



language

culture

learning

hello

world

UNIT

1

The nature of language

## Objectives

In this unit, you will learn

- the characteristics of language;
- different aspects of language: phonetics and phonology, morphology, syntax, semantics, and pragmatics;
- different approaches to language.

There are approximately 3,000—6,000 distinct languages spoken by humans, and approximately 250 language families, such as the Indo-European language family and the Sino-Tibetan language family. 95% of the world's people speak fewer than 100 of the 6,000 different languages, whereas the last 5% of the world's people speak thousands of discrete languages. Every language has its own way of encoding and expressing human experience, and an entire way of thinking is lost each time a language disappears.

### 1.1 Characteristics of language

Many definitions of language have been proposed. American linguists Bernard Bloch and George L. Trager (1942, cited in Lyons, 1981: 4) stated that “A[a] language is a system of arbitrary vocal symbols by means of which a social group cooperates.” Sapir (1921, cited in Lyons, 1981: 3) defined language as “a purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols”. In a word, language is a system of communication, a tool of thought, a medium for self-expression, a social entity, and so on. It has the following characteristics:

- Language is discrete.
- Language is creative.
- Language is a system.
- Language is arbitrary.
- Language is changeable.

#### 1.1.1 Language is discrete

Language is built up from discrete sounds. For example, sounds /s/ and /z/ in English are represented by “s” as in “cats” and “dogs”, and sound /l/ is represented by “l” in “love”.

**Example 1.1**

Discrete sounds in English: /k/ /ʊ/ /e/ /t/ /d/ /ɪ/ /m/ /f/ /b/ /n/

The number of sounds in a language is limited but varies from language to language. Exchanging such discrete sounds causes a change in the meaning of a signal. For example, /kʊ/ is different from /ke/, and /m/ differs from /en/.

Discreteness means that the boundary between linguistic symbols is clear. Since linguistic symbols are discrete, the chain of linguistic symbols can be segmented until the smallest linguistic symbols are assigned. For example, “She is good” can be divided into subject “she”, verb “is” and adjective “good”. If the order of these linguistic symbols is changed, the meaning of the sentence becomes completely different, as in “Is she good?”. The sentence now is a question instead of a statement.

Clearly, these discrete linguistic symbols of a language can be used repeatedly to combine with other linguistic symbols to express infinite thoughts, which leads to creativity of the language (Irvine, 2014).

**1.1.2 Language is creative**

Chomsky (1972) thinks that language consists of words, rules and interfaces. Among them, rules include syntax, morphology and phonology. Moreover, rules focus on creativity—the ability to produce and understand new language. Rules allow for open-ended creativity, including the expression of unfamiliar meanings and the production of vast numbers of combination.

**Example 1.2**

- (1) Daddy is great.
- (2) The picture is great.
- (3) The show is great.
- (4) Daddy eats breakfast.
- (5) The picture shows a more scenario of a street.
- (6) The show continues an hour and a half.

As indicated by the sentences in Example 1.2, any object can be the subject of a sentence, the subject can have various predicates, followed by diverse adjectives or nouns. Meanwhile, changing the combination of different words can lead to totally different meanings, as shown in Example 1.3.

**Example 1.3**

- (1) Is Daddy great?
- (2) Is the picture great?
- (3) Is the show great?
- (4) Does Daddy eat breakfast?
- (5) Does the picture show a more scenario of a street?
- (6) Does the show continue an hour and a half?

Clearly, language has the potential and creativity to develop infinitely. This is why a child, in spite of the poverty of stimulus, is able to create and understand new words and sentences he or she has never heard before.

Language is a means of expressing an infinite number of thoughts and ideas and can react in an infinite number of ways to new situations. It is creative also because it can adapt to changes in society and technology over time. New words and phrases are created to keep up with changing times. For example, phrases like “surfing the web” and “e-commerce” arose with the spread of the Internet. They were created at a time when the phenomenon occurred and quickly became used by many and recognized by all familiar with the computer.

**1.1.3 Language is a system**

Language is a system of symbols and rules that enable us to communicate (Harley, 2001). The symbols include speech sounds and letters in writing, while the rules include phonology, syntax, and morphology. Both symbols and rules can fall into smaller units that are interdependent on each other. Language is considered as a system primarily because it is made of these discrete yet interdependent linguistic units.

Language is a system also because it is rule-governed. Language has five aspects: phonology, morphonology, syntax, semantics, and pragmatics. Each part is rule-governed in itself:

- phonology—rules for how the language sounds, or should sound,
- morphology—rules for word formation,
- syntax—rules for word order and arrangements,
- semantics—rules of language content, and
- pragmatics—rules of language usage (function and appropriateness).

