# LEARN TO READ KOREAN:
# AN INTRODUCTION TO THE HANGUL ALPHABET*

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## Abstract

In the mid 15th century the Korean scholar-king Sejong invented *Hangul*, the native Korean alphabet. This was the beginning of a long process by which *Hangul* gradually supplanted Chinese characters as Korea's primary writing system, a process which is still ongoing but nearly complete today. This presentation will introduce the historical and cultural background behind the invention of *Hangul* and describe the systematic linguistic principles on which the script is based. The 1446 text that introduced *Hangul* proclaimed that it was so simple that "a wise man can master it in a morning, and even a stupid person can learn it in ten days." In this presentation we put this claim to the test by attempting to learn to read Korean in under an hour.

## INTRODUCTION

If you leave the convention center where IPAC'16 is held and have a chance to look around during your stay in Korea—you will everywhere see the Korean alphabet, an indigenous script invented in Korea in the 15th century. This alphabet, called **Hangul**, has a number of remarkable features that make it unique among the world's scripts, and that justify the pride that Koreans take in it as one of their great cultural achievements. Korea is one of the few countries on earth that has an official holiday dedicated to its alphabet: Hangul Day, celebrated every year on October 9.

## ORIGINS

Before we talk about the origins of the alphabet, we need to go far back in time to learn about the history of writing on the Korean peninsula. Korea is situated between China and Japan, and for the last 2,000 years its history has been intertwined with those of these two great Asian civilizations.

### Invention and Development of Chinese Writing

China's recorded history stretches back over 3,000 years. The Chinese were one of only four civilizations in the history of our species known to have invented the concept of writing. The earliest extant texts, divinatory inscriptions carved into cattle bones and turtle shells, date back to the thirteenth century BCE. Although what we see here is already a fully functional writing system, capable of representing all the words and grammatical structures of spoken Chinese, the pictographic origins of some characters are still apparent.

Here, for example, is the graph writing the word *mǎ* meaning 'horse'.



Figure 1: Oracle bone character for 'horse'.

It's sideways, but otherwise quite recognizable: we can see the mouth, the eye, the mane, two legs, and a tail. Here's the modern form.



Figure 2: Modern character for 'horse'.

By the fourth century, Chinese characters had essentially reached their modern form. As you can see, they have become highly stylized and conventionalized, losing their pictographic quality.

### Early Korean Writing

It was this type of writing that was first encountered by the Koreans, as the expanding Chinese empire moved into the Korean peninsula. One of the earliest extant examples of writing on the Korean peninsula is the *Gwanggaeto* Stele, seen here in replica (Fig. 3).
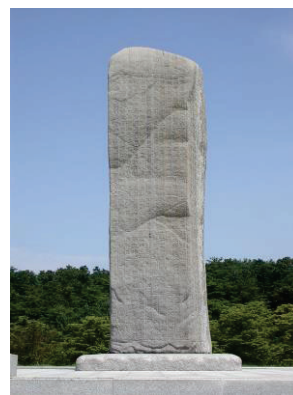


Figure 3: Replica of the *Gwanggaeto* Stele.

In the detail rubbing of the stele (Fig. 4), we can see that it is written in Chinese characters. In fact, it is written in the Chinese language. For over a thousand years, Classical Chinese was the official written language of Korea. All educated Koreans read and wrote Classical Chinese, a language different from the one they spoke.
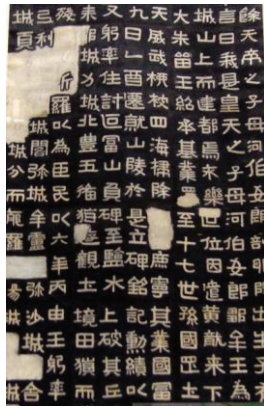
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Figure 4: Detail from rubbing of the *Gwanggaeto* Stele.

