

## **Phonetic Exploration of Sound Symbolism in Moroccan Arabic: High Vowels and Size Perception**

### **Abstract**

Empirical findings from experiments and cross-linguistic studies indicate that specific speech sounds are often associated with the concept of size. More specifically, high front vowels are frequently linked to the notion of "small," while low back vowels are generally associated with "large." It is in this context that our research explores how the addition of high vowels in pairs of Moroccan Arabic words can convey smallness, by examining phonetic characteristics. Our research hypotheses include the idea that the insertion of high vowels in words is likely to result in sharper sounds, shorter words, and a meaning related to smallness. We also assume that these phonetic modifications align with established patterns of sound symbolism, such as the correlation between high-pitched sounds and smallness. Furthermore, we investigate the variability of these patterns across languages and cultures.

Our methodology relies on building a corpus of word pairs that illustrate this linguistic construction, ensuring data cleanliness and case normalization. Subsequently, we conduct a meticulous phonetic analysis of the sound characteristics of words before and after the addition of the high vowel. To support our findings, we compare these data to established sound symbolism patterns, highlighting both similarities and differences.

We anticipate that the addition of the high vowel to words will result in an increase in the sharpness of sounds, a reduction in word length, and a meaning associated with smallness. We also hope to find evidence that corroborates the notion that these phonetic modifications reflect existing sound symbolism patterns, thus confirming the validity of the theory of sound symbolism. Finally, we expect to identify potential cultural or linguistic variations in these patterns, which could enrich our understanding of how languages use sound symbolism to express meaning. These findings will contribute to shedding light on the role of phonetics in the construction of linguistic meaning and deepening our knowledge of sound symbolism in linguistics.

**Keywords :** Sound symbolism, Phonetic features, Conceptual mapping.

### **References**

- Sapir, Edward. 1929. A study in phonetic symbolism. *Journal of Experimental Psychology* 12. 225–239.
- Ohala, John J., & Eukel, Brian W. 1987. Explaining the intrinsic pitch of vowels. In R. Channon & L. Shockey (Eds.). *In honour of Ilse Lehiste*. 207–215. Dordrecht : Foris.
- Tsur, Reuven. 2006. Size–sound symbolism revisited Reuven. *Journal of Pragmatics* 38.905–

Johansson, Niklas., & Zlatev, Jordan. 2013. Motivations for sound symbolism in spatial deixis : A typological study of 101 languages. *The Public Journal of Semiotics* 5. 3–20.

Rabaglia, Cristina D., Maglio, Sam J., Krehm, Madelaine., Seok, Jin H., & Trope, Yaacov. 2016. The sound of distance. *Cognition* 152. 141–149. doi:10. 1016/j.cognition.2016.04.001

Tanz, Christine. 1971. Sound symbolism in words relating to proximity and distance. *Language and Speech* 14. 266–276. doi:10.1177/ 002383097101400307