International Journal of Multidisciplinary Research and Development

Volume: 2, Issue: 5, 198-200
May 2015
www.allsubjectjournal.com
e-ISSN: 2349-4182
p-ISSN: 2349-5979
Impact Factor: 3.762

**Alka Verma**
B.tech, Computer Science Engineering, SRM University

**Abhishek Verma**
B.tech, Computer Science Engineering, SRM University

**Roopesh Dhara**
B.tech, Computer Science Engineering, SRM University

**Pranay Gambhir**
B.tech, Computer Science Engineering, SRM University

**Ajin Dayanandan**
B.tech, Computer Science Engineering, SRM University

**Correspondence**:
**Alka Verma**
B.tech, Computer Science Engineering, SRM University

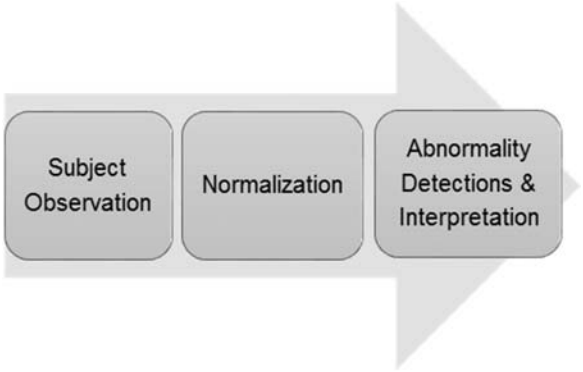
# The Kinesics Algorithm for Psychological Analysis of a Social Being

**Alka Verma, Abhishek Verma, Roopesh Dhara, Pranay Gambhir, Ajin Dayanandan**

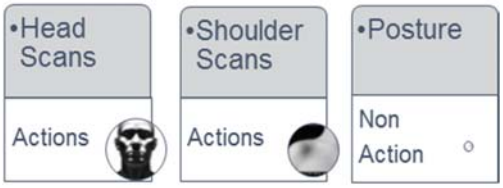
**Abstract**
Social beings as per evolved by the rule of natural selection over a period of 4.7 Billion years follows similar trends of genetically controlled response. These responses are associated with the exposure situation of social being in the race of survival. Some of these responses are strongly correlated with the Survival in a population and Reproduction for insuring their DNA domination in next generation. Analyzing these sets of trends in human being and interpreting its state of mind, responses to social stimulus and interpreting its social behavior falls under the psychological study of *Kinesics*. The proposed algorithm related to this kinesics analysis of social being is developed to help a person with non-psychological background to correctly take observations and interpret to a scientifically acknowledged conclusion.

**Keywords:** Psychology. Sociology, Kinesics, Body Language, Social Responses, Human Behaviour, Sociological Interpretation

## 1. Introduction
The flowchart of the algorithm has been developed in a way to allow a person totally new in the field of body language observation to achieve perfection going with the flow. The algorithm will allow a person to be as skilled as any psychologist who might have mastered the skills of kinesics if inputs to this flowchart are perfectly fed. Some postures emitting different meanings universally have been added. Taking all the popular concepts of kinesics that include removing the cultural standards or stating the universal signs has been taken into consideration .The flowchart has been designed to allow the user to access the current feelings of a total stranger.