Over time, the Koreans learned to adapt Chinese characters to represent the spoken Korean language. But this kind of writing had only limited application. Classical Chinese remained the official written language, much as Latin was the official written language of most of Europe in the Middle Ages, while spoken Korean could only be awkwardly and imperfectly rendered using Chinese characters. This was all to change in the 15th century.

### King Sejong and Hangul

King Sejong the Great ascended the throne of the Korean Joseon dynasty in 1418, ruling until his death in 1450. He was a polymath, proficient in literary arts, scientific investigation, and military matters. A massive statue, erected in Seoul in 2009, sits above an underground exhibition hall that is dedicated to his life and his many achievements. Of these achievements, the invention of the alphabet stands as his most enduring legacy.

When announcing the alphabet to the Korean people, Sejong explained his motivation this way: "The language of our nation is different from that of China and is not compatible with Chinese characters. As a result, the concerns of the ordinary illiterate people cannot be easily communicated to their rulers. Saddened by this, I have invented twenty eight letters. It is my desire that all the people may easily learn them and use them daily."

By the way, if you have any Korean 10,000-*won* bills in your possession, you have been walking around with a picture of King Sejong in your pocket.

The original name of the alphabet was "Correct Sounds for Enlightening the People". King Sejong, aided by a small group of advisors, invented it in 1443 and promulgated it in 1446. It was accompanied by an explanatory text explaining the principles underlying its invention and giving examples of its proper usage.

### Alphabetic Principles

What is perhaps most remarkable about the alphabet is that the shapes of the letters themselves were chosen based on scientific principles, including a highly sophisticated understanding of articulatory phonetics. Yet it was remarkably simple to learn and use. One of the king's advisors said, without exaggeration, that a wise person could master it in the space of a morning, and even a stupid person could learn it after a week's study.

So what are these scientific principles? Figure 5 is a page from the section of the text laying out the individual consonant letters and their sound values.
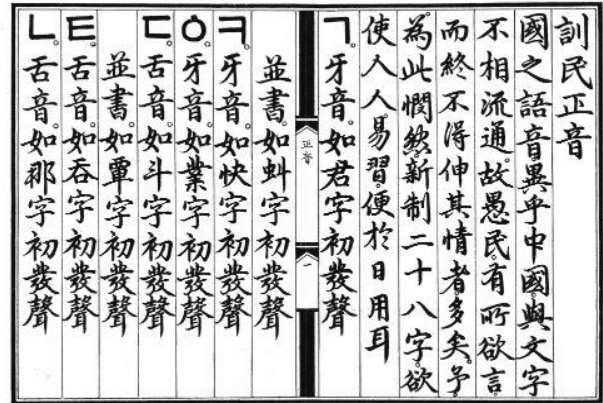


Figure 5: *Hunmin jeongeum*.

Let me draw your attention to the three letters at the upper left. Note their similarity of shape. These letters are an iconic representation of the position of the tongue when articulating certain sounds.

The four consonant sounds *n*, *d*, *t*, and *l* are all pronounced with the tip of the tongue angled up to make contact with the alveolar ridge, the hard bony structure just behind the upper teeth. If you pronounce all four consonant sounds, you can feel where your tongue is making contact with the roof of your mouth. The place is the same for all four sounds. Try saying them between two *a* vowels: *ana*, *ada*, *ata*, *ala*.

Because these sounds are all pronounced in the same place in the mouth, their letter shapes are all based on the same simple form, representing the position of the tongue. To distinguish the letters, additional strokes are added onto the base form.

This connection between letter shapes and tongue gestures is unique among writing systems of the world. It results in an alphabet for which sounds that sound similar are represented by letters that look similar.

As another example, consider the letters for the *g* and *k* sounds. These sounds are pronounced similarly and sound similar. For this reason they are written with similar letters: ㄱ and ㅋ, respectively; the latter is derived from the former by the addition of an extra stroke.

A second unique feature of the Korean alphabet is the combination of letters into syllable blocks. Let me show you how this works. The city name **Busan** contains five sounds: the consonant sound *b*, the vowel sound *u*, consonant *s*, vowel *a*, consonant *n*.

