Impact Of Planets For The Formation Of Human Faces in The Aspects of Pattern Recognition

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ABSTRACT
Universe is a vast empty space around us that consists of stars, Solar system and galaxies. The sun in the middle binds our solar system and all other planets such as Mercury, Venus, Earth, Mars, Jupiter Saturn, Uranus, Neptune, Pluto revolve around the sun in a magnetic path called an orbit. Each planet in the solar system rotates itself in its own path. These planets revolves and rotates in different speed which cause adverse changes in climatic conditions. According to the Newtons " 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, these difference in distance produces differential speed of each planet. ie, Speed α Distance 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. 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 gets changed only if there is a change in the arrangement of the solar system[1]. The existing living beings in the planets deserve to change heavily when there is a slight change in the solar system. The definition of life lies between birth and death. Hence these conditions makes living beings to possess different characters. Based on each characteristics, the position of the face parameters are formed.

KEYWORDS
Astrology, Planets, Pattern Recognition, Segmentation, Classification.

1. INTRODUCTION
In Indian Astrology the earth is considered to be static and other planets including the sun move around the earth .As the earth is named as Jagat which means an object in constant motion. Since the planetary effects are studied on earth, the latter is considered to be static. The Zodiac belt around the earth is 360 degrees which is divided into 12 houses/parts (30degrees each). Our ancestors have already found the division of 12 houses and named them as 1.Mesha(Aries) 2.Vrusha (Taurus), 3.Midhuna (Gemini), 4.Karkata (Cancer), 5.Simha (Leo), 6.Kanya (Virgo), 7. Tula (Libra), 8. Vrisschika (Scorpio), 9.Dhanu (Sagittarius), 10. Makaram (Capricorn), 11. Kumbha (Aquarius) and 12.Meena(Pisces).[10]. which is at present found in the Panjagam . In the zodiac belt each planet produces energy when they cross the other planets. The type of energy produced by the planets during their crossing is also mentioned in the Panjagam. Indian astrologers have considered 9 planets which have astrological influence on earth, such as Sun(Surian), Moon(Chandran), Mars(Cheway), Mercury(Bhudhan), Venus(Sukran), Jupiter(Guru), Saturn(Sani), Raghu and kethu. Depending on the changes in the solar system caused by the planets we come across Full Moon Day, New Moon Day, Solar Eclipse and Lunar Eclipse.

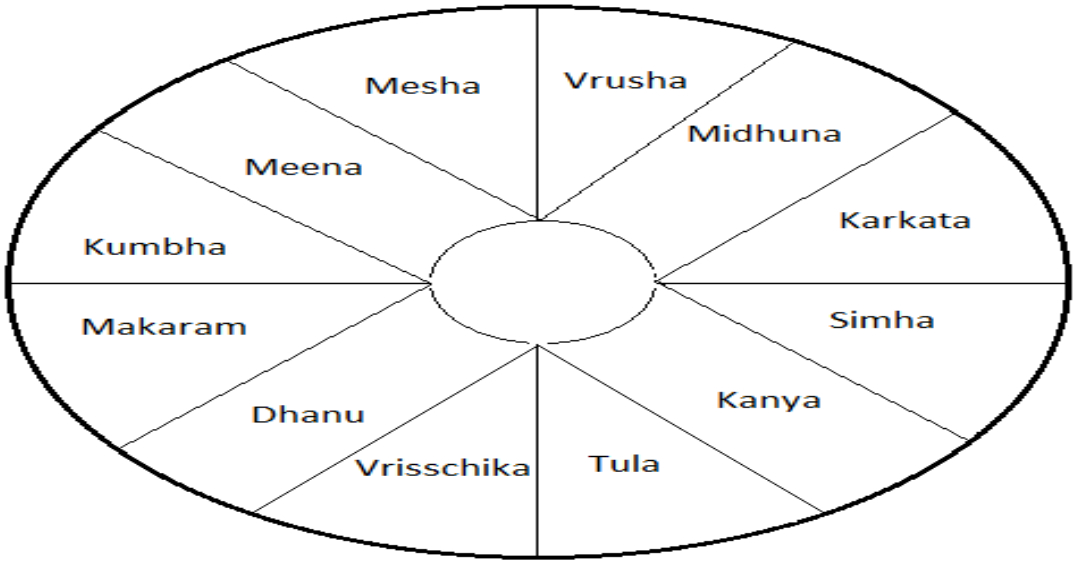


Figure 1: Division Of Zodiac belt into 12 houses(30 degrees each)[10]