For example, certain creative formations of sounds are acceptable while others are not

permitted, as shown in Example 1.4.

**Example 1.4**

(1) grop (√) vs. grpo (x)

(2) fral (√) vs. frla (x)

(3) trast (√) vs. trsat (x)

Similarly, there are special constraints on the meaning and use of particular class of verbs, such as verbs of time expressions (e.g., *winter*, *vacation* and so on) (O’Grady et al., 2011), as shown in Example 1.5.

**Example 1.5**

(1) (√) Joe wintered in Michigan.

(2) (√) Jihong vacationed in Dalian.

(3) (x) Sally nooned in a hotel.

(4) (x) George five minuted in the shop.

It is clear that when a verb is created from a time expression, it must indicate a period of time. Hence, “Joe wintered in Michigan” means “Joe was in Michigan for the winter”, and “Jihong vacationed in Dalian” means “Jihong was in Dalian for the vacation”. Since “noon” and “minute” express “points in time” rather than “a period of time”, they cannot be used as verbs in such a creative way.

Evidently, in order for language to work, we need a way to say words (phonology), to know the meaning attached to these words (morphology), to understand the meanings of words combined within a sentence (syntax), and how greater the non-verbal context informs of the meaning of language (pragmatics). These different systems work in conjunction to make it easy and automatic to produce and understand a sentence or an utterance. This is especially clear when one tries to learn a new language and realizes how many different pieces he or she has to learn before he or she moves to navigate the language.

These systems are discrete and interdependent. Each system has sub-systems, yet they become fully meaningful only when they work together. This is why we say language is a “system of systems” (Mulder & Hervey, 1975). It is impossible to think of spoken language without phonology, the individual sounds that make up words. These sounds would become meaningless if they did not correspond to words that we understand as meaningful. Likewise, language would be incredibly limited if we had words but no way to pronounce them.

The ability to handle new utterances is best demonstrated in the production and comprehension of utterances/sentences. Every day, we are exposed to numerous novel

combinations of words, ideas and information that we have never heard, read or said before.

#### 1.1.4 Language is arbitrary

Language is arbitrary. This is because language is based on arbitrary symbols. Words have no inherent relation to the objects, people, and commands they stand for. For example, “chair” refers to the object that people can sit on, “pan” refers to the object that people use to fry food, and so on. The relationship between these signifiers (a form such as a sound, morpheme, word, phrase, clause, or sign like “chair” and “pan”) and the signified (an object, action, quality, or quantity) is arbitrary, but not planned or objective (Monaghan et al., 2014).

Language is arbitrary also because different sounds from different languages may convey the same meaning. For example, “water” (English), “eau” (French), “agua” (Spanish), and “shuǐ” (Chinese) all mean water. Also, same sounds from different languages may convey different meanings, such as “knee” (English), “nie” (“never” in German), and “nǐ” (“you” in Chinese).

#### 1.1.5 Language is changeable

Language is always changing. It changes across space, across social groups, and across time. Language change has many types, including sound changes, lexical changes, semantic changes, and syntactic changes.

Generation by generation, pronunciations evolve, new words are borrowed or invented, the meaning of old words drifts, and morphology develops or decays. A typical example in sound change that occurred between Middle and Early Modern English (around Shakespeare’s time) is known as the Great Vowel Shift. At that time, there was a length distinction in the English vowels, and the Great Vowel Shift altered the position of all the long vowels, in a giant rotation. The nucleus of the two high vowels (front “long i” /i:/, and the back “long u” /u:/) started to drop, and the high position was retained only in the offglide. Eventually, the original /i:/ became /ai/, so the “long i:” vowel in Modern English is now pronounced /ai/ as in the word “bite” (/bait/). Similarly, the “long u:” dropped all the way to /au/. So, the earlier /hʊ:s/ of “house” became /haus/.

All natural languages change. This happens for several reasons. First, language changes because the needs of its speakers change. New technologies, new products, and new experiences require new words to refer to them clearly and efficiently. So, new words and phrases like “Internet”, “website”, “homepage”, “e-commerce”, and “surf the Internet” emerged as technology developed. Another example is the word “text”. Originally it was used as in “text message” to show that one person sent another text rather than voice messages by phone. Gradually, people began using the shorter form “text” to refer to both the message and the process, as in “I got a text from my sister” or “He has already texted John”.



Another reason for language change is that no two people have had exactly the same language experience because of age, job, education level, region of the country, and so on. We pick up new words and phrases from all the different people we talk to. We borrow them from other languages (e.g., “sushi” and “tea”), we create them by shortening longer words (e.g., “gym” from “gymnasium”, “hippo” from “hippopotamus”) or by combining words (e.g., “brunch” from “breakfast”, “lunch” and “snark” from “snake” and “shark”), and we make them out of proper names (e.g., “Levis” and “Fahrenheit”).

