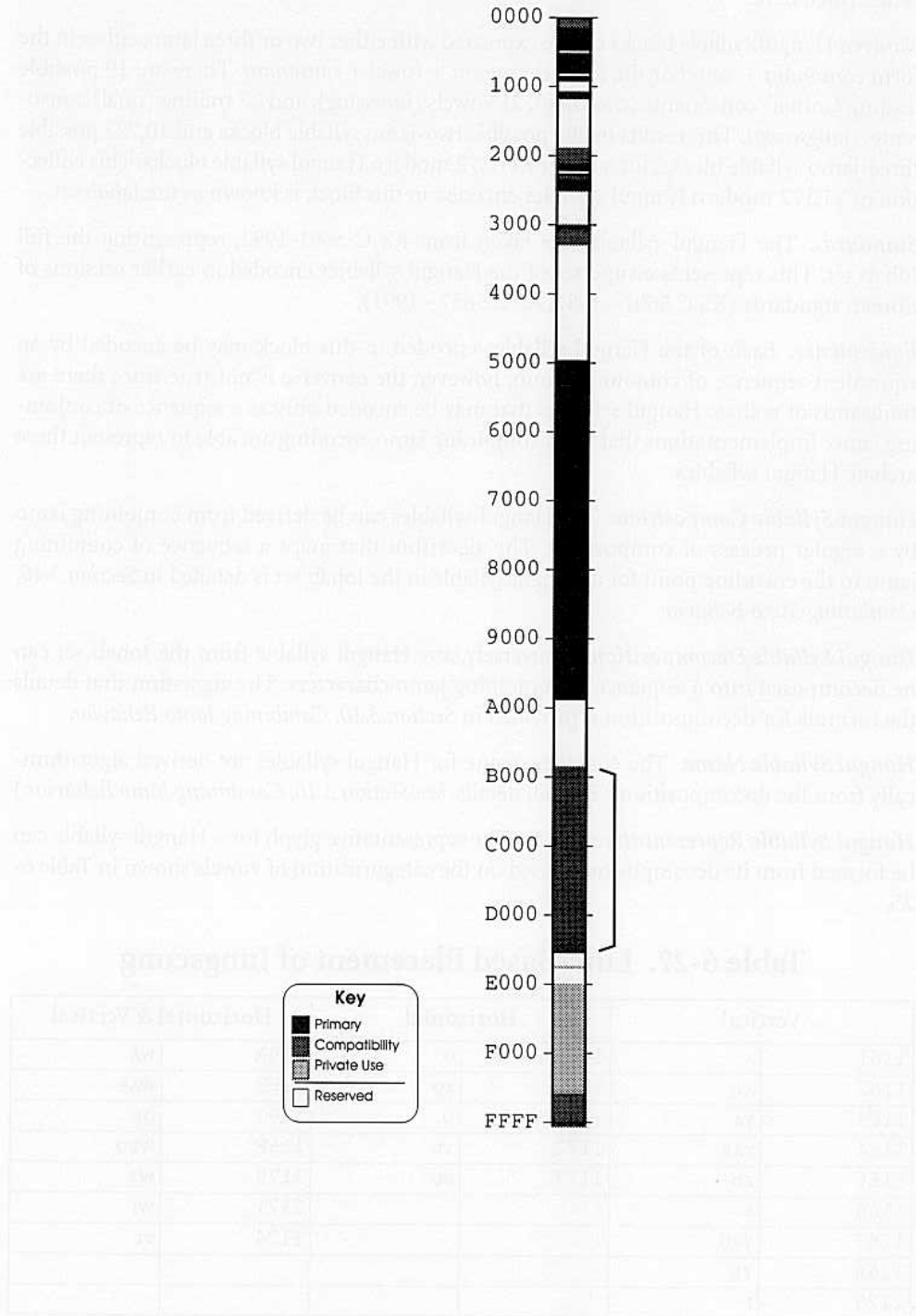


6.5 Hangul Syllables Area

The Hangul Syllables Area of the Unicode Standard encodes the Hangul syllable characters associated with the Korean writing system (see Figure 6-30).

Figure 6-30. Hangul Syllables



Hangul Syllables: U+AC00—U+D7A3

The Hangul script used in the Korean writing system consists of individual consonant and vowel letters (*jamo*) that are visually combined into square display cells to form entire syllable blocks. Hangul syllables may be encoded directly as precomposed combinations of individual jamo or as decomposed sequences of conjoining jamo. The latter encoding is supported by the Hangul Jamo block (U+1100 → U+11FF). The syllabic encoding method is described here.

Modern Hangul syllable blocks can be expressed with either two or three jamo, either in the form *consonant + vowel* or the form *consonant + vowel + consonant*. There are 19 possible leading (initial) consonants (*choseong*), 21 vowels (*jungeong*), and 27 trailing (final) consonants (*jongseong*). This results in 399 possible two-jamo syllable blocks and 10,773 possible three-jamo syllable blocks, for a total of 11,172 modern Hangul syllable blocks. This collection of 11,172 modern Hangul syllables encoded in this block is known as the *Johab* set.

Standards. The Hangul syllables are taken from KS C 5601-1992, representing the full Johab set. This represents a superset of the Hangul syllables encoded in earlier versions of Korean standards (KS C 5601 - 1987, KS C 5657 - 1991).

Equivalence. Each of the Hangul syllables encoded in this block may be encoded by an equivalent sequence of conjoining jamo; however, the converse is not true since there are thousands of archaic Hangul syllables that may be encoded only as a sequence of conjoining jamo. Implementations that use a conjoining jamo encoding are able to represent these archaic Hangul syllables.

Hangul Syllable Composition. The Hangul syllables can be derived from conjoining jamo by a regular process of composition. The algorithm that maps a sequence of conjoining jamo to the encoding point for a Hangul syllable in the Johab set is detailed in *Section 3.10, Combining Jamo Behavior*.

Hangul Syllable Decomposition. Conversely, any Hangul syllable from the Johab set can be decomposed into a sequence of conjoining jamo characters. The algorithm that details the formula for decomposition is provided in *Section 3.10, Combining Jamo Behavior*.

Hangul Syllable Name. The character name for Hangul syllables are derived algorithmically from the decomposition. (For full details, see *Section 3.10, Combining Jamo Behavior*.)

Hangul Syllable Representative Glyph. The representative glyph for a Hangul syllable can be formed from its decomposition based on the categorization of vowels shown in Table 6-25.

Table 6-27. Line-Based Placement of Jungseong

Vertical		Horizontal		Horizontal & Vertical	
1161	A	1169	o	116A	WA
1162	AE	116D	YO	116B	WAE
1163	YA	116E	U	116C	OE
1164	YAE	1172	YU	116F	WEO
1165	EO	1173	EU	1170	WE
1166	E			1171	WI
1167	YEO			1174	YI
1168	YE				
1175	I				

If the vowel of the syllable is based on a vertical line, place the leading consonant to its left. If the vowel is based on a horizontal line, place the preceding consonant above it. It the

vowel is based on a combination of vertical and horizontal lines, place the preceding consonant above the horizontal line and to the left of the vertical line. In either case, place a following consonant, if any, below the middle of the resulting group.

In any particular font, the exact placement, shape and size of the components will vary according to the shapes of the other characters and the overall design of the font.

Encoding Structure. The character block for Hangul syllables is divided into the following ranges:

U+AC00 → U+D7A3 Hangul syllables in KSC 5601 order