Cross-Culturally and Phonetically Common?
—A Short Note on Onomatopoeias for Animal Sounds—

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Onomatopoeia is an interesting research topic because it is part of the structure of language complying with phonological and morphological rules of languages while being connected to the real world through the human perceptual process of listening to sounds. Although language has been regarded as an arbitrary sign since Saussure, onomatopoeias could be somewhat common cross-culturally and phonetically among languages if they were derived by mimicking real sounds. This note briefly analyzes onomatopoeias used for animal sounds—specifically, those presented in a picture book for children called *Ironna Kuni no Onomatope* [Onomatopoeias in Various Countries] (2008, pp. 4–7).

The book introduces the sounds of seven animals (pig, rooster, dog, cat, cow, sheep, and lion) in ten, nine, or six languages depending on the animal (Korean, Chinese, Thai, Vietnamese, English, German, French, Italian, Spanish, and Russian) while assuming readers know the corresponding Japanese onomatopoeias. This note tentatively discusses aspects of phonological commonness observed in these languages, including Japanese. Only English and Japanese words are written as representatives in entries in the following paragraphs.

Pig (**En** oink oink, **Jp** bû bû): The onomatopoeic words for the pig sound are listed in 10 languages in the book. They start with velar consonants (six languages) or back vowels /u/ or /o/ (four languages), i.e., all start with sounds articulated at the velum. The only exception is Japanese, whose word starts with a labial consonant /b/, though the following vowel is a back vowel /u/. Voicing of the starting sound is quite common too: They are all voiced except for Russian, which starts with voiceless /x/. Another interesting feature is that they all, except for Italian, consist of two syllables, or the repetition of exactly the same or very similar syllables (Italian word *grugnire* has three syllables but *-ire* is a verb suffix). It is interesting that reduplication

is used so widely as a morphological process. However, the pronunciation of the English and Spanish words is the same, and Dutch, French, Italian, and Russian words are similar to each other, with the initial consonant clusters being /gr/ or /xr/ and the following vowels being /u/ or /o/, which suggests they may have been historically derived from the same word.

Rooster (**En** cock-a-doodle-doo, **Jp** kokekokkô): The words for the rooster sound are also listed in 10 languages. In the words in 11 languages (10 languages listed in the book and Japanese), a noticeable characteristic is that they all have three syllables or more, probably reflecting the rooster sound being long. Another eye-catching characteristic is that nine of the languages use a velar consonant /k/ (eight of them begin with /k/), although Chinese and Vietnamese words use only a back vowel /o/ and a glide /w/, articulated at the velum.

Dog (**En** woof woof, bow wow, **Jp** wan wan): For the dog, cat, cow, and sheep sounds, the words in nine languages are listed, Vietnamese excepted. Of the 10 languages including Japanese, the words in seven languages start with labial sounds: in five languages /w/, one /m/, and two /b/ (English is counted twice because two forms are mentioned in the book). The others use /g/ and /h/ (in two and one languages respectively). In terms of voice, the starting sound of nine languages are voiced. The following vowels are /a/ or /o/, i.e., open vowels, except for English *woof* /ʊ/, and the syllable-final sounds are /ŋ/, /f/, /w/, or /ɴ/. This means the syllable starts with the closed position, then opens, and finally closes again.

Cat (**En** meow meow, **Jp** nyâ nyâ): Of the 10 languages, eight use words amazingly similar to each other: /miaw, mj-, -ao/. Different words are used in Korean, /njaoŋ/, and Japanese, /nja:/, but these are still similar to the others, as they begin with a nasal-glide cluster and use /a/.

Cow (**En** moo, **Jp** mô): Of the 10 languages, nine start with /m/, followed by /u/ or /o/-like vowels. Korean /ɯmmɛ/ is an exception, but it does include /m/ and a /u/-like vowel as well.

Sheep (**En** baa baa, **Jp** mê mê): Of the 10 languages, the words of six start with /b/ and four with /m/, i.e., all start with labial stop sounds. The vowels are front mid or open in all languages, /e/ (seven languages), /je/

(two languages), or /æ/ (one language), and words in all languages end with these vowels without a glide or a coda consonant.

Lion (**En** roar [verb], **Jp** gaô): For the lion sound, six languages are listed: Korean, Thai, English, French, Spanish, and Russian. Of the seven languages including Japanese, the starting sounds are /r/, /g/, /gr/, /h/, and /ɔ/ (/r/ is used in three languages, and the others in one language each). The vowels used are /a/, /o/, or /u/-like sounds, which may be regarded as back vowels. Although French uses a front vowel /y/, its sound quality is somewhat close to back vowels because of its roundedness.

In many of the seven onomatopoeias, considerable similarity among the languages was observed in terms of the place of articulation and voice of the initial sounds, the vowel quality, and the syllable coda. In particular, the cat and cow onomatopoeias are strikingly similar among the languages. Also, the length of the onomatopoeias reflects that of the original sound (see the rooster onomatopoeias).

Therefore, onomatopoeias for animal sounds can be said to have many phonetic features in common cross-culturally. However, some of this commonality may be due to diachronic derivation (having the same etymologies), which partially obscures the claim for the non-arbitrariness of onomatopoeias.

References

Kodomo Kurabu (Ed.). (2008). *Ironna kuni no onomatope* [Onomatopoeias in various countries]. Tokyo: Obunsha.

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