Full Moon day is the day that occurs when the moon is on the opposite side of the earth from the sun. ie, a full moon occurs when the geocentric apparent longitudes of the sun and moon differ by 180 degrees , the moon is then in opposition with the sun[12]. **New moon day** is the day that occurs when the moon lies closet to the sun in the sky from the earth.ie, it is the time when the moon and the sun have the same elliptical longitude[9]. A **Solar eclipse** occurs when the moon passes between the sun and earth, and the moon fully or partially blocks the sun. This happens only at new moon, when the sun and the moon are in conjunction as seen from the earth. A **Lunar eclipse** occurs only at full moon, where the moon's orbit allows it to pass through the earth shadow. It occurs only when the full moon occurs near the two nodes of the orbit, either the ascending node or the descending node. This cause lunar eclipses to occur only about every 6 months.

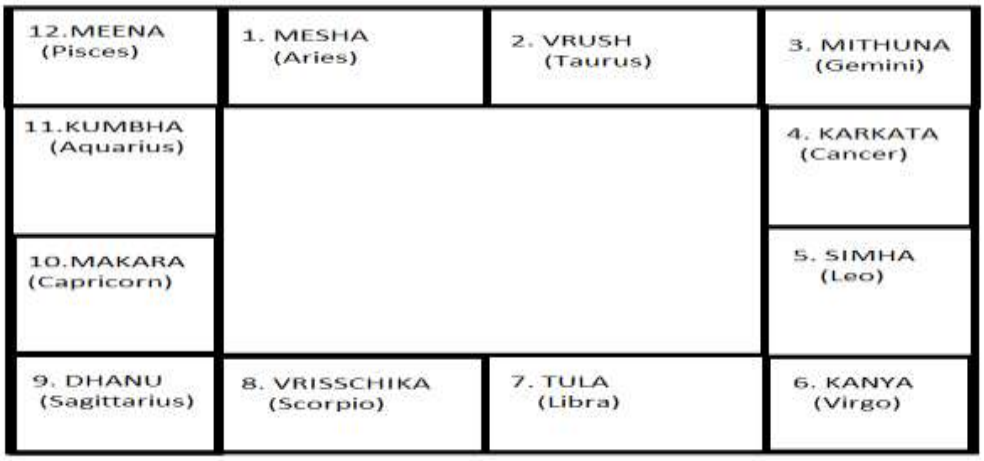
2. IMPACT OF PLANETS

TABLE 1: DISTANCE AND SPEED OF EACH PLANET

Planets	Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto
Distance (Million Km)	58	108	149.7	228	778	1427	2869	4496	5914
Speed (Km/Sec)	47.87	35.02	29.78	24.63	13.06	9.67	6.83	5.47	1.67

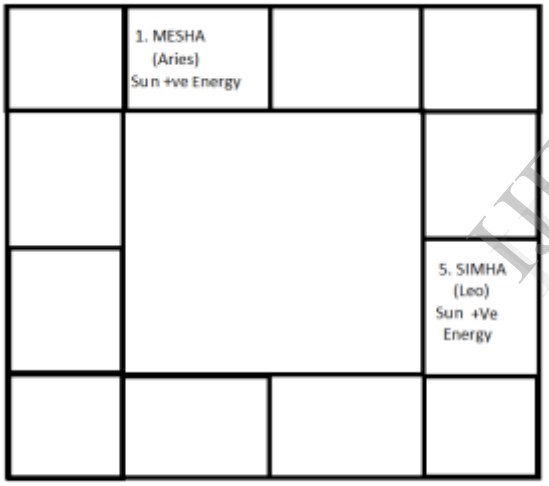
The following diagram depicts the arrangement of 12 houses(30 degrees each) in the Panjagam. Now lets see the impact of the planets in the 12 houses of the Zodiac belt. In the first house ie Aries, Sun & mars generates positive energy. In Taurus, Moon & Venus generates positive energy . In Gemini, Mercury alone generates positive energy . In Cancer, Moon & Jupiter generates positive energy . In Leo, Sun generates positive energy . In Virgo, Mercury generates positive energy . In Libra, Venus & Saturn generates positive energy .In Scorpio, Mars, Neptune & Pluto generates positive energy . In Sagittarius, Jupiter generates positive energy. In Capricorn, Mars & Saturn generates positive energy . In Aquarius, Saturn generates positive energy. In Pisces, Jupiter & Venus generates positive energy . [13].

