시작

NY Times on March 9, 2023 (briefing)

Did a lab leak cause Covid?

U.S. lawmakers opened hearings yesterday into the origins of the corona virus pandemic. The hearing, which quickly became politically charged, underscored how difficult it may be to ascertain the origins of Covid-19.

Republicans on the House panel investigating the pandemic's origins made an aggressive case that the virus may have been the result of a laboratory leak. The lab-leak hypothesis recently gained a boost after new intelligence led the Energy Department to conclude, albeit with low confidence, that a leak was the most likely cause.

The first public hearing came as the debate intensifies about one of the great unsolved mysteries of the pandemic. The committee is made up of seven Democrats and nine Republicans, including Representative Marjorie Taylor Greene, who is known for her embrace of conspiracy theories.

Here's what we know, and don't know, about the origins of the pandemic.

탐구주제:

읽기의 작동방식을 검토하기에 앞서, **읽기**를 **왜** 하는지 분명히 이해할 필요가 있다.

다른 사람 혹은 우리의 생각을 이해하기 위해서

읽기에 앞서서 존재해야 할 정신행위

쓰기 행위

1. 기억의 연장
2. 말(생각)의 연장

개인의 생각을 보전, 다른 사람에게 생각을 전달

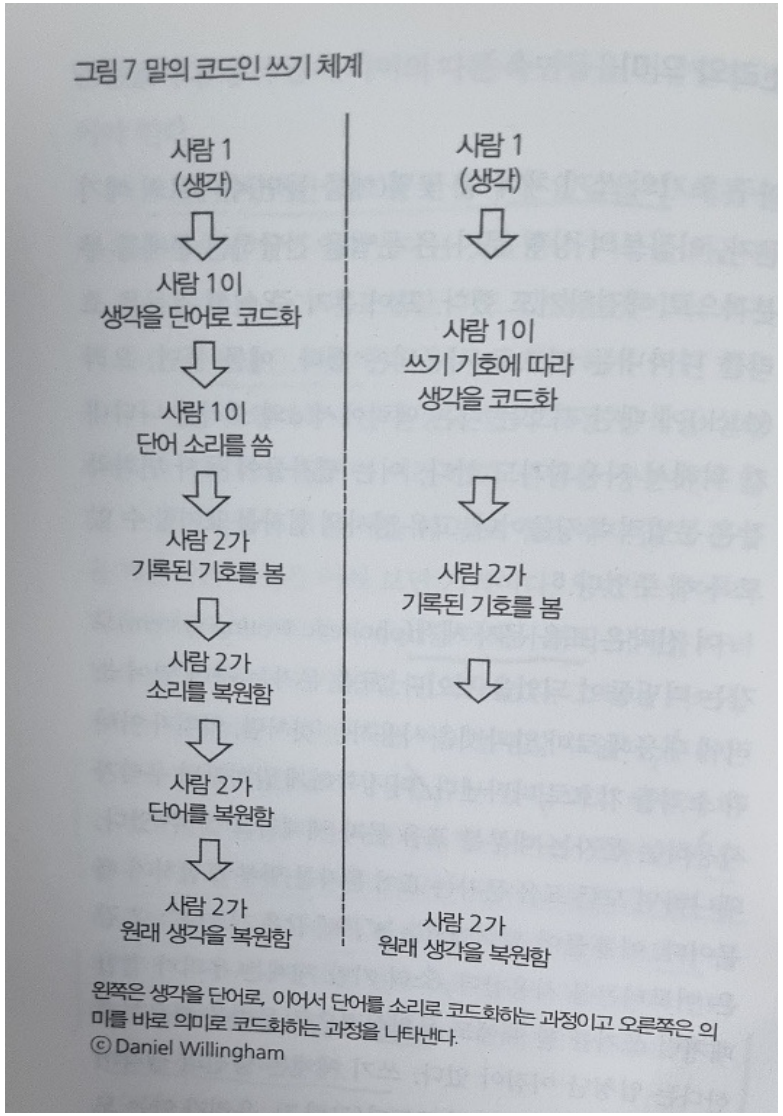
쓰기 체계

1. 그림문자 (장점과 단점)
2. 표어문자(logograph) (장점과 단점)

