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MANTRAKSHAR

PART 1

Seeds of Curiosity: How Science Predates Language

Science, the methodical pursuit of knowledge through observation and experimentation, might seem inherently tied to language. After all, how can we share and refine scientific ideas without complex communication? However, the roots of science extend far deeper, long before the first words were spoken. Our early ancestors, driven by curiosity and the need to survive, laid the foundation for scientific thinking even before they could articulate it.

Imagine a world without language. Early humans, facing unpredictable environments and dangerous predators, had to rely on keen observation and problem-solving skills. They noticed patterns in the movements of animals, the cycles of the sun and moon, and the connection between cause and effect. Recognizing that fire provided warmth and protection is a prime example. This wasn't mere instinct; it was a form of rudimentary scientific inquiry. Through trial and error, they learned to create and control fire, a cornerstone of human advancement.

While they couldn't explain these observations with scientific vocabulary, they were actively using the scientific method in its most basic form: observing, questioning, experimenting, and drawing conclusions. The development of tools like sharpened sticks and rudimentary shelters further demonstrates this early problem-solving and adaptation. These actions, driven by the need to survive and thrive, were the seeds from which science would eventually blossom.

The emergence of language, estimated to be around 100,000 years ago, became a turning point. Language allowed early humans to share their observations and experiences, fostering collective knowledge. They could now discuss the effectiveness of different hunting strategies, describe the properties of plants, and pass down wisdom to future generations. This collaboration accelerated scientific progress. Cave paintings, believed to be a form of communication, might even represent early attempts to document observations about animals and the environment.

As civilizations arose, the need for more formalized knowledge systems grew. The ancient Egyptians and Babylonians developed sophisticated mathematics and astronomy, essential tools for agriculture, construction, and navigation. These early scientific endeavors, though not conducted with the rigorous methodology of modern science, established a foundation of quantitative reasoning and a desire to understand the natural world.

In conclusion, science is not a recent invention but rather a culmination of human curiosity and problem-solving that predates language. Our early ancestors, through their observations and adaptations, laid the groundwork for scientific thinking. Language then became a powerful tool for sharing and refining this knowledge, propelling scientific progress forward. While the methods and terminology have evolved dramatically, the core human drive to understand and interact with the world around us has always been there, a testament to the enduring spirit of scientific inquiry.

PART II : CONCERNING KNOWLEDGE , REALITTY AND RELATIONS BETWEEN THEM

Understanding reality is not a simple task because it does not depend on the view of one person but depends on how every person sees it , remembers it and then replicates or transfers it to other people. Based on view it is divided in to direct realism and indirect realism. Indirect realism is broadly equivalent to the scientific view of perception that subjects do not experience the external world as it really is, but perceive it through the lens of a conceptual framework. Indirect realism explores the visual references made by organs of action, semantics explores the references made by the organs of speech. Semiotics is closely related to this. In terms of indirect realism 1. Signified would be (thought evoked in the mind basically an ideogram or pictogram) , 2. Signifier (the word or sound associated with it) 3. Sign (signifier + signified) . In terms of direct Realism 1. Signified would be (real image) 2. signifier (the word or sound associated with it) . 3. sign . Sometimes the signifier becomes the signified as in cases of sound acting like an ideogram or idea, for example Hindi j (ज) has a morphology of cup representing some creation and when it is associated with other sounds it represents creation in some form.

- Concerning ambiguity
- concerned with the complicated nature of understanding
  - A process which combines Brain with mind
    - STUDY OR SCIENCE
      - Natural Sciences
      - Formal Sciences
      - Social Sciences
    - With the purpose to
      - ARS JUDICANDI
      - Ars inveniendi
      - Ars mnemonica
      - The art of Combinations
        - Organization
- referential state with reference to dimensions , space and time
  - real states are formed only from real states
  - Virtual states does not follow the same principles as real states
  - Cognitive states which are neither real nor Virtual, they do not exist in reality but only on paper and mind

PART - III : LOGIC CONCERNED WITH FORMAL LANGUAGE

human sounds when combined with one another can act as a reference for an object of reality or a concept. Regardless of meaning and understanding one can recognize any object on the basis of reference. A person associates an object with a particular set of sounds , this set of sounds can be transferred in to other persons memory without any understanding or knowing what is the background or future of this object. This person may still be able to recognize it when it sees a similar kind of object. The study which is concerned with the sounds and their order and organization is called grammar.