Table 1. Division Of 12houses(30 degrees each) in Panjagam



SUN

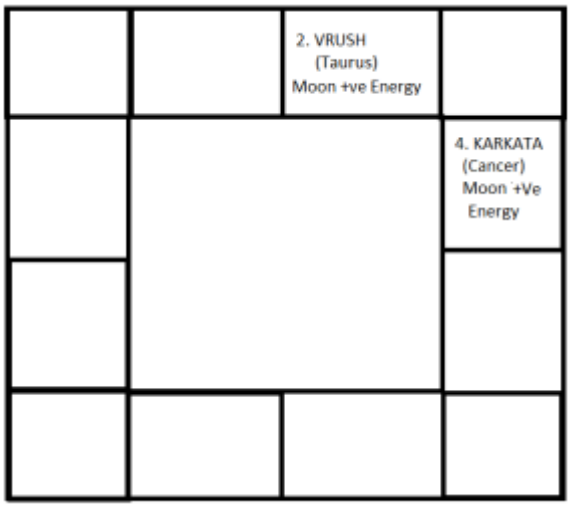
In this planet hydrogen and helium are produced. Magnesium oxide that is required for our body is produced by this planet and gets mixed in the air. In cereals , Wheat has the power of the sun. The sun takes one month time to cross each 30 degree. Briton is the only country in the world to get the major benefits of the sun.



When the sun crosses the Ist house ie, Mesha and 5th house ie, Simha in the zodiac belt it produces positive energy. This energy is used for the formation of bones in our human body.

MOON

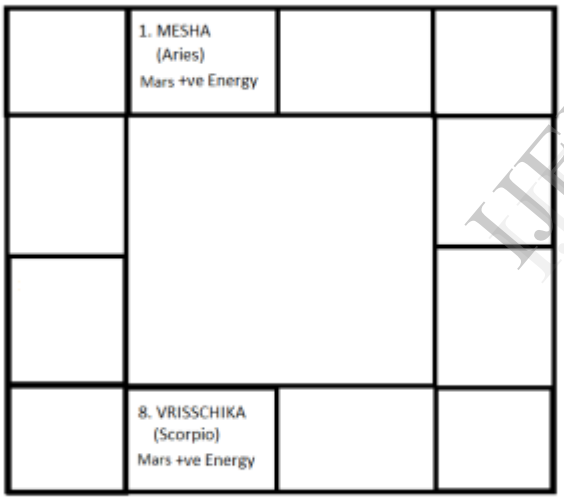
Power of the moon is found in white colored products. All white colored flowers will blossom only in the night. In cereals, grains has got the power of the moon. Australia is the only country in the world to get the major benefits of the moon.



When the moon crosses the 2nd house ie, Virsschika and 4th house ie, Karkata in the zodiac belt it produces positive energy. This energy gives the power to the blood in the human body.

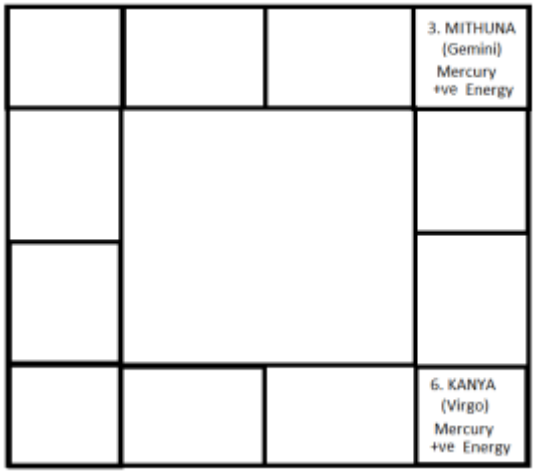
MARS

When the mars crosses the 1st house ie, Mesha and 8^{8h} house ie, Virsschika in the zodiac belt it produces positive energy. In Cereals Thoor Dal has the power of mars. In gems coral has got the power of mars. The power of mars is found more in copper metal.