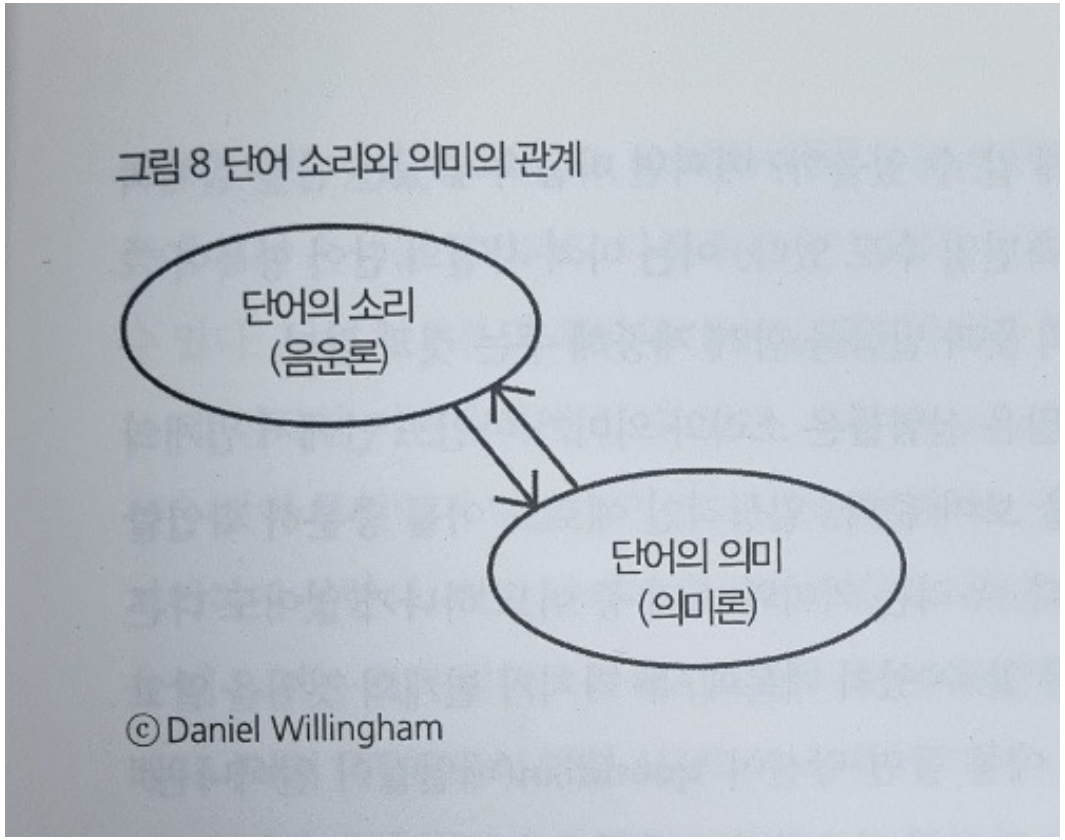
→ "의미" 전달의 문제

3. 표음문자(phonetic writing system) (장점)

모든 **쓰기** 체계는
"당신의 생각이 아니라,"
"당신이 하는 **말의 코드**다"!

