Origins of the Indian Scale – Saptak

Saptak means "gamut" or "the series of seven notes". It denotes the set of swaras, Sa, Re, Ga, Ma, Pa, Dha, Ni which comprise a musical scale in Indian classical music. In Sanskrit, saptak literally means "containing seven" and is derived from the Sanskrit word sapta which means "seven".

Indian classical music has seven basic notes, Sa Re Ga Ma Pa Dha Ni, with five interspersed half-notes, resulting in a 12-note scale.

The Natya Shastra is an ancient Indian treatise on the performing arts, encompassing theatre, dance and music. It was written during the period between 200 BC and 200 AD and is traditionally attributed to the Sage Bharata.

While the term raga is articulated in the Natya Shastra (where its meaning is more literal, colour, as in mood), it finds a clearer expression in what is called 'jati' in the Dattilam.

The Dattilam is an ancient Indian musical text ascribed to the sage Dattila. It is believed to have been composed between the 1st and 4th century AD. The Dattilam is focused on gandharva music, and discusses scales (swara), defining a tonal framework called 'grama' in terms of 22 micro-tonal intervals (sruti) comprising one octave.

The seven notes of the scale (swaras), in Indian music are named shadja, rishabh, gandhar, madhyam, pancham, dhaivat and nishad, and are shortened to Sa, Ri (Carnatic) or Re (Hindustani), Ga, Ma, Pa, Dha, and Ni. Collectively these notes are known as the sargam (the word is an acronym of the consonants of the first five swaras).

Sargam is the Indian equivalent to solfège. Sargam is generally practised against a drone. The tone Sa is not associated with any particular pitch. As in Western moveable-Do solfège, Sa refers to the tonic of a piece or scale rather than to any particular pitch.

Shadja is the defining note of the scale. The word Shadja means 'giving birth to six', and refers to the fact that once this note is fixed, the placement of other notes in the scale is determined. Shadja' is considered to be the one from which the other six notes emerge.

Brihaddeshi is a Classical Sanskrit text on Indian classical music (6th - 8th century AD) attributed to Matanga Muni. It is the first text that speaks of raga. It introduced sargam notation.

Of the seven notes, "Sa" is the most firm note. Without sa, the entire saptak falls apart. The name for Sa is "sadja." It comes from the Sanskrit "sad + aja." In Sanskrit, "Sad" means "six", while "aja" means creator of. the other six notes.

These notes cannot have true definition unless Sa is defined, because the position of Sa will define where Re, Ga, Ma, Pa, Dha, and Ni fall.

The next firm note is "Pa." The union of "Sa" and "Pa" represents the perfect union, the perfect harmony. Sa and Pa are immovable, this forms a perfect fifth. Every other note can move.

Sa, Re/Ri, Ga, Ma, Pa, Dha/Da, and Ni is traditionally held to have originated from the sound of a different animals. Some sounds have additional meanings of their own. Each swara is associated with one of the seven chakras of the body.

Sadja	Sa	Cry of the peacock
Rishabha	Re	Lowing of the bull
Gaandhaara	Ga	Bleating of a goat
Madhyama	Ma	Call of the heron
Panchama	Pa	Call of the cuckoo
Dhaivata	Dha	Neighing of the horse
Nishaada	Ni	Trumpeting of the elephant

Meanings

Sa is derived from Shadja which means 'giving birth to six'. Re is derived from Rishabha which means 'Great One' Ga is derived from Gandhar which means 'sweet fragrance' Ma derived from Madhyama which means 'being in the middle' Pa is derived from Panchama which means 'the fifth note' Dha is derived from Dhaivata which means 'sixth note/divine' Ni is derived from Nishad which means an 'seventh note' also 'setting at rest', 'esoteric doctrine', 'secret doctrine', 'mysterious or mystical'

Singing the Swaras has a positive effect on the body, mind and the consciousness. The swaras also effect our feelings and emotions.

The swaras are also associated with planets and colours -

'sa' (shadjam) - Mercury - green
'ri' (rishabham) - Mars - red
'ga' (gandharam) - Sun - golden colour
'ma' (madhyam) - Moon - white or yellowish tint
'pa' (panchamam) - Saturn - blue or black
dha' (dhaivatam) - Jupiter - yellow
'ni' (nishadham) - Venus - multi colour

Qualities of the Svara

Shadja - Means 'father of the six svaras' and the one which gives birth to the other six svaras. Rishab - Being the nearest to the Grâmni svara (Sa) it is strong as Vrishab (Bull).

Gandhâr - Is associated with karunâ (sadness, longing).

Madyam – This svara is in the middle of the saptak.

Pancham – Is made up of the words panch (five) and mi (to measure). Is that note that is fifth from the Shadaj and is the tool to measure the svara intervals.

Dhaivat – Is the overtone of the madyam svara and is heard by the Dhivân (sensitive minds). Nishâd – Is so called because the notes of the scale come to a close with it. The word is derived from Sanskrit root "ni+shâd" to come to a rest. Nishâd is full of karunâ (longing).

From the web sites -

http://www.eswaronline.com/carnatic/index.html

http://www.dharambir.com/indian-classical-music-research/the-rudiments/svara-and-tunings/

http://jayasreesaranathan.blogspot.com/2008/08/connection-between-sapta-swaras-and.html