In the Hangul alphabet, these five sounds are written like this: ㅂㅜㅅㅏㄴ. However, this linear string of five letters is not how Busan is written in Korean. Busan is made up of two syllables, *Bu* and *san*. The letters of each syllable are combined into a rectangular shape, like so: 부산.

Why are the letters arranged this way, instead of linearly as in most alphabets? The original reason is the influence of Chinese writing. Chinese characters occupy a notional rectangle, and each represents one syllable. The idea that syllables are self-contained graphic units is a natural outcome of being literate in Chinese. Arranging Korean letters in syllable blocks also allowed for an aesthetically pleasing way of intermixing Chinese characters and Hangul letters within a single text, in which each graphic unit represents a single syllable of speech.

The Chinese characters 釜山, meaning "Cauldron Hill" were the way that Busan was originally written before the invention of the alphabet. There is one rectangular character for each syllable, a structure imitated by the arrangement of the Korean letters.

## MODERN USAGE

Through much of the 20$^{th}$ century, the Korean language had a mixed-script writing system, employing both Hangul letters and Chinese characters side-by-side. Figure 6, a Korean newspaper from the 1980s, shows the mixed-script usage.



Figure 6: *Chosun Ilbo* of April 11, 1984.

Within the same headline, some Korean words are written in Chinese characters and some in the Korean alphabet. Nowadays, however, Chinese characters have almost completely fallen out of use in Korean writing. This is fortunate for foreign learners interested in reading Korean.

## READING HANGUL

Now it's time for us to practice reading Hangul. For this you will need to consult the handout (Appendix 1).

### Korean Syllable Structure

In order to correctly interpret the sound values of Korean letters, we need a basic understanding of Korean syllable structure. As shown on the first page of the handout, Korean syllables have three parts: an *initial consonant*, a *medial vowel*, and a *final consonant*. Only the vowel must be present in all syllables.

The arrangement of letters in a syllable block follows the syllable structure. Recall the written form 산 of *san*, the second syllable of Busan, which we will use as an example.

The letter representing the initial consonant sound is written at the top or top left. In this case, the letter ㅅ for the *s* sound is at the top left.

The letter representing the vowel sound is written below or to the right of the initial, depending on its shape. Vertically-oriented vowels, like ㅏ here writing the sound *a*, are written to the right.

The letter representing the final consonant sound is written at the bottom. In this case, it is ㄴ for *n*.

### Reading and Transcribing Korean Writing

To read a syllable, look up the value of each letter depending on its position. Use Tables 1-3 on the handout to get the correct transcriptional value.

Let's practice by reading the word 블루칩. Obviously, even if we can make out the pronunciation, we can't understand the meaning of Korean words that we haven't learned. So we will work with words that are recognizable to us because they have been borrowed into Korean from English or other European languages. This word is a borrowing from English, and is related to the stock market.

Breaking down the syllables blocks we arrive at this sequence of letters:

ㅂ ㅡ ㄹ , ㄹ ㅜ , ㅊ ㅣ ㅂ

Checking the tables in the handout, and mindful of whether consonant letters appear in initial or final position, we arrive at the following transcription.

*beulluchip*

Following the note on the handout reminding us that *eu* represents a vowel similar to that in English *bull*, we can recognize that this is the Korean word for 'blue chip (stock)'. Because of the systemic constraints of Korean pronunciation, the initial *bl-* cluster of English has been broken up with the insertion of the 'default' vowel *eu*.

Note that the way we transcribe and pronounce a Korean letter depends on its position in the syllable. In this example, the same letter ㅂ writes a *b* sound at the beginning of a syllable and a *p* sound at the end of a syllable.

## CONCLUSION

Invented by a single person at a single time, the Korean alphabet is highly systematic. It is unique among the world's scripts in several respects: the iconic consonant letter shapes that imitate the physical organs of speech production; the correlation between similarity of letter shape and similarity of pronunciation; and the grouping of letters into syllable blocks.

