

LING 110 Chapter IV: The Alphabet

- **Introduction**
 - One of the most important inventions in human history.
 - Two Advantages to a writing system:
 1. Allows us to communicate with others outside of shouting range.
 2. An extension to our memory.

LING 110 The History of Writing

- There are many legends and stories about the invention of writing.
 - Greek Legend: Cadmus, prince of Phoenicia and founder of the city of Thebes, invented the alphabet and brought it with him to Greece.
 - Chinese Fable: the four-eyed dragon-god Cang Jie invented writing.
 - Icelandic Saga: Odin was the inventor of runic script.

LING 110 The History of Writing con't

- However, it is evident that, before a single word was written, uncountable billions were spoken.
- Therefore, it is unlikely that a particularly gifted ancestor awoke one morning and decided, “Today I’ll invent a writing system.”
- In fact, the invention of writing systems comes relatively late in human history, and its development was gradual.

Different Types of Writing Systems

Different Writing Systems

- We can distinguish among a number of different writing systems based on what the symbols represent.
1. Petroglyphs:
 - Cave drawings, drawn by people living more than 20, 000 years ago, can still be ‘read’ today.
 - They are literal portrayals of life at that time.
 - They may be aesthetic expressions rather than pictorial communications.
 - Example: Altamira cave in northern Spain.

Different Types of Writing Systems

2. Pictographic

- The symbols are actual pictures of the objects that they represent.
- Disadvantages to a purely pictographic system.
 - 1. Not everyone is an adequate artist.
 - 2. Some concepts are not easily/obviously pictured.

Different Types of Writing Systems

2. Pictographic con't

- These later drawings were clearly “picture writings”.
- Unlike modern writing systems, each picture or pictogram is a direct image of the object it represents.
- There is a non-arbitrary relationship between the form and the meaning of the symbol.
- This early form of “writing” did not have any direct relation to the language spoken, because the pictures represented objects in the world rather than the linguistic names given to these objects (not sounds).

Different Types of Writing Systems

2. Pictographic con't

- Pictographic writing has been found among peoples throughout the world, ancient and modern: among Africans, First Nations of North America, the Inuit, the Incas of Peru, the Yukagirians of Siberia, and the people of Oceania.
- Pictograms are used today in international road signs and in other places where the native language of the region might not be adequate.
- The advantage of such symbols is that they can be understood by anyone because they do not depend on the words of any language.

Types of Writing Systems con't

Rebus:

- One way to work around the representation of an abstract concept.
- Borrow the symbol for a concrete object whose name is a homophone for that of the abstract concept.

For example: son = sun

- We do this often with letters and numbers:
b4 = before k9 = canine
- This begins the process of associating symbols with sounds in the language instead of pictures or concepts.

Types of Writing Systems con't

Rebus con't:

- When a graphic sign no longer has any visual relationship to the word it represents, it becomes a *phonographic symbol*, standing for the sounds that represent the word.
- A single sign can then be used to represent all words with the same sounds (the homophones of the language).
- This is the *rebus principle*.
- A rebus is a representation of words or syllables by pictures of objects whose names sound like the intended word or syllable.

Types of Writing Systems con't

Rebus con't:

- This system is not an efficient one, because in many languages words cannot be subdivided into sequences of sounds that have meanings by themselves.
- It would be difficult, for example, to represent the word *English* in English according to the rebus principle.
- *Eng* by itself does not “mean” anything, nor does *glish*.

Different Types of Systems con't

3. Ideographic

- A symbol represents a concept, abstract or concrete.
- Advantages:
 - 1. Greater expressiveness.
 - 2. Understandable by speakers of different languages.
 - 3. It is possible to read literature in an Ideographic system.

Different Types of Systems con't

3. Ideographic con't

- Once a pictogram was accepted as the representation of an object, its meaning was extended to attributes of that object or concepts associated with it.
- Thus, a picture of the sun could represent “warmth”, “heat”, “light”, “daytime”, and so on.
- Pictograms thus began to represent ideas rather than objects.
- Such generalized, abstract pictograms are called ideograms.

Different Types of Systems con't

3. Ideographic con't

- The differences between the two is not always clear.
- Ideograms tend to be a less direct representation, and one may have to learn what a particular ideogram means.
- Pictograms tend to be literal.
- Pictograms and Ideograms became stylized:
 - Poor artists
 - Creative abstractions of the time
- The simplifying conventions that developed so distorted the literal representations that it was no longer easy to interpret symbols without learning the system.