MERCURY

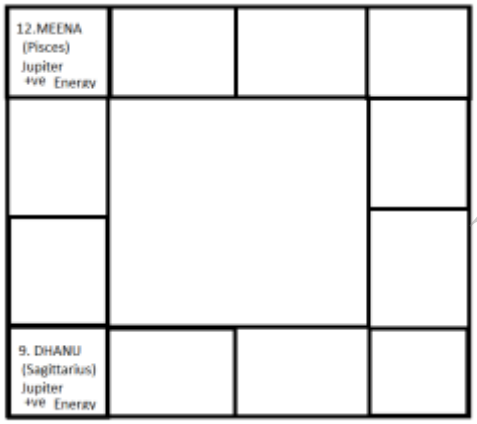
Power of the mercury is found in green gram cereal.. In this planet only, the chemicals like silica and soda are formed and gets mixed in the air.. When mercury crosses the 3rd house ie, Mithuna and 6th house ie, Kanya in the zodiac belt it produces positive energy.



This energy gives the strength to the skin in the human body. In metals, Bronze is produced due to this energies vibration.

JUPITER

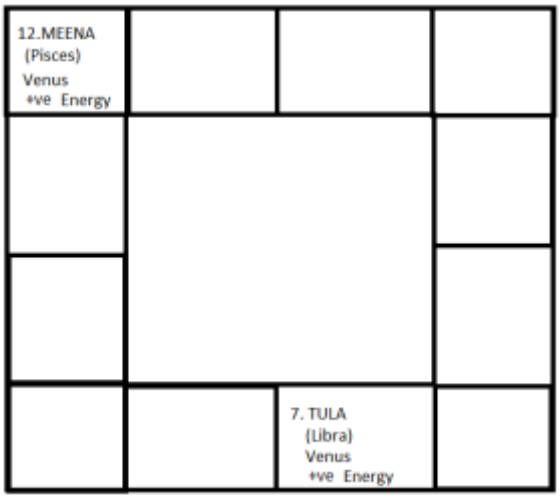
Jupiter in the only planet in the solar system that produces oxygen which then gets mixed in the air and used by all living beings for their survival. In metals, gold has got the power of Jupiter. Its power is found in Peeple tree. The main goddess of Jupiter is Dhakshinamoothy. This energy is used for the functioning of brain in our human body.



This energy is used for the formation of Sperm in our human body. When the Jupiter crosses the 9th house ie, Dhanus and 12th house ie, Meena in the zodiac belt it produces positive energy.

VENUS

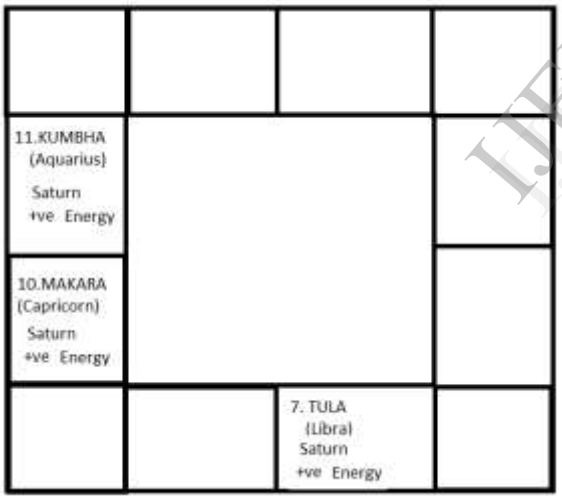
Silica oxide is produced by this planet and gets mixed with the air. Due to its vibration , the diamond metal is produced. The content of Hemoglobin in the blood in our human body is controlled by this planet.



Creation of Vindhu in a man's body is based on the energy produced by the venus. When the Venus crosses the 7th house ie, Thula and 12th house ie, Meena in the zodiac belt it produces positive energy.

