IS LANGUAGE NATURAL

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IS LANGUAGE NATURAL?

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Abstract

Is language natural? We may think of this from the point of view of philosophy of language. Based on the philosophy of language, natural language is similar to ordinary language. Natural language is different from constructed languages and formal languages such as computer-programming languages or the *languages* used in the study of formal logic, especially mathematical language. We may say that natural language is any languages which arouse in unpremeditated fashion as the result of the innate facility for language possessed by the human intellect.

Key words: *natural language, philosophy of language, constructed language, formal language*

INTRODUCTION

Background

From the beginning when language is used by human being language takes different forms of usage. It starts from the non-verbal up to verbal language. A natural language is typically used for communication, and may be spoken, signed, or written. It has been through some changes and it keeps changing along with the development of science and technology. Based on this view, some scholars said that natural language is similar to ordinary language.

Natural language itself is distinguished from constructed languages and formal languages, like computational linguistics or computer-programming language and formal languages. The term formal languages are languages used in scientific subjects which deal with logic like mathematical logic.

Problem Statement

What is natural language?

Objective of the study

To explain natural language

THEORETICAL FRAMEWORK

1. Defining natural language
2. Native language learning
3. Origins of natural language
4. Linguistic diversity
5. Taxonomy
   5.1 Genetic classification
   5.2 Typological classification
   5.3 Areal classification
6. Controlled languages
7. Constructed languages and international auxiliary languages
8. Modalities
   8.1 Sign languages
   8.2 Written languages

DISCUSSION

Though the exact definition varies between scholars, natural language can broadly be defined in contrast on the one hand to artificial or *constructed languages*, such as computer programming languages like *Python* and *international auxiliary languages* like *Esperanto*, and on the other hand to other communication systems in nature, such as the *waggle dance* of bees. Although there are a variety of natural languages, any cognitively normal human infant is able to learn any natural language.

By comparing the different natural languages, scholars hope to learn something about the nature of human *intelligence* and the innate biases and constraints that shape natural language. As human being carries their own level of intelligence, they will have different level of understanding on something. This is resulted from the fact that language is innate which means that everyone has this capacity in their brain. For normal human being, they will through the same stage that is called language acquisition.

Linguists have an incomplete understanding of all aspects of the rules underlying natural languages, and these rules are therefore objects of study. The understanding of natural languages reveals much about not only how language works (in terms of *syntax, semantics, phonetics, phonology,* etc.), but also about how the human *mind* and the human *brain* process language. In linguistic terms, *natural language* only applies to a language that has evolved naturally, and the study of natural language primarily involves native (first language) speakers.

The theory of *universal grammar* proposes that all natural languages have certain underlying rules which constrain the structure of the specific grammar for any given language. While grammarians, writers of dictionaries, and language policy-makers all have a certain influence on the evolution of language, their ability to influence what people think they *ought* to say is distinct from what people actually say. The term *natural language* refers to actual linguistic behavior, and is aligned with descriptive linguistics rather than linguistic prescription. Thus non-standard language varieties (such as African American Vernacular English) are considered to be natural while standard language varieties (such as Standard American English) which are more prescribed can be considered to be at least somewhat artificial or constructed.

The learning of one's own native language, typically that of one's parents, normally occurs spontaneously in early human childhood and biologically driven. A crucial role of this process is the ability of humans from an early age to engage in speech repetition and so quickly acquire a spoken vocabulary from the pronunciation of words spoken around them. This together with other aspects of speech involves the neural activity of parts of the human brain such as the *Wernicke's* and *Broca's areas*.

There are approximately 7,000 current human languages, and many, if not most seem to share certain properties, leading to the belief in the existence of *Universal Grammar*, as shown by *generative grammar* studies pioneered by the work of *Noam Chomsky*. Recently, it has been demonstrated that a dedicated network in the human brain (crucially involving *Broca's area*, a portion of the left inferior frontal *gyrus*), is selectively activated by complex verbal structures (but not simple ones) of those languages that meet the Universal Grammar requirements.

There is disagreement among anthropologists on when language was first used by humans (or their ancestors). Estimates range from about two million (2,000,000) years ago, during the time of *Homo habilis*, to as recently as forty thousand (40,000) years ago, during the time of *Cro-Magnon* man. However recent evidence suggests modern human language was invented or evolved in Africa prior to the dispersal of humans from Africa around 50,000 years ago. Since all people including the most isolated indigenous groups such as the *Andamanese* or the Tasmanian aboriginals possess language, then it was presumed to present in the ancestral populations in Africa before the human population split into various groups to inhabit the rest of the world.

