PS643 - Introduction to AI, Data, and Policy

Date: 25/10/24

by - Priyam Garg (210111001)

Automated Surveillance

"The Victorian roots of facial recognition" by Richard Woodall is a popular science piece from a magazine "Real Life". The credibility of said piece is questionable since an editor has seen it.

Science and its History

The idea that "belief requires proof" is a much newer course of thought. Earlier term for science - "Natural Philosphy". Modern science is defined by the term "falsifiability", the potential for something to be false. If something can be proven false can it be a science. Science is something of which a hypothesis can be made, and until it is proven false it is accepted. A Hypothesis that has not been proven false for sufficiently long time is a theory.

"Pathogonomy" - Judging character from feeling someone's skull and facial features. Pathognomy being so vague so cannot be used to hypothesise or predict with so as to be rejected/falsified hence it is not a science. The apprehensions with pathogonomy initially started as people pointing out that skeletal structures change during life. This was the first signs of critical thinking. Every field of science had its origins in pseudoscience, because the method of deliberately doing experiments is a new method.

<u>Natural Selection:</u> Animals mutate and in turn evolve randomly and those mutated individuals survive that can outlive and muscle the others. Therefore only features of the strongest members survive.

Charles Darwin suggested to replace the line of thought of judging character from skeletal structures to judge from their facial expressions to gauge emotions instead, this was called "Physiogonomy". He in fact replaced one psuedoscience with another. This line of thought is convenient for the power bearer/authority. He failed to understand that human character is internal than external. Although this has been accepted as a pseudoscience much in the past, but "Al community" have convinced the rest of us that emotion detection is possible.

"Emotion detection can be termed Computational Physiogonomy"

Darwin was somewhere between the hard headed conservatives of his time that believed races are real and today's scientific line of thought, he believed emotions are ever changing and are reflexes and cannot be attributed entirely to the person.

During colonial times, measuring the people, gauging their emotions and trying to find problematic people for better control became a major theme and goal. This was the origin of the concept of collecting data and using data that we see today. However even after independence this attitude of "measuring" by the government did not change. One such issue is the Criminal Tribes Act, although decommissioned it is still in place to identify "suspects".