SATURN

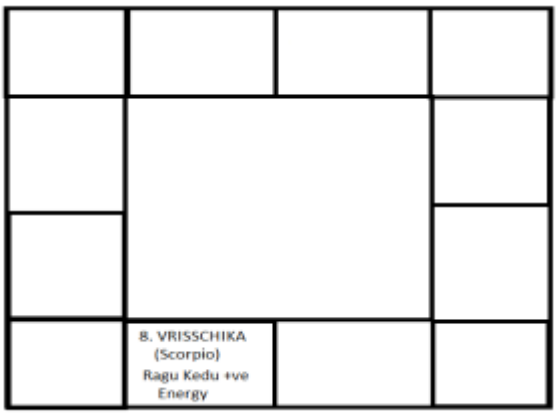
This planet produces Berlia and ferrous oxide. Hydrogen and helium produced by the sun gets combined with this ferrous oxide and gets mixed with the air due to this planet. In stones, Aquamarin is produced by this planet .Its energy is found in Vanni tree and Oonjai tree. Saturn's power in found more in crow.



This energy is used for the formation of nerves in our human body When the Saturn crosses the 7th house ie, Tula , 10th house ie, Makara and 11th house ie, Kumba in the zodiac belt it produces positive energy.

RAGHU-KETHU

In earth , black stone is produced because of this planet. Its energy if found more in reptiles like creatures(snake, lizard..). With the help of this planet , chemicals like Klusina and Crocoyo gets mixed with the air. This energy is the source for the creation of Vaidoorium and tiger stones.



Kethu acts as the shadow for all the molecules. It acts as the shadow for our Soul. These two planets produces positive energy only in the 8th house ie. Virsschika. Dharbapul has got more power of this.
The above mentioned energies are administered by the nine planets of the solar system. How these energies are converted to live energy in the air will be enhanced in the future work.

3. PATTERN RECOGNITION TECHNIQUES

The primary goal of pattern recognition is supervised or unsupervised classification. Pattern recognition is the study of how machines can observe the environment, learn to distinguish patterns of interest from their background, and make sound and reasonable decisions about the categories of the patterns. In spite of almost 50 years of research, design of a general purpose machine pattern recognizer remains an elusive goal. A pattern is defined "As opposite of a chaos; it is an entity, vaguely defined, that could be given a name"[14]. For example, a pattern could be a fingerprint image, a handwritten cursive word, a human face, or a speech signal.
Pattern recognition is generally categorized according to the type of learning procedure used to generate the output value. Supervised learning assumes that a set of *training data* has been provided, consisting of a set of instances that have been properly labeled by hand with the correct output. Unsupervised learning, assumes training data that has not been hand-labeled, and attempts to find inherent patterns in the data that can then be used to determine the correct output value for new data instances. A combination of the two that has recently been explored is semi-supervised learning, which uses a combination of labeled and unlabeled data

3.1 Approaches to Pattern recognition

* Template Matching
* Statistical Classification
* Structural or Syntactic matching
* Neural networks

Table 2. Pattern Recognition Models

Approach Name	Representation	Recognition Function	Error criterion
Template Matching	Curves, Pixels	Correlation, Distance measure	Classification error
Statistical Classification	Features	Discriminate Function	Classification error
Structural or Syntactic matching	Primitives	Roles, grammar	Acceptance error
Neural networks	Samples. Pixels, Features	Network Function	Mean Square error

3.1.1 Template Matching

In Template matching the objects are directly compared with a few stored examples or prototypes that are representative of the underlying classes. One of the simplest and earliest approaches to pattern recognition is based on template matching. Matching is a generic operation in pattern recognition which is used to determine the similarity between two entities (ie. points, curves or shapes) of the same type. In template matching, a template of the pattern to be recognized is available. The pattern to be recognized is matched against the stored template while taking into account all allowable positions and scale changes. The similarity measure, often a correlation, may be optimized based on the available training set. Often, the template itself is learned from the training set. Template matching is computationally demanding, but the availability of faster processors has now made this approach more feasible.

3.1.2 Statistical Classification

In the statistical approach, each pattern is represented in terms of d features or measurements and is viewed as a point in a d dimensional space. The goal is to choose those features that allow pattern vectors belonging to different categories to occupy compact and disjoint regions in a d-dimensional feature space. The effectiveness of the representation space is determined by how well patterns from different classes can be separated. Given a set of training patterns from each class, the objective is to establish decision boundaries in the feature space with separate patterns belonging to different classes. In the statistical decision theoretic approach, the decision boundaries are determined by the probability distributions of the patterns belonging to each class, which must either be specified or learned [4], [6]. A statistical classifier may estimate the statistical distribution of the two features.