Speaker's point of view of any object with respect to space and time. The speaker considers himself to

be a part of space and time continuum in which he is standing at a certain place of location which are defined by terms using what we call preposition and he considers himself to be a similitude of reality which are abstractly and separately considered as pronouns but the reality of it is considered as a unique concept called noun which are described with the help of so called adjectives. Until now it is clear the subject has been standing still , speaking only about the locations and nouns , but now he starts to move and perform actions relative to space and time. These actions are explained by the speaker in relation to time , and the manner of how it was done is explained by adverbs.

- Language organization
  - LINGUISTIC SPACE CONFINED TO A 2D SPACE CALLED PAPER OR VIRTUAL PAPER
    - More general
      - HYPOTHETICAL GRAMMAR
        - TYPES OF GRAMMAR
        - GRAMMAR PARTICLES
    - More specific
      - LANGUAGE
      - CONCERNING REAL IDEOGRAPHIC CHARECTER
    - References forming memorizable patterns from strokes in cognitive states or on paper
      - sensible references , a sensible form which represents
        - Units of language
          - spoken sounds called phones
          - Written strokes
            - alphabets or Indexing sounds , indexing based on order of alphabets or its reading order
            - strokes
              - Indexing component or Indexing Semantograms , indexing based on class
              - index strokes , indexing based on dimensions
              - index numbers
        - PHONOSEMANTIC PHONEMES
          - set of sounds with an inherent meaning
      - these sensible references are compounded in to abstract forms which exist either in mind or on paper , are categorized as
        - linguistic compounds compound forms which form Integral compounds
          - smaller
            - INFLECTIONS
          - larger
            - WORD
            - COMPOUND SEMANTOGRAM
            - Phonosemantic compounds
      - the mind organizes them in an expressible but referential format called
        - SEMANTOGRAPHIC SYNTAX
          - SEMANTIC EXPRESSIONS
        - linguistic chain the so called order
          - LINGUISTIC EXPRESSIONS
          - GRAMMAR SYNTAX
          - ORTHOGRAPHY

PART - IV : CONCERNING WORD ROOTS , INFLECTIONS , SEMANTICS AND WORD MORPHOLOGY

English had influences of many languages over the course of its development , so it has a rich vocabulary with its expanse from all over the world. For easy understanding the roots , prefixes , suffixes and the etymology or origin of the word. It is classified under following heads.

- NOMENCLATURE
- Morphophonology
- SIMPLE WORDS OR ROOT WORDS DERIVED FROM A SINGLE SOURCE
  - phonosemantic matching from source language to Target language
    - pronunciation and meaning similar between source and target language or family (similar word - ज्यों का त्यों)
      - तत्सम
        - In Hindi From sanskrit
        - In hindi From persian
          - Tatsam hindustani
        - In English
          - In English from greek
            - potens - potential (Greek – English)
          - In English From Latin
    - different pronunciation but same meaning between the source and target language or family (less similar word)
      - tadbhav (तद्भव)
        - In hindi from sanskrit
          - मुख (mukh) से मुँह (muh)
    - source and target language have same pronunciation but different meaning
    - The target language word has no source language , considered indigenous or native
      - देशज
        - native hindi
    - The target language borrowed words directly from foreign language
      - विदेशज
        - foreign roots in hindi
        - from English to Hindi
          - anglo hindu words
    - Similarities between the source languages or ancestral languages
      - proto-Indo-European
        - Cognates
          - ignis - अग्नि (Greek - Sanskrit)
- COMPOUND WORDS WITH TWO OR MORE ROOT WORDS
  - derived from a single source
  - derived from different sources
    - Sankar / Hybrid Words

- OVERALL ROOTS LIST
  - GOTHIC ENGLISH
  - LIST OF FOREIGN ROOTS IN ENGLISH

Since English is a little vulgar language , its use has been limited to common everyday life and the scientific terminology is limited to the use of Greek and Latin words which is actually a foreign

language. So considering this fact that science terminology is derived from Latin and Greek , it is a totally different language and it cannot be limited to English itself. Except for the fact that it uses Latin script. Considering the fact that Indo-European language family is the largest family group besides china.

Sanskrit is also an ancient language besides Latin , Greek and Avestan which shares a similar vocabulary to Greek and Latin with a little difference in their pronunciation.

PART IV - CONCERNING SIMPLE PRONUNCIATION AND UNDERSTANDABLE LANGUAGE

- Simple English
    - SIMPLE MEDICAL TERMS
- Simple hindi or hinglish
- Ambiguous terminology

CONCERNING MANTRAKSHAR ; AN ALPHABET OF HUMAN THOUGHT

- Mantrakshar
    - Representations
        - MANTRAKSHAR SEMANTOGRAMS
            - Indexing component or Indexing Semantograms
                - dimensional differences
        - Art of combinations
    - Mantrakshar coding