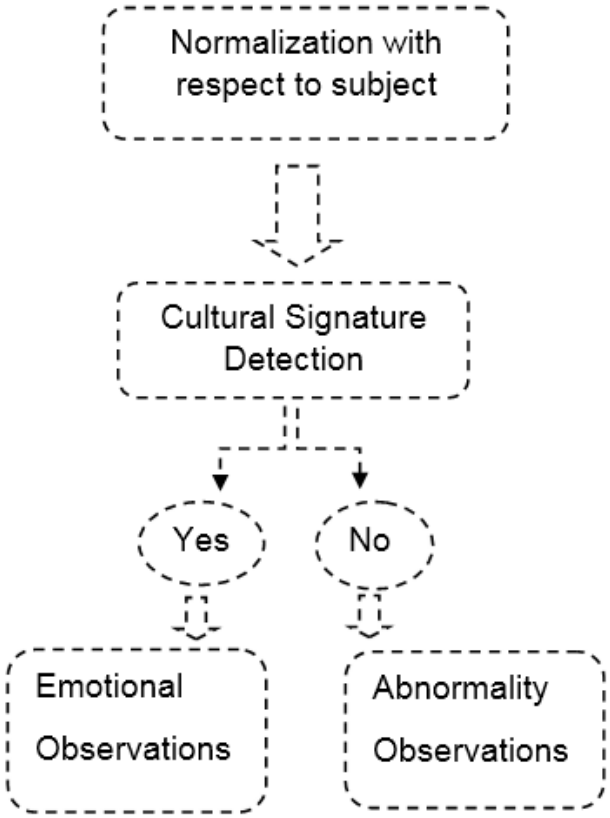



## 2. Subject Observations
Carefully studying every change in the posture of the subject or rather call it scanning is the most important part of the procedure. It is all that depends on it weather a perfect output will be achieved in future or not. A perfect scan begins with the head, reading the expression that might be common or uncommon. The next priority is the scan from shoulder to toe, this scan covers the movement of shoulders voluntary or involuntary using arms or placing arms on a surface between the subject and the observer. Using toes as a barrier is also a consideration which will be added in an updated algorithm.




**3. Normalization**

Normalizing the situation for the subject includes knowing what normal is in aspect to the subject. Knowing what normal for the subject is achieved by large time observation of the subject. If the flowchart is followed ignoring the normalization, will result in more than 50% probability of increasing the chances of the output being wrong. Being aware of the cultural standards will also play a major role in the same as it affects the large portion of shaping the body language of an individual.



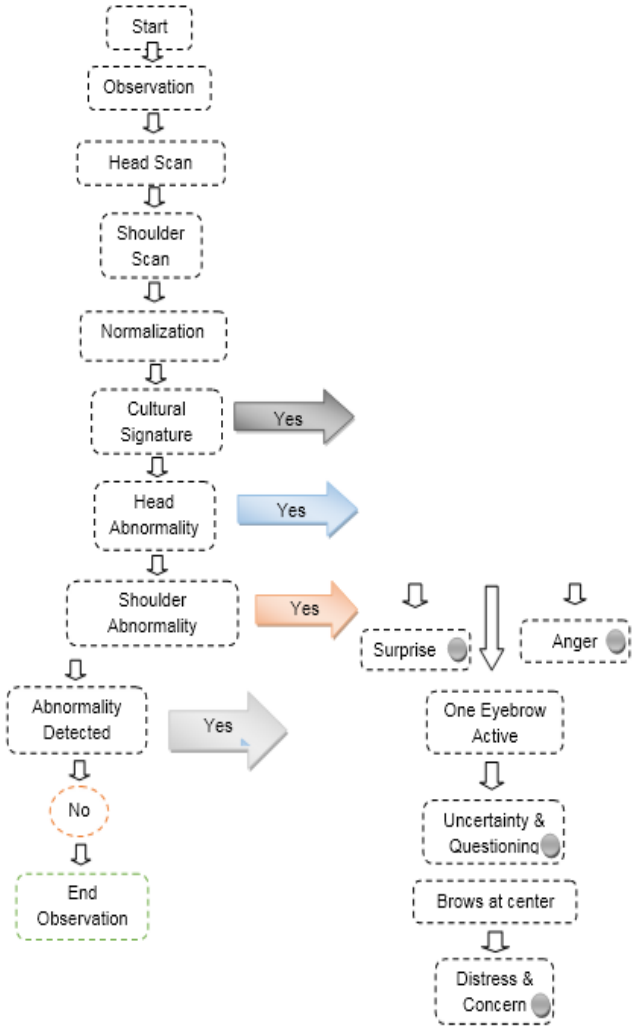

**4. Cultural Standard Elimination**

Observing the cultural background of the subject is a key role, there are many dynamically varying cultures around the globe, knowing and having even a brief study of every culture's body language symbols that are particularly unique to them are nearly impossible. Thus the only thing possible is knowing about the particular culture's unique body gestures that the subject belongs to. The knowledge can be gained by spending time around people belonging to the same culture and defining their unique gestures.

