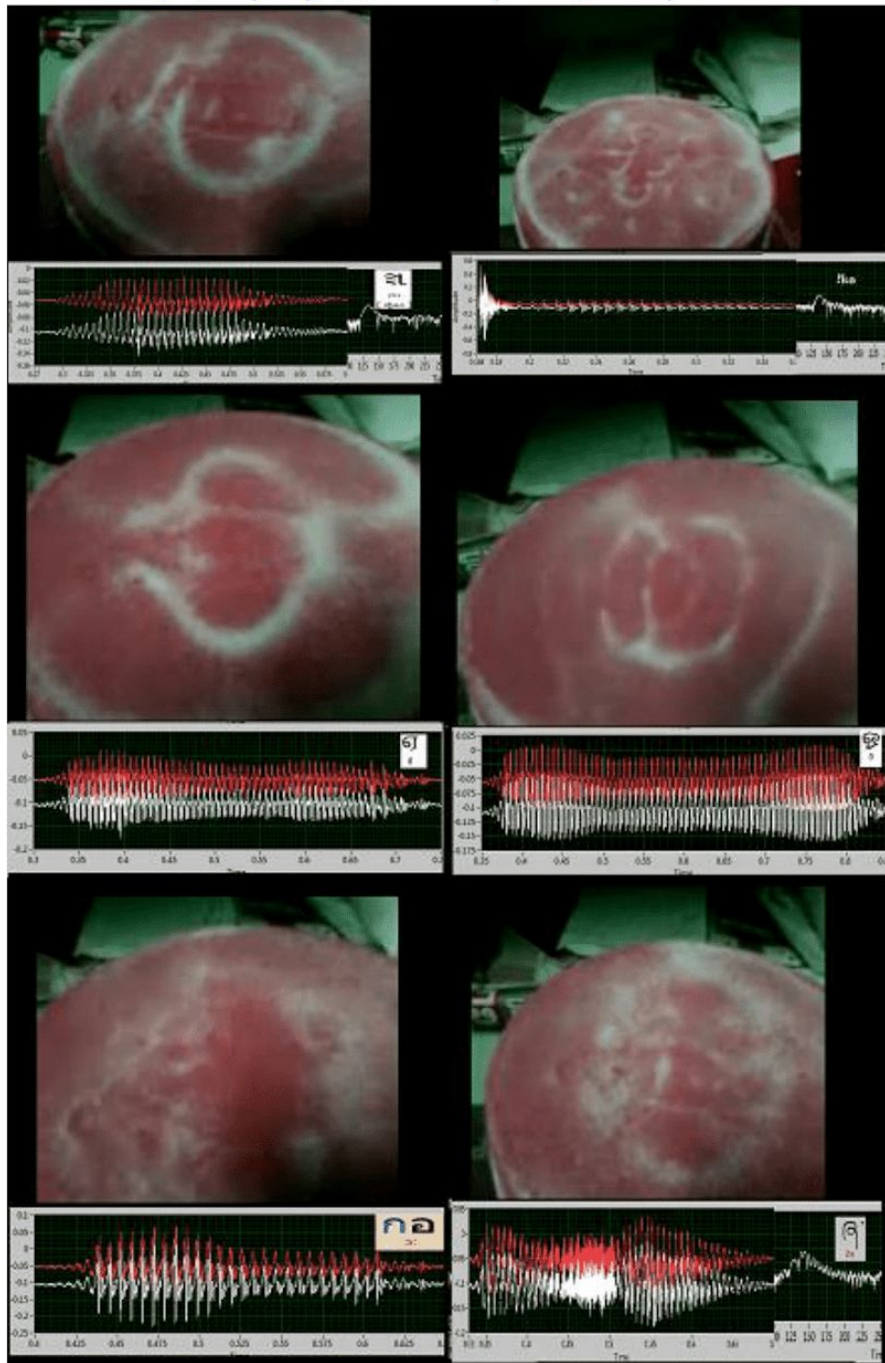
1. Vowels R, Rr, L, ll, Am and Ah



## 2. Vowels Uh, Ae, Ew and Gluttural letter (Aytam in Tamil)



3. Letters Jna, !Xa (click), E, O, Aw and Za (French Je sound)





#### 4. Letters Z, F, Guttural Qaf, La, Rra, Zha