The rate of change varies. Many factors influence the rate at which language changes, including speakers’ attitudes toward borrowing and change (Ottenheimer, 2009). When most members of a speech community value novelty, their language will change more quickly. When most members of a speech community value stability, then their language will change more slowly. When a particular pronunciation, word, grammatical form, or turn of phrase is regarded as more desirable, or marks its users as more important or powerful, then it will be adopted and imitated more rapidly.

The branch of linguistics that is expressly concerned with changes in a language over time is **historical linguistics**, also known as **diachronic linguistics**.

## 1.2 Aspects of language

Language has five aspects: phonetics and phonology, morphonology, syntax, semantics, and pragmatics.

### 1.2.1 Phonetics and phonology

#### 1.2.1.1 Phonetics

Phonetics is the study of the sounds of language. Phonetics is divided into three types according to the production (articulatory), transmission (acoustic), and perception (auditive) of sounds: acoustic phonetics, auditory phonetics and articulatory phonetics.

- Acoustic phonetics is the study of the physical properties of sounds.
- Auditory phonetics is the study of the way listeners perceive sounds.
- Articulatory phonetics is the study of how the vocal tracts produce the sounds. It is related to the articulatory movements in the chest, throat, mouth, and nose which produce them.

Sounds in English are classified into consonants and vowels. Table 1.1 presents English phonemic symbols that are used in this textbook.

**Table 1.1 English phonemic symbols (Field, 2007)**

| Consonants     |             |        |                 | Vowels      |             |      |               |
|----------------|-------------|--------|-----------------|-------------|-------------|------|---------------|
| Voiceless      |             | Voiced |                 | Short       |             | Long |               |
| Stops/Plosives |             |        |                 | ɪ           | <i>bit</i>  | i:   | <i>beat</i>   |
| p              | <i>pit</i>  | b      | <i>bit</i>      | e           | <i>let</i>  | ɑ:   | <i>far</i>    |
| t              | <i>tar</i>  | d      | <i>dot</i>      | æ           | <i>bad</i>  | ɔ:   | <i>fort</i>   |
| k              | <i>kite</i> | g      | <i>get</i>      | ʌ           | <i>hut</i>  | ʊ:   | <i>boot</i>   |
| Fricatives     |             |        |                 | ɔ           | <i>hot</i>  | ə:   | <i>hurt</i>   |
| f              | <i>fat</i>  | v      | <i>vet</i>      | ʊ           | <i>put</i>  |      |               |
| θ              | <i>thin</i> | ð      | <i>the</i>      | ə           | <i>ago</i>  |      |               |
| s              | <i>sit</i>  | z      | <i>zeal</i>     |             |             |      |               |
| ʃ              | <i>ship</i> | ʒ      | <i>treasure</i> | Diphthongs  |             |      |               |
| h              | <i>ham</i>  |        |                 | ei          | <i>late</i> | aʊ   | <i>loud</i>   |
| Affricates     |             |        |                 | ai          | <i>like</i> | ɪə   | <i>here</i>   |
| tʃ             | <i>chat</i> | dʒ     | <i>bridge</i>   | ɔi          | <i>soil</i> | eə   | <i>where</i>  |
| Nasals         |             |        |                 | əʊ          | <i>boat</i> | ʊə   | <i>lure</i>   |
|                |             | m      | <i>map</i>      |             |             |      |               |
|                |             | n      | <i>nose</i>     | Triphthongs |             |      |               |
|                |             | ŋ      | <i>tongue</i>   | aiə         | <i>hire</i> | aʊə  | <i>flower</i> |
| Approximants   |             |        |                 |             |             |      |               |
|                |             | w      | <i>we</i>       |             |             |      |               |
|                |             | r      | <i>rip</i>      |             |             |      |               |
|                |             | j      | <i>yet</i>      |             |             |      |               |
| Lateral        |             |        |                 |             |             |      |               |
|                |             | l      | <i>lap</i>      |             |             |      |               |

## I. Consonants

Consonants are produced as air from the lungs is pushed through the glottis (the opening between the vocal cords) and out of the mouth. They are classified according to voicing, aspiration, nasal/oral sounds, places of articulation and manners of articulation. Voicing is whether the vocal folds vibrate or not. The sound /s/ is called voiceless because there is no vibration, and the sound /z/ is called voiced because the vocal folds do vibrate. Only three sounds in English have aspiration: /b/, /p/ and /t/. An extra puff of air is pushed out when these sounds begin a word or stressed syllable. Hold a piece of paper close to your mouth when you are saying the words “pin” and “spin”. You should notice extra air when you say “pin”.