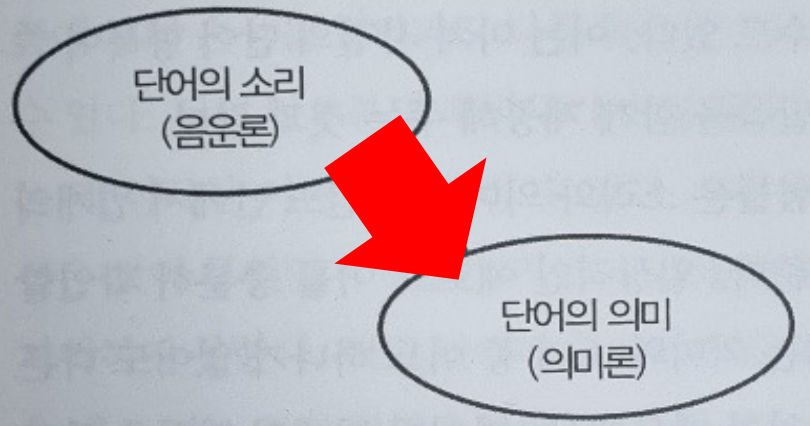


읽기의 작동 – **단어의 이원적 표상**



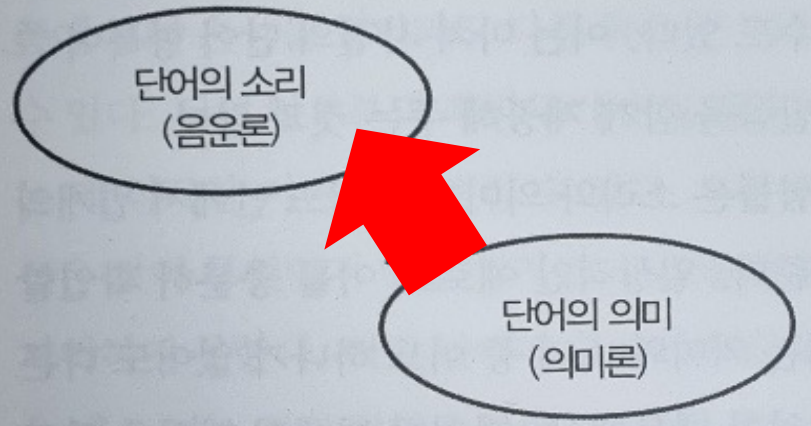
- 단어의 소리와 의미는 **별개**지만, 서로 **연결**되어 있다!

