# Impact of Solar System in the Generation of Energy for the Formation of Human Faces with Respect to Pattern Recognition Techniques 

D.Chitra<br>Assistant Professor<br>Department of Computer Technology \& Applications<br>Coimbatore Institute of Technology<br>Coimbatore,India

P.Ponmuthuramalingam, Ph.D. Professor<br>Department of Computer Science Government Arts College<br>Coimbatore,India


#### Abstract

Planetary is the study of planets in the solar system which is binded by a magnetic path of the solar energy provided by the sun. Magnetic path is called the orbit. The path that each planet takes around the sun is an oval shape called an ellipse. Based on the distance from the sun, speed of the planets is calculated. The inclination of the north pole of the planet balances the planet in the vacuum using the law, centroid gravity. The planets consumes energy from the sun during the process of crossing across the sun. In Indian Astrology earth is consider as the midpoint and 360 degree angle is formed by the 30 degree of each 12 rasi boxes. The Raassi boxes have the direct impact on the living being in their position of the face parameters.


## KEYWORDS

Planetarium, Distance, Speed, Solar System, Human Physiology.

## 1. INTRODUCTION

The formation of the Solar System is estimated to have begun 4.568 billion years ago with the gravitational collapse of a small part of a giant molecular cloud[1]. Sun ,Moon, Planets , Asteroids and other small Solar system bodies are formed by the result of gravitational collapse. Sun is the source of energy in the Solar system which is formed as a red giant body. The position of the planets are often shifted as they do not have regular path. Thus it results in giant collisions. Moon was formed according to the planets and their resources. At first planets or original bodies were not present. The Sun possessed the kinetic energy. The energy that is possessed by the sun is converted into heat energy [2].The centre of the sun became hotter and it created a proplanetary disc. This proplanetary disc was caused by the competing forces of gravity, gas pressure, magnetic fields, rotation[9]. The planets are formed from compounds with high melting point such as metals and rocky silicates. The four terrestrial planets such as Mercury, Venus, Earth, Mars are rocky bodies which are arranged in the inner solar system[2]. The remaining five planets such as Jupiter, Uranus, Saturn, Neptune and Pluto in the solar system are formed by the metals.[5]

## 2. PLANETARIUM

In the vacuum the planets are arranged in a regular position in such case that they do not colloid with each other. This is due to the magnetic flex created by the sun[3].

## Distance And Speed

Sun creates a proplanetary disc of magnetic field. The nine planets are arranged consequently. Of that the first planet is
mercury which has a very small orbit and the last planet is the Pluto which has a large orbit. So, between these two planets only all other planets are arranged. Each planet has its own mass which creates its velocity in the magnetic field. When the distance increases its velocity decreases. The planets require time to revolve around the sun in a particular speed of motion. This speed can be calculated using the formula
Speed = Distance Travelled / Time
Where:
Distance travelled around an orbit $=2 \pi \mathrm{r}$
$r=$ distance from the Sun
Time $=$ Time for the planet to orbit the sun
The distance of the planet from the sun is taken as the radius of a circle, and then calculates the circle's circumference.

Circumference equals radius times two times pi. (Where $\mathrm{pi}=3.14$ )

Now the distance of one revolution is known. Divide that distance by the time for the planet to orbit the sun, and we will have the speed.
For eg. if Earth is 149700000 km from the sun, and takes 365.2 days to orbit: $149700000 \mathrm{~km} * 2 * \mathrm{pi}=940116000 \mathrm{~km}$ in one orbit $940116000 \quad / 365.2=2574249.72618 \mathrm{~km}$ per day which converts to about 29.79 meters per second .
In such a way, the speed of each planet have been calculated and shown in Table 1. Similarly Speed is calculated in the same way for all other planets .

TABLE 1: DISTANCE AND SPEED OF EACH PLANET

| Planets | Distance <br> (Million Km) | Time for 1 <br> orbit <br> (days) | Speed <br> $(\mathrm{Km} / \mathrm{Sec})$ |
| :--- | :--- | :--- | :--- |
| Mercury | 58 | 88.0 | 47.8725 |
| Venus | 108 | 224.7 | 35.0214 |
| Earth | 149.7 | 365.2 | 29.7859 |
| Mars | 228 | 687.0 | 24.6309 |
| Jupiter | 778 | 4332 | 13.0697 |
| Saturn | 1427 | 10760 | 9.6724 |
| Uranus | 2869 | 30700 | 6.8352 |
| Neptune | 4496 | 60200 | 5.4778 |
| Pluto | 5914 | 90600 | 1.6700 |