Because of this high degree of systematicity, the Korean alphabet is relatively easy for foreigners to learn. Even without a knowledge of the Korean language, foreign visitors to Korea can benefit from a basic knowledge of the script to help them recognize place names, European-language borrowings, and signage.

For more information on the Korean alphabet, see the Wikipedia entry [2], the web site of the National Institute of Korean Language [3], and Kim-Renaud [4]. On the

Korean language in general, including its relationship to writing, see Lee and Ramsey [5]. For more on the alphabet's inventor King Sejong, consult his biographies [6, 7].

# APPENDIX

This appendix is a modified version of the handout that was distributed as part of the oral presentation.

## Korean Syllable Structure

Korean syllables consist of three parts:

- (I) **I**nitial:   the beginning consonant sound
- (V) **V**owel:  the vowel sound
- (F) **F**inal:    the ending consonant sound

Not all syllables have initials and finals; only the vowel must be present.

- The second syllable *san* of Busan has initial *s*, vowel *a*, and final *n*.
- The first syllable *bu* of Busan has initial *b* and vowel *u*; it has no final.
- The second syllable *ul* of Seoul has no initial; it has vowel *u* and final *l*.
- The word *o* 'five' consists only of a vowel; it has no initial or final.

## Korean Letters, Sounds, and Romanization

There are currently three widely used Romanizations of Korean: Yale, McCune-Reischauer, and the Revised Romanization. The Revised Romanization became South Korea's official Romanization in 2000, and is used throughout.

The Romanized form of a Korean letter depends on two factors: its position in the syllable and the letters that are adjacent to it. Tables 1-3 list the Romanized equivalents of Hangul letters according to syllable position.

Table 1: Initial Consonant Letters

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | ㄱ | g | ㄲ | kk | ㅋ | k |
| 2 | ㄴ | n | | | | |
| 3 | ㄷ | d | ㄸ | tt | ㅌ | t |
| 4 | ㄹ | r (l) | use *l* only when the preceding syllable ends in *l* | | | |
| 5 | ㅁ | m | | | | |
| 6 | ㅂ | b | ㅃ | pp | ㅍ | p |
| 7 | ㅅ | s | ㅆ | ss | | |
| 8 | ㅇ | -- | this dummy letter must be written when there is no initial | | | |
| 9 | ㅈ | j | ㅉ | jj | ㅊ | ch |
| 10 | ㅎ | h | | | | |

Table 2: Vowel Letters

| | Vertical letters ( ㅣ shape) | | | | Combinations | |
|---|---|---|---|---|---|---|
| 1 | ㅏ | a | ㅑ | ya | ㅘ | wa |
| 2 | ㅓ | eo | ㅕ | yeo | ㅝ | wo |
| 3 | ㅣ | i | | | | |
| 4 | ㅐ | ae | ㅒ | yae | ㅙ | wae |
| 5 | ㅔ | e | ㅖ | ye | ㅞ | we |
| | **Horizontal letters ( ─ shape)** | | | | | |
| 6 | ㅗ | o | ㅛ | yo | ㅚ | oe |
| 7 | ㅜ | u | ㅠ | yu | ㅟ | wi |

Three of the simple vowel sounds are Romanized with two letters. It is important to remember that the following digraphs represent single sounds:

- *eo* ㅓ   similar to the vowel sound in the English words *hum*, *bud*, e.g. S<u>eo</u>ul, Inch<u>eo</u>n
- *ae* ㅐ   similar to the vowel sound in the English words *head*, *bell*, e.g. T<u>ae</u>gwondo
- *eu* ─   similar to the vowel sound in the English words *good*, *bull*, e.g. Hang<u>eu</u>l 'Hangul'

Table 3: Final Consonant Letters

| 1 | ㄱ | k | ㄲ | k | ㅋ | k |
|---|---|---|---|---|---|---|
| 2 | ㄴ | n | | | | |
| 3 | ㄷ | t | | | ㅌ | t |
| 4 | ㄹ | l | | | | |
| 5 | ㅁ | m | | | | |
| 6 | ㅂ | p | | | ㅍ | p |
| 7 | ㅅ | t | ㅆ | t | | |
| 8 | ㅇ | ng | | | | |
| 9 | ㅈ | t | | | ㅊ | t |
| 10 | ㅎ | t | | | | |

For simplicity, double-letter finals like ㄹㄱ (*lk*) and ㅄ (*ps*) are not listed here, even though they do occur in some syllables.

