# Major characteristics of communication systems



Apart from the normal communication with the help of spoken or written languages that humans follow, there are also other communication systems like traffic signals, Morse code, etc which we use.

The characteristic features of Language were described by Charles Hockett and he said that any language has 16 design features.

# Some shared features of Animal and Human communication system are-

- Body language: (it is not a distinct characteristic of human language as it's used by other animals as well) Humans - nod, wave, shrug, thumb, forefinger, little finger, etc (hand is very versatile for communication and like expressing things through body language)
  - Animals baring the teeth, tail wag, snarling, cowering
- Use of vocal auditory channel (spoken language)
- Predestined to emerge (a frog, by the virtue of being a frog will croak, a cat by virtue of being a cat will mew, similarly a human by the virtue of being a human will talk and not bark or mew or croak - it is predestined (that is unless we have some sort of deformity or abnormality).

Frogs will croak, dogs will bark, cats will mew, humans will talk. All animals are predestined to emerge and communicate in some particular way or the other - irrespective of if it uses the vocal auditory channel or not (like bats or dolphins)

**Advantage of humans:** Humans can transfer language to other media. Written symbols, Braille, Morse Code, sign language. So they can use more than just the

vocal auditory channel to enable communication

Language that is based on sound through oral <-> auditory channel is more basic to animals and humans both.

### Some characteristic features of human language

#### 1. Arbitrariness.

sign = signifier + signified.

In human language, we can observe the use of neutral symbols (*neutral in the sense that the symbols aren't logically related to the words we are trying to convey or the meaning we are trying to convey*) to connect the signifier (word) and the signified (objects, concepts). There is no logical connection between the two.

The same signified is denoted by the totally different signifiers in different languages and it's often arbitrary and we can't really find a proper relationship between those

#### Some examples of the same-

**DOG**: Unchein (french)

Ein hund (German)

Saarameya (Sanskrit)

Indian languages - kukkura, kukur, kukka, kutta, patti, naai, kutra

**HOUSE**: dom (Russian), casa (Spanish), Indian Languages: baaDi, ghar, illu, veeDu

**TREE**: vriksh, peD, gaach, cheTTU, darakht, maram, rukh (Nepali), zhaaD (Marathi), jhaaD

**Exceptions:** onomatopoeic word. Cuckoo, bang, rimjhim, dhaDaam se gir jaana, Thaash kore thappoD maaraa

Such words are relatively few in any language. They are ALSO variable: arf arf, bow wow, bhou bhou, gheu gheu; cock-a-doodle-do, kukuDu - ku; hee haw, dhenchu dhenchu, ghenkkko ghenkko

In this respect you might want to explore the theories for how the words for mother and father came into origin in different languages and are fairly similar although usually we have different kinds of sounds for even similar words across various languages. Animals, on the other hand, have a strong link between the message and the signal. Crab - small claw (less angry), large claw (very angry)

**Exceptions:** Gulls - express aggression by turning away from the opponent and uprooting beak-fulls of grass.

Therefore, it is not a critical distinction between human and animal communication systems.

#### 2. Semanticity/Discreteness.

In human language we have the categorization and classification of entities and actions. We observe the use of symbols to 'mean' or refer to objects and actions.

So for example, chair means a four legged object to sit on. Compare with stool/bench/table.

Similarly jump means the act of leaping in the air. Compare with walk/read/eat/dance/sing.

Animals on the other hand communicate about a total situation and they don't have specific words to signify the entire situation in detail. There may be a special call for danger, but not *run away quickly because a snake is approaching our new nest* 

Bertrand Russell once said "No matter how eloquently a dog may bark, he cannot tell you that his father was poor but honest" and that pretty clearly shows the distinction between human and animal languages and means of communication.

However, we should note that we can't really understand or explain what's happening in the communication in animal kingdom because we don't understand their communication nicely yet but this is just a conclusion we have that the way humans communicate is much more precise and distinct as well as well detailed compared to how animals communicate.

**Next day**: duality of patterning/double articulation

Homework: How many English words can we create with the following letters

r,b,a,e,d,s

(at least one word should have all the letters but there can be words with less

#### letters as well)

#### Solution to Homework:

## R,b,a,e,d,s - six letters which mean nothing by themselves

Bread, beard, are, bare, bear, red, bad, bed, abed, dear, read, era, bar, drab, dare, bard, as, ad, base, bred

Breads, beards, bares, bears, reds, reads, eras, abs, dares, bards, beds, bars, ads, bared, based

36 meaningful words?