## 3. MECAHNICS OF SOLAR SYSTEM

According to the Newton's "Law Of Motion", ie Motion of an object depends on a force. The planets revolve around the sun in a regular path of motion by the magnetic force provided by the sun. This magnetic force differs by mass of the planet and distance of the planet from the sun. The planets are arranged at different distances to avoid collusion. So, this difference in distance produces differential speed of each planet. The other main factor for the planet to rotate in a regular path lies in the centre of gravity, produced by the positioning of the planets. As the planets are titled in a particular angle, they are balanced in their way of motion. Speed of the planets and their distance from the sun provides their own tilting angle. Each planet has their own characteristics and power. According to IIIrd Law OF Motion, The Force (F1) of one planet is inversely proportional to the Force(F2) of the other planet. F2=-F1. The distance between the planets are arranged in such a way that the magnetic flex of one planet should not intersect with the nearest planet. The characteristics of the planets get changed only if there is a change in the arrangement of the solar system[1]. In this paper we discuss on Indian astrology. Generally we consider sun as the centre of the solar system. In Indian Astrology Earth is considered as the centre of the solar system, such that the distance that the distance required for the earth to move around the sun is 364.23 days approximatelyAccording to Indian Astrology the nine power planets are considered in the order as Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn, Neptune and Pluto. In Indian Astrology[8], the earth is considered to be static and other planets including sun, relatively move around the earth. This should not create any confusion that Indians were not conscious regarding the movement of earth around the sun, as the earth is named as Jagat, which means an object which is in constant (revolving) motion. Since, the planetary effects are studied on earth, the latter is considered to be apparently static. The Sun requires 54 Hours to cross each 30 degree. For the sun to cross all the 12 raassi, it requires 648 Hours. By this only we specify that the zodiac belt around the earth is 360 degree which is shown in Table 2.

TABLE 2: HOURS AND DEGREES OF EACH PLANET

| Raassi | Hours | Degrees |
| :--- | ---: | ---: |
| Mesham(Aries) to Rishabam(Taurus) | 54 | 30 |
| Rishabam(Taurus)to Midhuna(Gemini) | 108 | 60 |
| Midhuna(Gemini)to Karkata (Cancer) | 162 | 90 |
| Karkata (Cancer) to Simha (Leo) | 216 | 120 |
| Simha (Leo) to Kanya (Virgo) | 270 | 150 |
| Kanya (Virgo) to Tula(Libra) | 324 | 180 |
| Tula(Libra) to Vrisschika(Scorpio) | 378 | 210 |
| Vrisschika(Scorpio)toDhanu(Sagittarius) | 432 | 240 |
| Dhanu(Sagittarius)to Makara(Capricon) | 486 | 270 |
| Makara(Capricon)to Kumbha(Aquarius) | 540 | 300 |
| Kumbha(Aquarius) to Meena (Pisces) | 594 | 330 |
| Meena (Pisces) to Mesham (Aries) | 648 | 360 |

The Zodiac belt around the earth is 360 degrees which is divided into 12 parts / houses ( 30 degrees each). Thus they are named as 1.Mesha (Aries), 2.Vrusha (Taurus), 3.Mithuna
(Gemini), 4.Karkata (Cancer), 5.Simha (Leo), 6.Kanya (Virgo), 7. Tula (Libra), 8. Vrisschika (Scorpio), 9. Dhanu (Sagittarius), 10. Makara (Capricorn), 11. Kumbha (Aquarius) and12.Meena(Pisces).[8]. Further, 27 Nakshatrassuch as 1.Ashwinee, 2.Bharini(Dwijaa),3.Kruttikaa,4.Rohinee,
5.Mrugassiraa,6.Aardraa,7.Punarvasu,8.Pushyaa,9.Assleshaa, 10.Maghaa, 11.Puurvaphaalgunee,12.Uttaraaphaalgunee, 13.Hastaa,14.Chitraa,15.Swaatee,16.Vissaakhaa,17,Anuraadh aa,18.Jyeshthaa,19.Moolaa,20.Poorvaashaadhaa,21.,Uttaraash aadhaa,22.Ssravanaa,23.Dhanishthaa,24.Satabhishaa,25.Poorv abhaadrapada,26.Uttarabhaadrapada,27.Revati. Another set of constellations are located in the same range of 360 degrees pertaining to 12 houses. Accordingly, 360 degrees divided by 27 , comes to 13 degrees 20 minutes space provided for each Nakshatra. Further, the range of each Nakshtra is divided into four steps (Paada) each of which counts to 3 degrees 20 minutes in expansion. Since each zodiac house has a space of 30 degrees, it accommodates 9 steps irrespective of any Nakshatra[7]. Thus in every house 3 Nakshatras are involved out of which 1 or 2 Nakshatras may be completely inside and the rest may be transitional; may extend to the next house. In this fashion there is unequal extension of Nakshatras range in different houses (Fig. 1).