그림 8 단어 소리와 의미의 관계

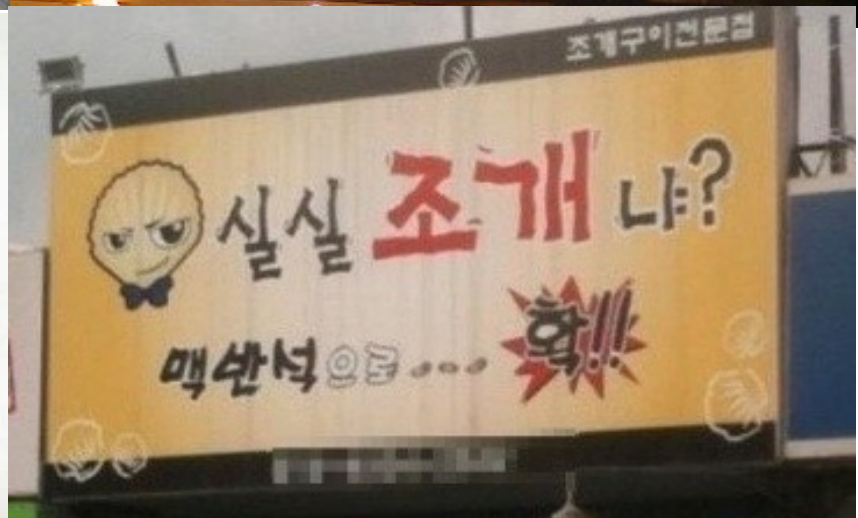


ⓒ Daniel Willingham

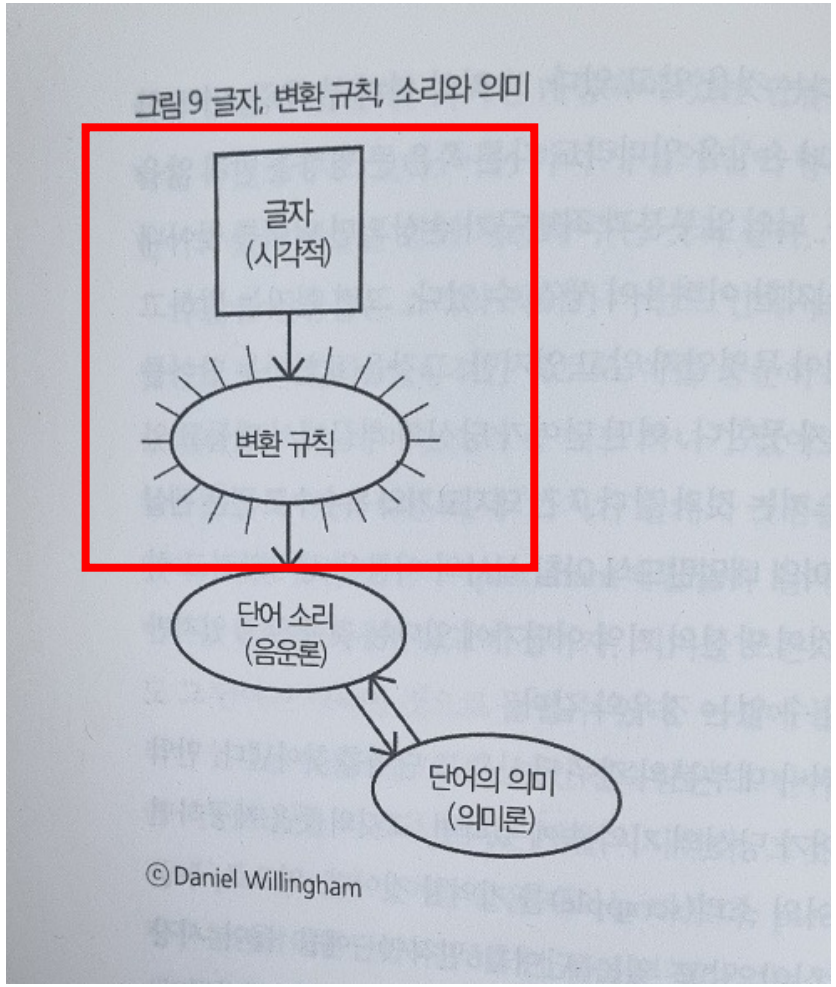
그림 8 단어 소리와 의미의 관계



ⓒ Daniel Willingham



읽기의 작동 – 단어의 이원적 표상