Different Types of Systems con't

3. Ideographic con't

- The ideograms became linguistic symbols as they came to stand for the sounds that represented the ideas, the words of the language.
- This stage represented a revolutionary step in the development of writing systems.

Different Types of Systems con't

4. Symbols Representing Sounds
 - Significantly reduces the number of symbols required (the number of sounds in a system is vastly less than the number of concepts that a language must potentially represent).

Different Types of Systems con't

4. Symbols Representing Sounds con't

I. Syllabary

A writing system in which symbols represent syllables.

ex. Japanese

II. An Alphabet

Each symbol ideally represents a single sound.

Note: Need to qualify this definition.

1. Relationship over time becomes distorted.

ex. English

Different Types of Systems con't

II. Alphabet con't

2. We usually don't want to represent every possible sound in a language, we only want to represent those that are distinctive.

3. Sometimes we don't want the orthographic system to accurately represent the sounds at all.

In order to develop a syllabary or alphabet, it is necessary to do a deeper analysis of the sounds and words of language that is required for a simple pictographic system.

It is necessary to understand what the distinctive sounds of the language are.

History of the Alphabet

The development of the alphabet used for representing English.

Origins

- **Earliest Alphabets: Pictographic Systems**
 - Born out of human need: ex. Business transactions
 - Eventually applied to other areas of life.
 - New signs for other concepts were created.
 - Principles by which signs were interpreted were augmented.

Rebus Principle

Existing signs were used for their sounds as well as for their original meaning.

This principle is called *rebus*.

- Through this principle, symbols began to represent sounds.
- The Egyptians for example began to reinterpret the hieroglyphics using the rebus principle.
 - This gave many symbols double functions.
 - The hieroglyphic system consisted of a large set of symbols for ideas and objects, for sounds and determinatives and, 22-24 symbols for consonants.

Semites Contribution

- Semites (1700 BCE) borrowed the symbols for the consonants.
- Organized them into an order and named them.
- Still not an alphabet because there are no symbols for vowels.
- It is a system that represents only sounds.
- Easier to learn than the Egyptian and Sumerian systems.
- The names of the letters were words for the objects that the symbols represented.
 - Vaguely familiar if you are aware of the Greek system.

On to the Phoenicians & Greeks

- The Phoenicians used the Semitic system to establish a trading network that eventually extended to Greece.
- About 1000 BCE, the Greeks used the Phoenician system as a model to represent their language.
 - They mapped the Phoenician symbols onto the sounds of Greek.
 - Since the Greeks wanted vowels represented, they used the Phoenician symbols for consonants that did not exist in Greek for the vowels.

Letter by Letter

- Since the Greeks did not use the consonant sound, *alef*, represented by what looks like an upside down A, they used it to represent a vowel.

Greek con't

- This move marks the creation of the first true alphabet in which both consonants and vowels are represented.
- Many characters have a history that can be similarly traced to pictographs.
- If we look at the Greek Alphabet used in classical times we notice a couple of interesting things.
 1. Some of the characters have not survived into English, and those that did changed shape.
 - Some of these characters represent sounds that do not exist in English as syllable initial sequences.
 - An example would be the consonant cluster ps, which was so common in Greek that they had a symbol to represent it.

Greek con't

2. Also, there are some curious sequences in the ordering of the letters.
 - The letter zeta Z is clearly the historical antecedent used in the English system.
 - Instead of being the last letter in the ordering it is 6th in the Greek system.

The Roman Alphabet

- Romans borrowed the alphabet from the Greeks, although not directly.
- The Etruscans served as a filter for many things Greek.
- Had to adapt the Greek alphabet to fit their sound systems.
 - For example: The Etruscans did not need the character *gamma*.
 - Thus they removed it from the alphabet.
 - However, when the Romans borrowed the alphabet from the Etruscans, they needed a symbol for the voiced velar stop.
 - The Etruscan alphabet no longer had an appropriate symbol.

Romans con't

- It did have the symbol zeta which the Romans did not need because Latin does not have the corresponding sound.
- So, the Romans converted *zeta* in to what is now *G*.
- This is just one example. Your text gives you examples that include the sound [k].
- The early Roman alphabet consisted primarily of letters from the Greek, some of which represent the same sounds as in the Greek system, some adapted to new sounds and some changed in shape to create new letters.