### 3.1 Days of a week

The days of a week are formed based on the name of the planets in the solar system.ie When the Sun's (Surian) energy directly falls on the earth then that day is named as Sunday. Similarly when the Moon's (Chandran) energy directly falls on the earth then that day is named as Monday. When the Mars's(Ceway in tamil) energy directly falls on the earth then that day is named as Tuesday. When the Mercury's (Bhudan in tamil) energy directly falls on the earth then that day is named as Wednesday. When the Jupiter's(Guru) energy directly falls on the earth then that day is named as Thursday. When the Venus 's(Sukran) energy directly falls on the earth then that day is named as Friday. When the Saturn's(Sani) energy directly falls on the earth then that day is named as Saturday.


Fig.1. Location of 9 Planets ,twelve Raassi and twenty seven Nakshtras in the Zodiac belt.[8]

### 3.2 Description of the Planets

## SUN

The sun is by far the largest object in our solar system, containing 99.8 percent of the solar system's mass. It gives out most of the heat and light that makes life possible on Earth and possibly elsewhere. Planets orbit the sun in oval-shaped paths called ellipses, and the sun is slightly off to the side of the center of each ellipse. The Sun is the center of solar system. The average rotation of Sun in zodiac is 10 per day and therefore it takes exactly one year to go around the zodiac. It is a symbol of spirit. It is considered as king of all planets. Sun represents lord Brahma with his four faces causing the four seasons and four elements (Fire, Air, Earth, Water).

## MOON

Moon is a satellite of earth but in astrology it is considered as a planet because of its size and proximity to earth. The moon can be observed to cross any particular celestial meridian, every 27.32166 days, which is the sidereal period of Moon. The period between the one full moon and next full moon is 29.5306 days which is also called lunar month[8]. It is negative, giving changeable and elastic nature and rules over personality and form. It is also called as the queen of solar system. The moon governs over the life of the beings on earth. She is the Luna (Diana), the Queen of the night. She is the Goddess and also a huntress.

## MARS

Mars is a red planet. It completes its orbit in 686.9804 mean earth solar days and spins on axis in 24 hours 39 minutes and 22.6689 seconds[6]. Mars completes one orbit in roughly the time earth completes two orbits. When it is closest to earth, it is retrograde and is visible during mid night. This appears at an interval of 779.94 earth's days. Mars has two satellites namely Phobos and Diamos. It is said to be the deity of Buddhists and the god of Romans. He is also god of war. Mars is a dry, fiery malefic and masculine planet. It is hot and barren and rules over fuming acids. It governs mainly over brothers, lands and enterprise. Mars rules over contentions, wars, strife, epidemics, mental aberrations etc. Mars is significant for energy both constructive and destructive. .

## MERCURY

Due to its closeness with Sun, it is difficult to be observed with naked eye.. Its sidereal time is 87.969 earth days. It has no satellite. It does not go beyond 280 from Sun..It represents protective agency. It is a prince in planetary cabinet. So like a child it does not act independently and borrows the characteristics of the planet with which it is associated.
Mercury is the chief governor for education and uncle. It is a planet of oration and speech.

## JUPITER

The Jupiter is most massive of all the planets. It rotates on its own axis in 9 hours 55 minutes. Jupiter has 12 satellites. The four main satellites are known as Io, Europa, Ganymede and Callisto. It is next to Sun in size and orb and in brightness next to the Venus. It is a planet of expansion. Jupiter is considered to be a teacher who removes the ignorance and darkness and offers wisdom by throwing light.. It rules over man's worldly possessions and fortunes and hence is called the Giver or Ruler of money

## VENUS

Venus revolves around the Sun in nearly a circular orbit. Its sidereal period is 224.7 earth days and its synodic period is 583.921 earth days. Venus sets after Sunset and rises before

Sun rises. Venus is the brightest planet, which is due to the reflecting power of its atmosphere. For the observers on earth, Venus can never be more than 480 away from Sun. When Venus is 480 away from Sun and is the evening star, it can be seen in the sky for about 3 hours 12 minutes after sunset. While Jupiter is Deva Guru, Venus is considered as Asura Guru.[6]. Venus is considered a Goddess of love, marriage, beauty and comforts. It is called Mahalakshmi, wife of lord Vishnu. Venus is one - eyed. Venus rules Yajur Veda.