- **읽기**는 **소리**와 **의미** 사이에 존재하는 **관계 위**에서 이루어진다.
- 글자 → 소리 표상 → 의미 표상

- 모든 **쓰기** 체계는 "당신의 생각이 아니라," "당신이 하는 **말의 코드**다"!

  →

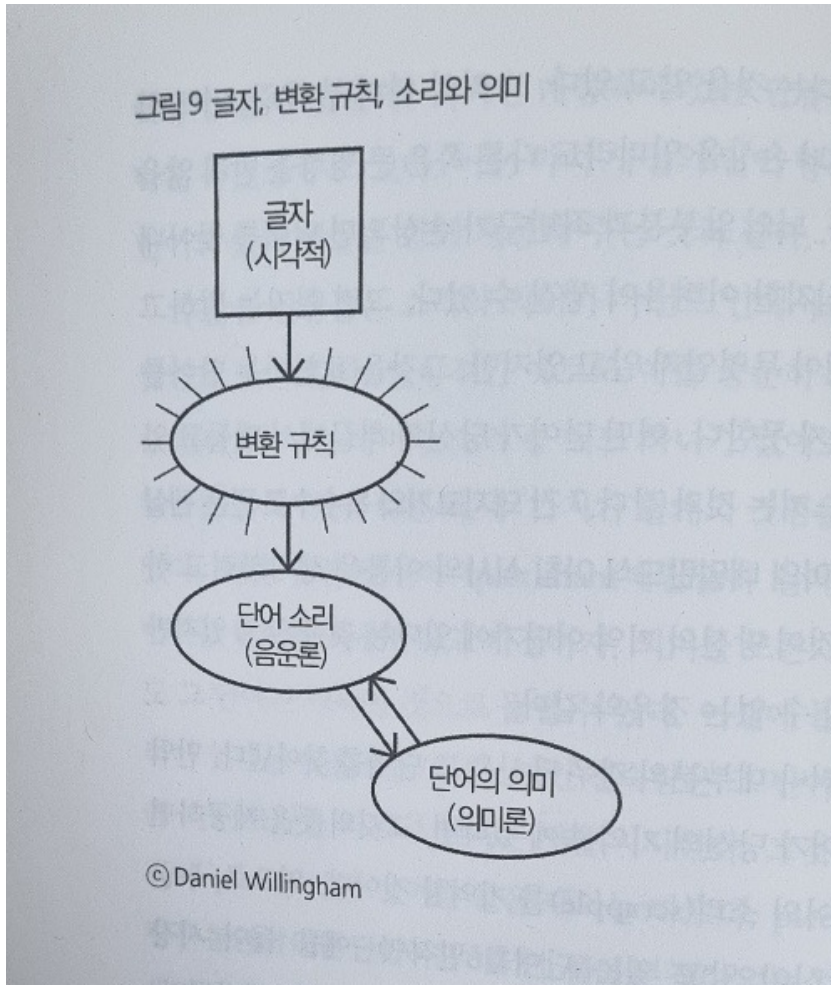
- 모든 **쓰기** 체계는 "당신의 생각이 아니라," "당신이 하는 **말(음절)의 코드(부호화)**다"!