As of 2009, SIL Ethnologue catalogued 6909 living human languages. A "living language" is simply one which is in wide use as a primary form of communication by a specific group of living people. The exact number of known living languages will vary from 5,000 to 10,000, depending generally on the precision of one's definition of "language", and in particular on how one classifies dialects. There are also many dead and, distinct from dead, extinct languages.

There is no clear distinction between a language and a dialect, notwithstanding linguist Max Weinreich's [*citation needed*] famous aphorism that "a language is a dialect with an army and navy". In other words, the distinction may hinge on political considerations as much as on cultural differences, distinctive writing systems, or degree of mutual intelligibility.

It is probably impossible to accurately enumerate the living languages because our worldwide knowledge is incomplete, and it is a "moving target", as explained in greater detail by the Ethnologue's Introduction, p. 7 - 8. With the 15th edition, the 103 newly added languages are not new but reclassified due to refinements in the definition of language. Although widely considered an *encyclopedia,* the *Ethnologue* actually presents itself as an incomplete catalog, including only named languages that its editors are able to document. With each edition, the number of catalogued languages has grown.

Beginning with the 14th edition (2000), an attempt was made to include all known living languages. SIL used an internal 3-letter code fashioned after *airport codes* to identify languages. This was the precursor to the modern *ISO 639-3* standard, to which

SIL contributed. The standard allows for over 14,000 languages. In turn, the 15th edition was revised to conform to the pending ISO 639-3 standard. Of the catalogued languages, 497 have been flagged as "nearly extinct" due to trends in their usage. Per the 15th edition, 6,912 living languages are shared by over 5.7 billion speakers. Some major limitations in the accuracy of Ethnologue's speaker population data should however be noted.

The classification of natural languages can be performed on the basis of different underlying principles (different closeness notions, respecting different properties and relations between languages); important directions of present classifications are:

a. paying attention to the historical evolution of languages results in a genetic classification of languages—which is based on genetic relatedness of languages,
b. paying attention to the internal structure of languages (grammar) results in a typological classification of languages—which is based on similarity of one or more components of the language's grammar across languages,
c. and respecting geographical closeness and contacts between language-speaking communities results in areal groupings of languages.

The different classifications do not match each other and are not expected to, but the correlation between them is an important point for many linguistic research works. (There is a parallel to the classification of species in biological phylogenetics here: consider monophyletic vs. polyphyletic groups of species). The task of genetic classification belongs to the field of historical-comparative linguistics, of typological—to linguistic typology. See also Taxonomy, and Taxonomic classification for the general idea of classification and taxonomies.

Language family

- The world's languages have been grouped into families of languages that are believed to have common ancestors. Some of the major families are the *Indo-European languages*, the *Afro-Asiatic languages*, the *Austronesian languages*, and the *Sino-Tibetan languages*.

- The shared features of languages from one family can be due to shared ancestry. (Compare with *homology* in biology).

Linguistic typology

- An example of a typological classification is the classification of languages on the basis of the basic order of the verb, the subject and the object in a sentence into several types: *SVO, SOV, VSO*, and so on, languages. (*English,* for instance, belongs to the *SVO language* type).
- The shared features of languages of one type (= from one typological class) may have arisen completely independently. (Compare with *analogy* in biology.) Their cooccurence might be due to the universal laws governing the structure of natural languages—*language universals*.

Areal feature

- The following language groupings can serve as some linguistically significant examples of areal linguistic units, or *sprachbunds: Balkan linguistic union*, or the bigger group of *European languages; Caucasian languages; East Asian languages*. Although the members of each group are not closely *genetically related,* there is a reason for them to share similar features, namely: their speakers have been in contact for a long time within a common community and the languages *converged* in the course of the history. These are called "*areal features*".
- One should be careful about the underlying classification principle for groups of languages which have apparently a geographical name: besides areal linguistic units, the *taxa* of the genetic classification (*language families*) are often given names which themselves or parts of which refer to geographical areas.

Controlled natural language

Controlled natural languages are subsets of natural languages whose grammars and dictionaries have been restricted in order to reduce or eliminate both ambiguity and complexity (for instance, by cutting down on rarely used superlative or adverbial forms or *irregular verbs*). The purpose behind the development and implementation of a controlled natural language typically is to

aid non-native speakers of a natural language in understanding it, or to ease computer processing of a natural language. An example of a widely used controlled natural language is *Simplified English*, which was originally developed for *aerospace* industry maintenance manuals.