## SATURN

Saturn completes a revolution around the Sun in 29.46 year. Saturn has 10 satellites. The Titan and Lapetus are massive satellites of Saturn. Titan is about the same size as the planet Mercury. Three concentric rings surround Saturn. These rings are separate and there is only black empty space in between any two rings, Saturn appears like a blue ball with 3 yellow rings. It is called Yama because it is the chief governor of longevity. Saturn is the father of Gulika and Mandi. It is also called Neelan and lord Shiva. Saturn is son of Sun[8].

## RAHU AND KETU

There are different names given to Rahu and Ketu like Nodes, Shadows, Head and Tail, Caput, Cauda etc. The Moon is a satellite of the earth revolving around it in an orbit inclined to that of the earth round the Sun at an angle of approximately 50. The Moon completes its orbit round the earth in about a month crossing the orbit of earth twice in the same period, once when it goes from south to north and at another time while traveling from north to south. The ascending point is called 'Rahu' and descending point 'Ketu'. These have retrograde motion in the zodiac at the rate of 19020' per year. There is a fundamental difference between Rahu and Ketu and the other planets[8]. The other planets are bodies of physical mass having form, shape, color, gravity, atmosphere, motion etc. On the other hand Rahu and Ketu are two imaginary points in the heavens without mass, shape or form. Rahu is known as Dragon's head and Ketu as Dragon's tail. Head is forward looking while the tail represents the past.They are classified as Karmic planets.

### 3.3 Rates Of Planetary Motion

Mercury takes 59 days to make a rotation but only 88 days to circle the Sun. That means that there are fewer than 2 days in a year! Many astronomers believe that Mercury might be the core of what was once a much larger planet -- it appears to be a huge ball of iron covered by a thin layer of rock. Venus is the brightest planet in our sky and can sometimes be seen with the naked eye. It is the solar system's brightest planet .Yellow clouds of sulfuric acid reflect the sun's light brightly. Earth has more exposed water than land. Three quarters of the Earth is covered by water! Mars is the home of "Olympus Mons", the largest volcano found in the solar system. It stands about 27 kilometers high with a crater 81 kilometers wide. Between Mars and Jupiter, is a Dwarf Planet known as Ceres. It was discovered in 1801.It is the smallest dwarf planet discovered in our universe and is the only one found in the asteroid belt. Jupiter is the largest planet in the solar system, but it spins very quickly on its axis. A day on Jupiter lasts only 9 hours and 55 minutes. Jupiter is so big that you could fit all the other planets in the solar system inside it. The red spot of Jupiter is the biggest, most violent storm in the known universe that spot is at least three times the size of earth! Saturn is the second biggest planet, but it's also the lightest planet. If there was a bathtub big enough to hold Saturn, it would float in the water! The ring that surrounds Saturn could be the remnants of a moon that was shattered by Saturn's gravity. Neptune was discovered in 1846 (over 150
years ago). Since that time it has still yet to make a complete orbit around the sun, because one Neptune year lasts 165 Earth years! Like Jupiter, Neptune has a dark spot caused by a storm. Neptune's spot is smaller than Jupiter's .which is only about the size of the planet earth. Pluto's orbit sometimes brings it closer to the Sun than Neptune. It jumped ahead of Neptune on September 5, 1989 and remained there until February, 1999 when it went back to being the farthest.
TABLE 3. PLANETARY MOTION [4]

| Planets | Through the Zodiac | Through the Sign |
| :---: | :---: | :---: |
| Sun | 1 Year(365.26 days) | 1 Month |
| Moon | 1 Month | $\begin{aligned} & 2 \hat{A} \hat{A} \quad 1 / 4 \text { to } 2 \hat{A} \hat{A} 1 / 2 \\ & \text { days } \end{aligned}$ |
| Mercury | About a Year (ie within 28 Ạ of the sun) | About a Month |
| Venus | About a Year (ie within 48 of Ậ the sun) | About a month |
| Mars | 1.88 Years | 2 Months |
| Jupiter | 11.86 Years | 1 Year |
| Saturn | 29.46 Years | 2 Ậ $1 / 2$ Years |
| Neptune | 164.79 Years | 14 Years |
| Pluto | 249 Years | 12 to 31 Years |

From the Planetary Motion Table it is clear that there is a very high difference in the speed at which the planets and the luminaries move. The Moon for example takes less than a calendar month to traverse the whole zodiac. At the other extreme Neptune will take about fourteen years to transit one sign, thus only passing through half the zodiac if we live into our eighties. Pluto can take even longer, although currently it is actually rather closer to us than Neptune and thus moves slightly quicker. Pluto's transit of Sagittarius will be completed in the region of thirteen years. When assessing the importance of planetary transits it is recommended that the greatest emphasis be placed on the motions of the slower moving outer planets, like Jupiter through Pluto inclusive. This is due to the more pronounced effects which such ponderous motions engender and the lower frequency with which they occur.[4]