- 영어 – 알파벳 체계 → 음소(phoneme)
- 영어 – 44 phoneme (26 letter)
- 한국어 – 24 phoneme (14자음+10개의 모음)

쓰기 체계의 분석을 통한 **읽기** 과정은 ....

1. 우리는 하나의 글자를 다른 글자와 시각적으로 구별할 수 있어야 한다.
2. 글자는 소리를 나타내는 것이기 때문에, 소리의 차이를 들을 수 있어야 한다.
3. 시각 요소와 청각 요소가 어떻게 매핑(mapping)되는 지를 알아야 한다.

추가 질문 1:



- 글자(단어)를 읽자마자, 뜻(의미)가 떠오른다(활성화된다)?

Stroop effect

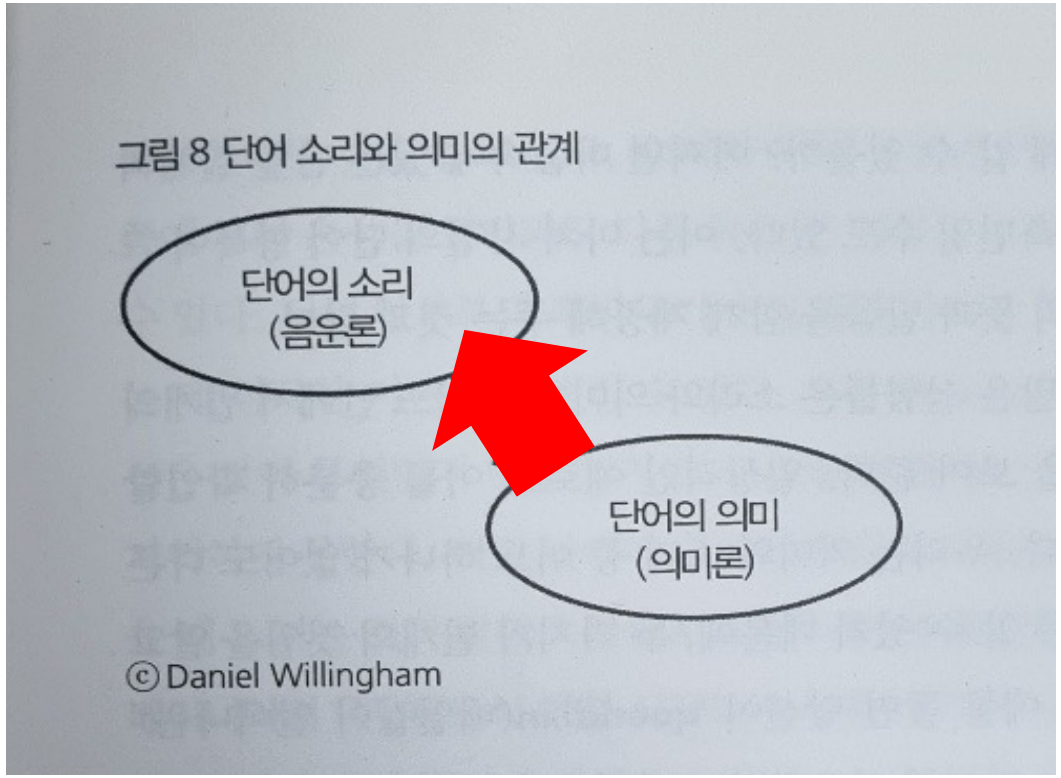
지시문

- 각 단어의 색깔을 말해주세요 (단어를 읽는 것이 아닙니다!).
- 마치 책을 읽는 것처럼, 왼쪽 상단에서 시작해서 오른쪽으로 진행합니다.
- 색깔을 큰 소리로 빨리 말하세요.

Slide 1

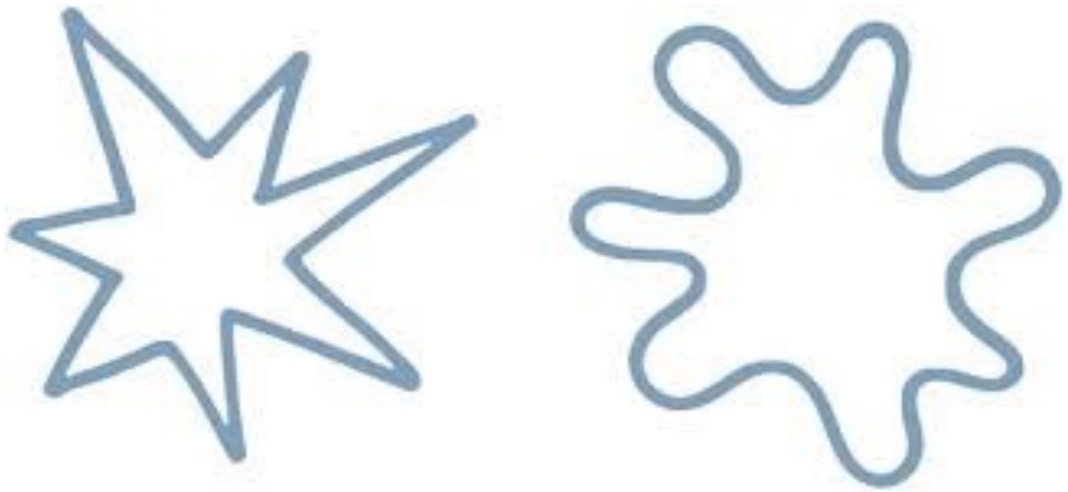
Slide 2

추가 질문 2:



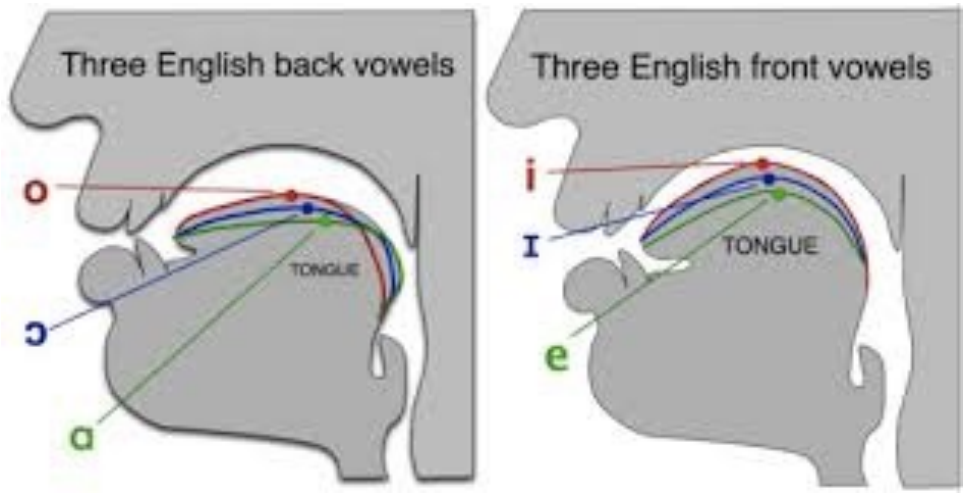
- (자의적 약속에 의해서가 아니라) 소리가 의미를 표상하는 경우가 있을까?