Constructed *international auxiliary languages* such as *Esperanto* and *Interlingua* (even those that have *native speakers*) are not generally considered natural languages. The problem is that other languages have been used to communicate and evolve in a natural way, while Esperanto was selectively designed by *L.L. Zamenhof* from natural languages, not grown from the natural fluctuations in vocabulary and syntax. Nor has Esperanto been naturally "standardized" by children's natural tendency to correct for illogical grammar structures in their parents' language, which can be seen in the development of *pidgin* languages into *creole languages* (as explained by Steven Pinker in *The Language Instinct)*. The possible exception to this are true native speakers of such languages.

More substantive basis for this designation is that the vocabulary, grammar, and orthography of Interlingua are natural; they have been standardized and presented by a *linguistic research body*, but they predated it and are not themselves considered a product of human invention. Most experts, however, consider Interlingua to be naturalistic rather than natural. *Latino Sine Flexione*, a second naturalistic auxiliary language, is also naturalistic in content but is no longer widely spoken.

Natural language manifests itself in modalities other than speech. Modalities here refer to English language modality that carries different meaning, from the function. This will be reflected in the use of modality which represent different kinds of meaning that will yield different understanding to the listener or the reader.

A *sign language* is a language which conveys meaning through visual rather than acoustic patterns—simultaneously combining hand shapes, orientation and movement of the hands, arms or body, and facial expressions to express a speaker's thoughts. Sign languages are natural languages which have developed in *Deaf communities*, which can include interpreters and friends and families of deaf people as well as people who are deaf or hard of hearing themselves.

In contrast, a *manually coded language* (or signed spoken language) is a constructed sign system combining elements of a sign language and a spoken language. For example, *Signed Exact English (*SEE) did not develop naturally in any population, but was "created by a committee of individuals.

Written language

In a sense, written language should be distinguished from natural language. Until recently in the developed world, it was common for many people to be fluent in *spoken* or *signed languages* and yet remain illiterate; this is still the case in poor countries today. Furthermore, natural *language acquisition* during childhood is largely spontaneous, while *literacy* must usually be intentionally acquired.

CONCLUSION

Based on the explanation above, the writer can draw conclusion that natural language is also an ordinary language that is different from constructed language and formal language. Chomsky in his theory about Universal Grammar said that each language has the same grammar that can be generated into its own grammar because human has innate capacity of language acquisition.

REFERENCES

A. Moro, M. Tettamanti, D. Perani, C. Donati, S. F. Cappa, F. Fazio "*Syntax and the brain: disentangling grammar by selective anomalies", NeuroImage*, 13, January 2001, Academic Press, Chicago, pp. 110-118

Musso, M., Moro, A. , Glauche. V., Rijntjes, M., Reichenbach, J., Büchel, C., Weiller, C. "*Broca's area and the language instinct," Nature neuroscience*, 2003, vol. 6, pp. 774-781.

Early Voices: The Leap to Language nytimes article by Nicholas Wade

"*Ethnologue: Languages of the World, Fifteenth edition*", accessed 28 June 2007, ISBN 1 55671 159 X

Rickerson, E.M.. "*What's the difference between dialect and language?*". *The Five Minute Linguist*. College of Charleston. Retrieved 17 July 2011.

Paolillo, J.C. & Das, A.: "*Evaluating Language Statistics*: The Ethnologue and Beyond". 2006

Gerrand, P.: "*Estimating Linguistic Diversity on the Internet: A Taxonomy to Avoid Pitfalls and Paradoxes*" JCMC 2007

Gopsill, F. P., "A historical overview of international languages". In *International languages: A matter for Interlingua*. Sheffield, England: British Interlingua Society, 1990.

Proponents contend that there are 200-2000 *native speakers of Esperanto*.

Gode, Alexander, *Interlingua-English: A dictionary of the international language*. New York: Storm Publishers, 1951. (Original edition)

Gopsill, F. P., "A historical overview of international languages". In *International languages: A matter for Interlingua*. Sheffield, England: British Interlingua Society, 1990.

Gopsill, F. P., "Naturalistic international languages". In *International languages: A matter for Interlingua*. Sheffield, England: British Interlingua Society, 1990.

Emmorey, Karen. *Language, cognition, and the brain: insights from sign language research* (2001), p. 11.

Pinker, Steven. 1994. *The Language Instinct*

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