Later Developments

The alphabet that is used in English and many other languages was adapted from the early Latin alphabet by creating new characters to meet the needs of each adopting language and to adapt to changes in the Latin language.

- For example: The re-introduction of Z at the end of the alphabet sequence.
 - This character was added because it was necessary to distinguish between [s] and [z].
 - Need to distinguish between *sip* and *zip*.

Later Developments con't

Of linguistics interest is the addition of: J, V, W, and Y.

The Case of Y

Added to the Alphabet eventually used by English in approx. 50 BCE.

The English innovation was to use it to represent the consonant [y].

In the Romance languages, the character *j* was created from *i* to replace *i* when it had previously represented [y].

The story of Y con't

- The character *j* was placed next to *i* in the alphabetic sequence.
- Thus *y* and *j* can be used to roughly determine the language family of the words containing them.
 - Words with *y* used to represent the consonant [y] are likely English while those with *j* are likely Latin or Romance.
 - Two further pieces of evidence:
 - 1. Dialectical differences
 - 2. Speeling

The story of Y con't

Note: There are two classes of exceptions to these observations:

1. This spelling rule does not hold for Greek words. (Spelling rules are Language specific.)
2. Y in compounds. If a y terminates the first member of the compound, it remains unchanged.

The character *u* has a similar story.

Find out: How does *w* -double u- betray its origin?

Spelling Rules

In a perfect alphabet system, a sound is represented by a single character.

However, systems must be adapted to accommodate new innovations.

New symbols are rarely created.

Instead take a familiar symbol and mark it somehow to show that it is being used in a different way.

One example of this is a diacritic mark.

Examples include: the German umlaut and the cedilla in French.

The Digraph

- Another kind of mark is to use another familiar symbol in conjunction with one felt to be closest to the new sound to indicate that it is being used in a new way.
- This sequence is called a **digraph**.
- In English for example we have used *h* in this way. When the sound [ʃ] entered the language, the digraph *sh* was created to represent it: cf. *Sheep and shoot*.
- Similarly *ch* was adapted from Greek.

Letters for a single sound

This innovation of using sequences of letters to represent a single sound introduces the notion of *spelling rule* to the system.

No longer are all sounds represented by a single character.

Instead, some sounds are represented by a sequence of symbols each of which individually represents different sounds.

Example: $s=[s]$ and $h=[h]$ but $sh=[ʃ]$

Mimicing of Phonological Rules

Pervasive in the representation of English vowels.

Old English made a distinction between long and short vowels.

During the OE period, 2 phonological rules affecting vowel length entered the language that correlated vowel length with syllable structure.

The two phonological rules:

1. All vowels in closed syllables are short.
2. All vowels in open syllables are long.

Once these rules were established, vowel length was completely governed and consequently predicted by syllable structure.

Rules for Vowels con't

- In OE long vowels were marked with a macron.
- This was lost after the Norman Invasion.
- A new method was required:
 - 1. Double vowels: food & feed
 - 2. Mimic the rules governing vowel length by creating orthographic open and closed syllables. (Double the first consonant of the syllable). This is commonly seen in verb conjugations.

Rules for Vowels con't

While mimicing a closed syllable was relatively easy, representing an open syllable was slightly harder.

It is necessary to create the sequence VCV

If the second vowel does not already exist then one must be created with the stipulation that it is not representing an actual vowel.

The letter *e* was selected as this second vowel and used to create open syllables. The silent *e*.

Example: tap/tape

Silent e con't

When an open syllable is naturally created, the *silent e* is not necessary and is omitted.

For example: *grope/groping*

The character *e* at the end of a word does not represent a sound but rather contributes to the representation of sounds by other characters.

Inconsistencies in Spelling

Inconsistencies in spelling have prompted people to want to reform English spelling.

Problem: The spelling system shows the relatedness among words.

If we spelled words exactly as they were pronounced we would lose this feature.

Conclusion

This history of the alphabet is the story of cultures.

Why do we need to know about the alphabet?

In the presentation of the text, we will use plain English orthography when it agrees with the phonetic facts.

However, when English orthography does not properly represent the facts, we will move to representing words phonetically.

This is where your IPA will be invaluable.

Read Chapter V: The Structure of Words for Tuesday.