3.1.3 Structural or Syntactic matching

In many recognition problems involving complex patterns, it is more appropriate to adopt a hierarchical perspective where a pattern is viewed as being composed of simple sub patterns which are themselves built from yet simpler sub patterns [11]. The simplest sub patterns to be recognized are called primitives and the given complex pattern is represented in terms of the interrelationships between these primitives. In syntactic pattern recognition, a formal analogy is drawn between the structure of patterns and the syntax of a language. The patterns are viewed as sentences belonging to a language, primitives are viewed as the alphabet of the language, and the sentences are generated according to a grammar. Thus, a large collection of complex patterns can be described by a small number of primitives and grammatical rules. The grammar for each pattern class must be inferred from the available training samples. Structural pattern recognition is intuitively appealing because, in addition to classification, this approach also provides a description of how the given pattern is constructed from the primitives. This paradigm has been used in situations where the patterns have a definite structure which can be captured in terms of a set of rules, such as EKG waveforms, textured images, and shape analysis of contours [2]. The syntactic approach may yield a combinatorial explosion of possibilities to be investigated, demanding large training sets and very large computational efforts .In syntactic or structural approach, a complex pattern (e.g., animal) is described in terms of component patterns (e.g., hair and head, or, torso and limbs) and their relationship (e.g., articulated joints).

3.1.4 Artificial neural networks.

These networks attempt to apply the models of biological neural systems to solve practical pattern recognition problems. This approach has become so popular that the use of neural networks for solving pattern recognition problems has become an area on its own. Neural networks can be viewed as massively parallel computing systems consisting of an extremely large number of simple processors with many interconnections. Neural network models attempt to use some organizational principles (such as learning, generalization, adaptivity,

fault tolerance and distributed representation, and computation) in a network of weighted directed graphs in which the nodes are artificial neurons and directed edges (with weights) are connections between neuron outputs and neuron inputs. The main characteristics of neural networks are that they have the ability to learn complex nonlinear input-output relationships, use sequential training procedures, and adapt themselves to the data. The most commonly used family of neural networks for pattern classification tasks [7] is the feed-forward network which includes multilayer perceptron and Radial-Basis Function (RBF) networks. These networks are organized into layers and have unidirectional connections between the layers. Another popular network is the Self-Organizing Map (SOM), or Kohonen-Network [8], which is mainly used for data clustering and feature mapping. The increasing popularity of neural network models to solve pattern recognition problems has been primarily due to their seemingly low dependence on domain-specific knowledge and due to the availability of efficient learning algorithms for practitioners to use. Neural networks provide a new suite of nonlinear algorithms for feature extraction and classification.

4. PATTERN RECOGNITION SYSTEMS

4.1 Sensing

The input to a pattern recognition system is often some kind of a transducer, such as a camera or a microphone array. The difficulty of the problem may well depend on the characteristics and limitations of the transducer- its bandwidth, resolution, sensitivity, distortion, signal-to-noise ratio, latency, etc.

4.2 Segmentation

Segmentation is one of the deepest problems in pattern recognition. Closely related to the problem of segmentation is the problem of recognizing or grouping together the various parts of a composite object. Image segmentation[8] involves identifying patterns that have similar properties and then grouping them into structures, based on stringent or relaxed rules, to produce the required features. A good segmentation is achieved when regions in an image can be easily distinguished based on grey intensities, texture or edge information.Removal of noise in the input data and isolation of patterns of interest from the background is performed in this phase.

4.3 Feature Extraction

The traditional goal of the feature extractor is to characterize an object to be recognized by measurements whose values are very similar for objects in the same category, and very different for objects in different categories. This leads to the idea of seeking distinguishing features that are invariant to irrelevant transformations of the input. In general, features that describe properties such as shape, color, and many kinds of texture are invariant to translation, rotation, and scale. As with segmentation, the task of feature extraction is a domain-dependent problem and thus requires knowledge of the domain. However, some of the principles of pattern classification can be used in the design of the feature extractor. Finding the new representation in terms of features is carried out in this phase.