### Assembling Korean Letters into Syllable Blocks

For simplicity, double-letter finals like ㄹㄱ (*lk*) and ㅄ (*ps*) are not listed here, even though they do occur in some syllables.

All syllable blocks are written in identically-sized notional rectangles. The letter shapes may be slightly distorted in order to fit together attractively within the rectangle.

The Hangul initial letter is written at the top and the final letter is written at the bottom. The relative position of all the letters depends on the graphic shape of the vowel letter:

- Vertically-oriented vowel letters are written to the right of the initial: *san* 산
- Horizontally-oriented vowel letters are written below the initial: *bu* 부
- Combination vowel letters are written both below and to the right: *wi* 위 (second syllable of *kiwi*, the type of fruit)

The six most common arrangements of written letters into syllable blocks are show in Table 4.

Table 4: Syllable Block Configurations

| I V 가 *ga* | I / V 고 *go* | I / V 과 *gwa* |
|---|---|---|
| I V / F 간 *gan* | I / V / F 곤 *gon* | I / V / F 관 *gwan* |

A final note: This description is highly over-simplified! Many details have been omitted.

### Exercises

1) Using Tables 1-3 above, rewrite the following Korean place names and personal names in Romanized form.

(a) Identify the initial letter **I**. It will be at the top or the top left of the syllable block.

(b) Find the initial letter **I** in Table 1, and copy down the Romanized form.

(c) Identify the vowel letter or letter combination **V**. It will be below the initial, to the right of the initial, or both below and to the right.

(d) Find the vowel letter(s) **V** in Table 2, and copy down the Romanized form.

(e) There may not be a final letter **F**. If there is one, it will always appear at the bottom below the vowel.

(f) Find the final letter **F** in Table 3, and copy down the Romanized form.

**Important**  The same consonant letter may be Romanized differently depending on whether it is in initial or final position. Be sure to consult the correct table!

**Important**  When the letter ㅇ appears in initial position, it represents *no sound* and so nothing should be transcribed. When it appears in final position, it represents the sound *ng*.

*It takes some practice to identify the individual letters when they are squished together within a syllable block, so take your time and don't be discouraged.*

a. 부산 _____

b. 서울 _____

c. 인천 _____

d. 포항 _____

e. 세종 _____

f. 평양 _____

g. 현대 _____

The Hangul initial letter is written at the top and the final letter is written at the bottom. The relative position of all the letters depends on the graphic shape of the vowel letter:

2) The following Korean technical terms are borrowed from English or other European languages. After Romanizing them, match them to their English equivalents.

| | | | |
|---|---|---|---|
| a. 이온 | _____ | 1. | *wormhole* |
| b. 웜홀 | _____ | 2. | *black hole* |
| c. 게놈 | _____ | 3. | *internet* |
| d. 인터넷 | _____ | 4. | *computer* |
| e. 블랙홀 | _____ | 5. | *ion* |
| f. 컴퓨터 | _____ | 6. | *beamline* |
| g. 칩 | _____ | 7. | *genome* |
| h. 에너지 | _____ | 8. | *energy* |
| i. 빔라인 | _____ | 9. | *chip* |

If you are sitting near a Korean speaker, ask him or her to pronounce the Korean words out loud. You will notice that some changes in pronunciation have taken place in the adaptation of the foreign words to fit the restrictions of the Korean sound system..

# REFERENCES

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