## **Language and Linguistics**

## 1. What is language?

If we accept the definition that language is a system of communication between two parties, then our definition will necessarily involve a large spectrum of communicating species (possibly machines) besides humans. Chimpanzees, bees, whales, dolphins (to name just a few) have relatively elaborate systems of communication. Elsewhere, artificial languages (such as Esperanto) and computer languages (Basic, HTML, C++, etc.) make the picture even more complex. However, if we think of communication as an open, flexible, creative, and self reflexive system, then we must consider language as specifically human.

A. Animal language: experiments with ASL (American Sign Language) on chimpanzees (Washoe, Sarah, Lana, Viki, Nim Chimsky, etc). Signs are characterized by immediacy, motivation, and absence of abstraction which produce mechanical and conditioned learning. Besides, syntax remains rudimentary with absence of creativity. Similarly vocabulary remains extremely limited. In conclusion experiments show limitations of animal brain to handle complexities of human language. Animal learning 'learning' processes remained in general rudimentary productions and repetitions of signs that lacked the most important characters of human language, namely arbitrariness, predication, and abstraction.

- B. Human language: Contrary to preliminary experiments, recent research has proven the discontinuity hypothesis. Darwin himself seems to anticipate this remarkable difference when he concluded that a reciprocal influence must have been in force between the complex evolution of the brain and the development of more articulate speech. Research has uncovered a number of linguistic universals that remain human language specific.
  - ✓ Semanticity: ling. Symbols have meaning; bees and monkeys have no internal concepts.
  - ✓ Arbitrariness: ling. Symbols are not similar to what they refer to (compare to bee's dance: contiguity with reference to orientation of sun & hive); (compare to monkeys' call for danger) (man's interjections, even onomatopoeias are culturally different, i.e. arbitrary, e.g. Pigs for "oink" in English but " booboo" in Japanese).
  - ✓ Discreteness: ling. Symbols are discrete, unlike bees' signs (near; far, faster → quantity of food); however monkeys' signs are relatively discrete.
  - ✓ Duality of patterning (double articulation): requires discreteness. Ling. Symbols are broken down. Meaningless → meaningful. Finite signs → infinite communication.
  - ✓ Productivity: syntax → novelty (unlike continuous signs of bees → limited productivity) (monkeys have some kind of semanticity but lack productivity).

- ✓ *Displacement:* capacity of speaking of things in their absence (bees have little displacement, i.e. some time gap between time of dance and discovery of food) (monkeys have no displacement).
  - Conclusion: Language is absolutely human specific. The uniqueness of human language goes beyond the principal of communication; it extends to fundamental questions related to self-consciousness, to being, and to the socialization (oedipinization) process.
- C. Artificial Languages: Artificial (or constructed or model) languages are man-made; they are numerous and serve different purposes. Usually they are created by hybridizing several (Western) languages. Although some of them are conjured to foster international communication (auxlanguages), the majority are not. Some are associated with leisure (artlanguages), others with business, others with politics, others with fiction worlds. Still others are pure linguistic experiments or simply hypothetical languages. Esperanto is one such a language with most speakers worldwide. Although some of these languages are technically well developed, they are hardly ever adopted by people for their lack some of the vital ingredients of natural languages, namely historicity and cultural background. Elsewhere there exist a significant number of machine languages such as programming languages (artificial intelligence). Examples are the 'pivot languages' or 'interlinguas' used in automatic

translation. We feed computers with instructions in such language to teach the computer to perform specific tasks. Although these may be efficient tools for computing, they remain far less complex than human language and lack some of the vital ingredients that make natural language unique, namely the pragmatic aspect.

Conclusion: Although technically tempting and possibly efficient, artificial languages constitute very little threat for natural languages since they lack the most vital aspects of human life, namely human agency, historicity, socio-cultural aspect in general. Beyond the purely communicative character of human language, the latter will always resonated in the minds of people because of the eternal impact of a Baudelaire, a Shakespeare, or Al Maari.

## 2. What is linguistics? (establishing a science)

Paradigm shift: Linguistics is the scientific study of language. It includes the study of sounds, words, and grammar of specific language as well as the relationship between the different languages. It also searches for the universal characteristics of all languages. Equally important is when linguistics is concerned with the analysis of the sociological, psychological, and ethnological aspects of communication.

## A. Search for ingredients of legitimacy

- Objectivity
- Measurability