Aspiration is indicated in writing with a superscript “h”, as in /p<sup>h</sup>/. Nasal sounds are produced when the velum (the soft palate located in the back of the roof of the mouth) is lowered and air is passed through the nose and mouth. Oral sounds are produced when the velum is raised and air passes only through the mouth.

### A. Places of articulation

According to places of articulation, consonants can be labial, bilabial, labiodental, dental, interdental, alveolar, alveopalatal/postalveolar, palatal, velar, glottal, or labiovelar.

- Labial: Any sound made with closure or near-closure of the lips.
- Bilabial: Sounds involving both lips—/p/ /b/ /m/.
- Labiodental: Sounds involving the lower lip and upper/front teeth—/f/ /v/.
- Dental: Sounds produced with the tongue placed against or near the teeth.
- Interdental: Tongue placed between the upper and the lower teeth—/θ/ /ð/.
- Alveolar: Tongue near the alveolar ridge on roof of the mouth (in between the teeth and the hard palate) (Within the oral cavity, a small ridge protrudes from just behind the upper front teeth, which is called the alveolar ridge)—/t/ /d/ /s/ /z/ /l/ /n/.
- Alveopalatal/Postalveolar: The roof of the mouth rises sharply just behind the alveolar ridge (tongue towards soft palate)—/ʃ/ /ʒ/ /tʃ/ /dʒ/.
- Palatal: Tongue on the hard palate (the highest part of the roof of the mouth is called palate)—/j/.
- Velar: Tongue near the velum (the soft area toward the rear of the mouth is called the velum)—/k/ /g/ /ŋ/.
- Glottal: Space between vocal folds—/h/.
- Labiovelar: Tongue raised near the velum and the lips rounded at the same time—/w/.

### B. Manners of articulation

According to manners of articulation, consonants can be grouped as oral, nasal, stop, fricative, affricate, approximant, liquid and lateral.

- Oral vs. nasal phones: When the velum is raised, cutting the airflow through the nasal passages, oral sounds are produced. The velum can also be lowered to allow air to pass through the nasal passages, producing a sound that is nasal.
- Stops: Obstruct the airstream completely.
- Fricatives: The airstream is partially obstructed and a turbulent airflow is produced.

- Affricates: Stop the airstream, then release it.
- Approximants: Consonant sounds produced by complete or partial closure of the vocal tract, similar to a fast vowel.
- Liquid: A consonant sound in which the tongue produces a partial closure in the mouth, resulting in a resonant, vowel-like consonant, such as English /l/ and /r/.
- Laterals: Consonant sounds produced with the airflow around the sides of the tongue, such as varieties of /l/.

One should practice saying the sounds of the English alphabet to see if they can identify the places of articulation in the mouth. The sounds are described by voicing, place of articulation, and then manner of articulation. For example, the sound /j/ is called a voiced palatal glide and the sound /s/ is called a voiceless alveolar fricative.

Table 1.2 Features of consonants in English

|                     | Bilabial | Labiodental | Interdental | Alveolar | Postalveolar | Palatal | Velar  | Glottal |
|---------------------|----------|-------------|-------------|----------|--------------|---------|--------|---------|
| Stop/Plosive        | p<br>b   |             |             | t<br>d   |              |         | k<br>g |         |
| Nasal (stop)        | m        |             |             | n        |              |         | ŋ      |         |
| Fricative           |          | f<br>v      | θ<br>ð      | s<br>z   | ʃ<br>ʒ       |         |        | h       |
| Affricate           |          |             |             |          | tʃ<br>dʒ     |         |        |         |
| Approximant         | w        |             |             |          |              | j       |        |         |
| Lateral approximant |          |             |             | l        |              |         |        |         |

II. Vowels

Vowels are produced by holding the tongue in certain positions and letting the airstream pass over it without any kind of interruption or friction. Most vowels are voiced (vowels in English are all voiced, while Japanese has voiceless vowels). They are classified according to the height of the tongue, the part of the tongue involved, and the position of the lips. The tongue can be high, middle, or low; and the part of the tongue used can be front, central, or back. Generally, long vowels are tense and short vowels are lax. Hence, the sound /ɪ/ can be written as a front, high, lax, unrounded vowel.

Many languages also have vowels called diphthongs, a sequence of two vowel sounds. Examples in English include /ɔi/ in “boy” and /aʊ/ in “cow”. English also has triphthongs—a sequence of three vowel sounds, such as /aiə/ in “fire” and /aʊə/ in “sour”.