Fig 2: Block Diagram of Solar System to Astrology

## 4.Human Physiology

The existing living beings in the planets deserve to change heavily when there is a slight change in the solar system. The meaning of life is a philosophical question concerning the significance of life or existence in general and also the health
conditions of all living creatures. It can also be expressed in different forms, such as "Why are we here?", "What is life all about?", and "What is the purpose of existence?". There have been a large number of proposed answers to these questions from many different cultural and ideological backgrounds. The definition of life lies between birth and death. Each planet on the Solar System have different effects over the earth. The 12 Zodiac encounters the effect of earth. Their probability of power is explained and tabulated with 3 metrics as Positive(High Power), negative(Least Power) and medium Power.

In Aries, Sun \& mars generates positive energy.Moon, Mercury, Jupiter \& Venus generates medium energy . Saturn ,Neptune and Pluto generates negative energy. In Taurus, Moon \& Venus generates positive energy .Mars ,Mercury and Saturn generates medium energy. Sun, Jupiter, Neptune and Pluto generates negative energy. In Gemini, Mercury alone generates positive energy. Sun, Moon, Venus, Saturn, Neptune \& Pluto generates medium energy . Mars and Jupiter generates negative energy[9]. In Cancer, Moon \& Jupiter generates positive energy . Sun generates medium energy. Mars, Mercury, Venus, Saturn , Neptune and Pluto generates negative energy. In Leo, Sun generates positive energy . Moon, Mars, Mercury, \& Jupiter generates medium energy . Venus, Saturn , Neptune and Pluto generates negative energy. In Virgo, Mercury generates positive energy . Sun , Moon , Jupiter, Saturn, Neptune \& Pluto generates medium energy. Saturn, Mars and Venus generates negative energy. In Libra, Venus \& Saturn generates positive energy .Moon, Mars, Mercury, Neptune \& Pluto generates medium energy. Sun \& Jupiter generates negative energy. In Scorpio, Mars, Neptune \& Pluto generates positive energy .Sun, Mercury, Jupiter \& Venus generates medium energy . Moon \& Saturn generates negative energy. In Sagittarius, Jupiter generates positive energy. All other planets generates medium energy. None of the planets here generates negative energy. In Capricorn, Mars \& Saturn generates positive energy . Moon .Mercury, Venus, Neptune \& Pluto generates

TABLE 3: GENERATION OF ENERGY BASED ON THE PLANETS AND RAASSI

| Pushuri | Anis | Imu | Ginil |  |  |  |  |  |  | githin | Cyin |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In | . | - | . | . | 1. | - II | II |  | 11 | ! | . | . | 11 |
| 1 lm | 11 | - | . | + | - IV | \|| 11 | \|| 1. | 11 |  | 1 | 11 | 11 | 11 |
| V14 | . | II |  |  |  | II |  | 11. |  | 1 | - | 11 | 1 |
| lmm | . | 11 | - |  |  | 11. | + V | 11 | II | 1 | IV | 11 |  |
| min | I. |  |  |  |  |  | II |  | . | - |  | 11 |  |
| Vem | 1 | - | 11 |  |  |  |  | - .1. | 1 | V | II | 11 |  |
| 部 |  | II | 1 |  |  |  | 11. | - |  | V | - | $\cdot$ | 11 |
| H4t |  |  | 1 |  |  |  |  | 11 | - | 1 | 1 |  | 11 |
| 8 |  |  | I |  |  |  | II \|V | 11 |  | 1 | 1 |  | 11 |

+ : Positive energy - :Negative energy M: Medium energy
medium energy. Sun and Jupiter generates negative energy. In Aquarius, Saturn generates positive energy. Moon, Mars, Mercury, Jupiter \& Venus generates medium energy. Sun, Neptune and Pluto generates negative energy. In Pisces, Jupiter \& Venus generates positive energy .Sun, Moon, Mars, Saturn, Neptune \& Pluto generates medium energy. Mercury alone generates the negative energy[9].


## 5. CONCLUSION

These planets also bring about changes in the health condition of human beings. Not only this, it have proved in astrology that they are responsible for forming human beings. They help in forming different characteristic features in humans. Based on each characteristic features of the planet face parameters are formed. In future the problem may be extended in analyzing how faces are formed in the womb and how they are related using Pattern Recognition Techniques.

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