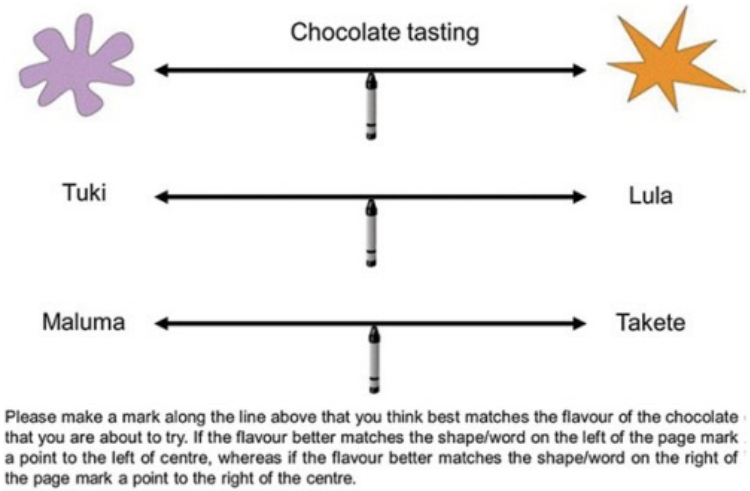
Buba or kiki



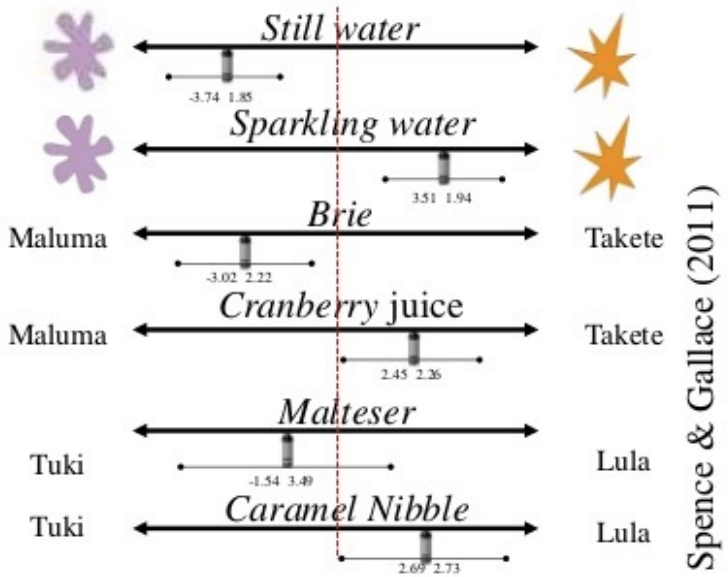
- **Sound symbolism** is the idea that vocal sounds or phonemes carry meaning in and of themselves.