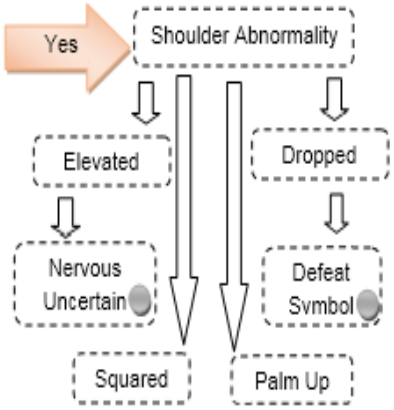
**5. Kinesics Algorithm**

**5.1 Observation Process**

Taking observation of full response of a being is too complicated to be achieved with 100% efficiency and accuracy in very short window of interaction with the subject. The expression of a social being is mainly concentrated in the region of focus of the observer standing closest to the subject. Supporting the hypothesis, the human evolution with natural selection predicts that chances of survival of a human being who can express his feelings in upper portion of body (mostly in the focus range of the nearest observer) is higher as the human being has a advantage of communicating with higher efficiency and has higher chances of survival in a group survival.

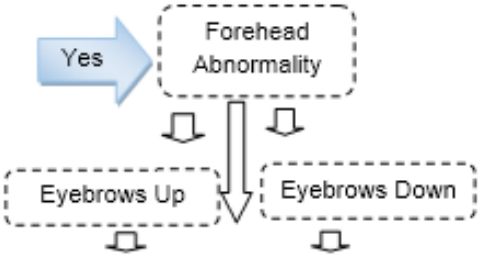


### 5.2. Emotion Consideration

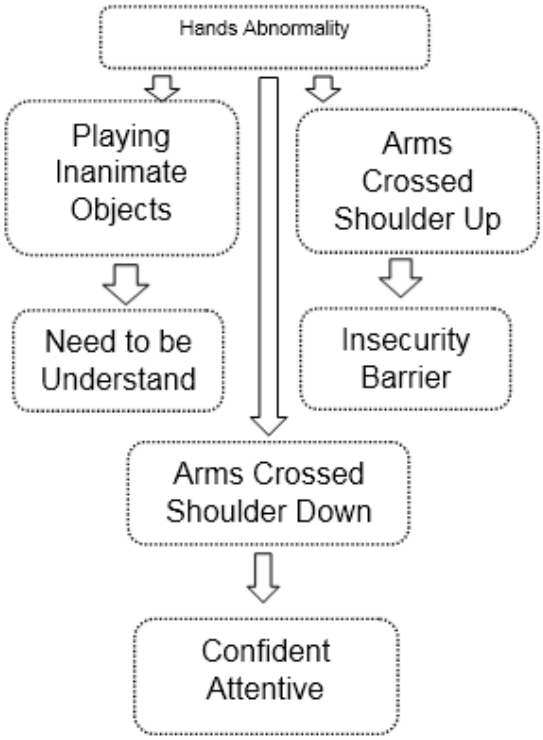

## 6. Abnormality Detection

### 6.1 Forehead Abnormality





### 6.2 Arms Abnormality




### 7. Acknowledgement

We would to thank our parents and colleagues for supporting us with suitable assets in completing our work on Kinesics Algorithm for Psychological analysis of Social Being.

### 8. References

1. Danesi, M (2006). "Kinesics". *Encyclopedia of language & linguistics:* 207-213.
2. Birdwhistell, R. L. (1952). Introduction to *Kinesics: An Annotation System for Analysis of Body Motion and Gesture*. Washington, DC: Department of State, Foreign Service Institute.
3. Birdwhistell, R. 1970. *Kinesics and Context*. University of Pennsylvania Press, Philadelphia.
4. Nierenberg, G. I., & Calera, H. H. (1971). *How to Read a Person like a Book*. New York: Hawthorn Books.
5. Jump up ^ Leeds-Hurwitz, W. (1987). The Social History of The Natural History of an Interview: A multidisciplinary investigation of social communication. *Research on Language and Social Interaction*, 20, 1-51.
6. Knapp, M. 1972. *Nonverbal Communication in Human Interaction*. Reinhart and Winston, New York, pp. 94-5.
7. McDermott, R. 1980. Profile: Ray L. Birdwhistell. *The Kinesis Report*, 2, 3: 1-16.
8. Ekman, P; Friesen, W (1971). "Constants across cultures in the face and emotion" (PDF). *Journal of Personality and Social Psychology* **17** (2): 124–9. doi:10.1037/h0030377.PMID 5542557.