4.4 Classification

The task of the classifier is to use the feature vector provided by the feature extractor to assign the object to a category. Because perfect classification performance is often impossible, a more general task is to determine the probability for each of the possible categories[3]. The abstraction provided by the feature-vector representation of the input data enables the development of a largely domain-independent theory of classification. The degree of difficulty of the classification problem depends on the variability in the feature values for objects in the same category relative to the difference between feature values for objects in different categories. The variability of feature values for objects in the same category may be due to complexity, and may be due to noise. All nontrivial decision and pattern recognition

problems involve noise in some form.ie Using features and learned models to assign a pattern to a category.

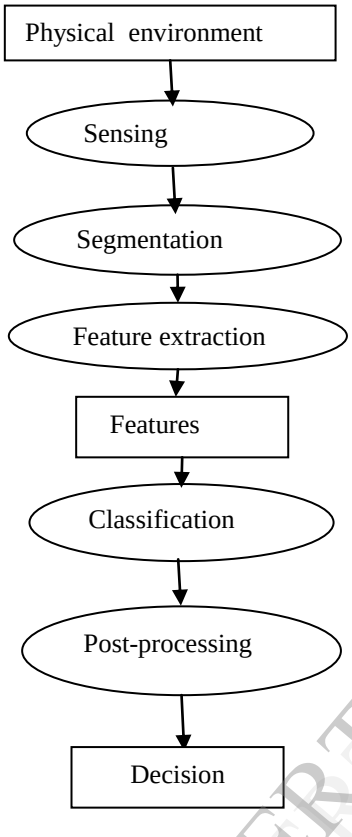


Figure 2: Process Diagram of a Pattern Recognition System

4.5 Post Processing

A classifier rarely exists in a vacuum. Instead, it is generally to be used to recommend actions where each action is having an associated cost. The post-processor uses the output of the classifier to decide on the recommended action. Conceptually, the simplest measure of classifier performance is the classification error rate-the percentage of new patterns that are assigned to the wrong category. Thus, it is common to seek minimum-error-rate classification. However, it may be much better to recommend actions that will minimize the total expected cost, which is called the risk. Two important functions like Evaluation of confidence in decisions and Exploitation of context to improve performance is maintained by this pahse.

5. DESIGN OF A PATTERN RECOGNITION SYSTEM:

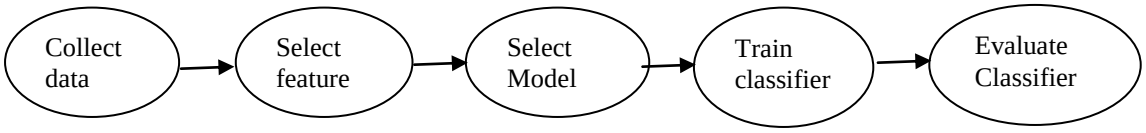


Figure 3: The Design Cycle

Patterns have to be designed in various steps that are expressed below:

Step 1) **Data collection:** During this step Collect training and testing data. Next the question arises

How can we know when we have adequately large and representative set of samples?
Step 2) **Feature selection:** During this step various details have to be investigated such as Domain dependence and prior information ,Computational cost and feasibility, Discriminative features. Similar values for similar patterns, Different values for different patterns, Invariant features with respect to translation, rotation and Scale, Robust features with respect to occlusion, distortion, deformation, and variations in environment.
Step 3) **Model selection:** During this phase select models based on following criteria: Domain dependence and prior information., Definition of design criteria, Parametric vs. non-parametric models, Handling of missing features, Computational complexity Various types of models are : templates, decision-theoretic or statistical, syntactic or structural, neural, and hybrid. Using these models we can investigate how can we know how close we are to the true model underlying the patterns?
Step 4) **Training:** Training phase deals with How can we learn the rule from data?
Supervised learning: a teacher provides a category label or cost for each pattern in the training set.
Unsupervised learning: the system forms clusters or natural groupings of the input patterns.
Reinforcement learning: no desired category is given but the teacher provides feedback to the system such as the decision is right or wrong.
Step) 5 **Evaluation:** During this phase in the design cycle some questions have to be answered such as how can we estimate the performance with training samples? How can we predict the performance with future data? Problems of over fitting and generalization.[3]

6. CONCLUSION

The planets 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. Based on each characteristic features of the planet, face parameters are formed. In this paper we have discussed the energy produced by the nine planets and in what way they help in the formation of various parts in our human body. How this energy is converted to live energy in the air and how they are related using Pattern Recognition will be enhanced in the future work.

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