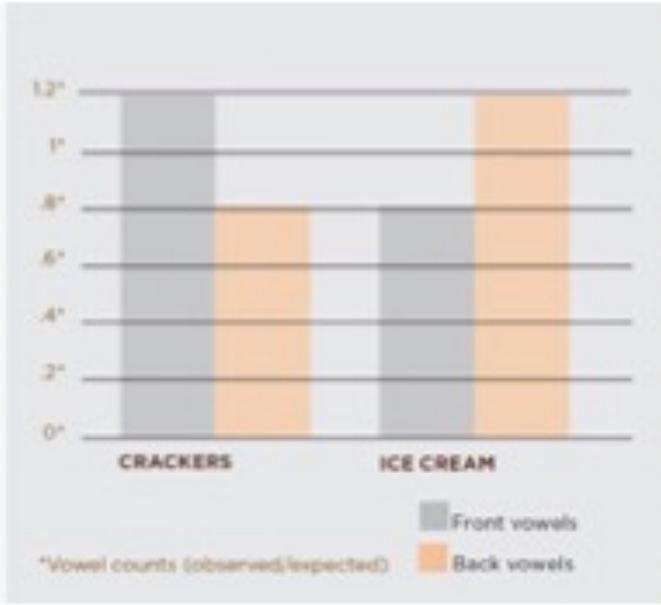
Sounds and Emotion/Sensation



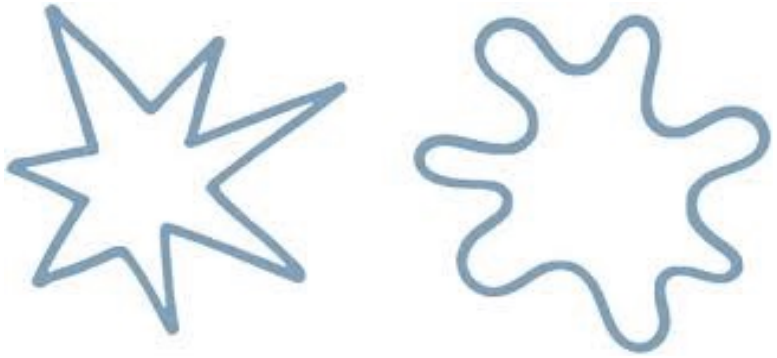


Psychological testing





The buba-kiki effect



- Curved shapes are associated with vowels, which involve lip rounding and/ or tongue backing/lowering (i.e., [u], [ɑ], and [o]) as well as with the sonorant and voiced bilabial consonants (e.g., [m], [n], and [l]).
- Jagged shapes are associated with relatively high and front vowels (i.e., [i] and [e]) and the voiceless stop consonants (e.g., [t], [k], and [p]; Tarte and Barritt, 1971; Ramachandran and Hubbard, 2001; Maurer et al., 2006).
- This effect has been observed many languages, such as English (KÖhler, 1929; Winter and Perlman, 2021), Swahili (Davis, 1961), Himba (Bremner et al., 2013), and Tamil (Ramachandran and Hubbard, 2001).

The sound-magnitude effect

- The effect has been most commonly linked to cross-modal mappings between acoustic properties of specific vowels and small/large objects

- High and front vowels are typically associated with small objects/concepts, while low and back vowels are associated with large objects/concepts (Birch and Erickson, 1958; Thompson and Estes, 2011).

- This effect has been found in many languages, such as English (Johnson, 1967), Korean (Kim, 1977), as well as several other languages (Gebels, 1969; Newmeyer, 1992).

- Klink (2000) reported that
- Front vowels were associated with lighter colors and weight, thinness, weakness, softness, coldness, bitterness, and femininity compared to back vowels, which were associated with largeness and the opposite of all the adjectives mentioned in reference to front vowels.
- Stops have complete closure of the articulators before releasing the airstream from the mouth, producing a hard stop like that heard in the phonemes/p/,/t/,/b/,/g/,/d/, and/k/(e.g., [p] in pill, [t] in till, [b] in bill, [g] in gill, [d] in dill, and [k] in kill). Fricatives are characterized by a less sudden stop of the airstream leaving the mouth during articulation, as in the phonemes/f/,/s/,/v/, and/z/(e.g., [f] in feel, [s] in seal, [v] in veal, [z] in zeal).
- Nonwords containing fricatives were perceived as smaller, faster, lighter, sharper, softer, and more feminine than stops (Klink, 2000). Thus, both consonants and vowels seem to be associated with distinct physical characteristics.

- Brand names often are developed to intentionally convey a feature or characteristic of the product they represent, such as Viagra, in which the letter V is associated with ideas of energy (Begley, 2002).
- semantic appositeness or appropriateness (i.e., the extent to which a name conveys information about the product; e.g., the air freshener brand Febreze being a combination of the words fresh and breeze; Lowrey, Shrum, & Dubitsky, 2003)