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## Does an "M" Sound Round to You?

Research shows that some consonants evoke certain shapes no matter what language you speak

By [Anne Pycha](#) | Oct 15, 2015 | 0

They are just nonsense words, but for decades *bouba* and *kiki* have been studied by linguists, who are fascinated by the way they convey meaning across a broad spectrum of languages. Beginning as far back as the 1920s, study after study has demonstrated that children and adults, regardless of the languages they speak, match the words *bouba* and *malumi* with round shapes and *kiki* and *takete* with spiky shapes. Why this is so has remained a puzzle. In most words, consonants and vowels do not have any inherent link to meaning. The “o” in “octagon,” for example, is not naturally connected to eight-sided shapes. So what could possibly be special about *bouba* and *kiki*?

Scientists now have a partial answer: consonants seem to carry significance apart from the words they help to form. In a recent study of 71 French speakers published in the journal *Language and Speech*, researchers in Europe led by Mathilde Fort of the École Normale Supérieure in Paris showed that people consistently matched *b*, *m* and *l* words with round shapes and *k* and *t* words with spiky shapes, regardless of the vowels they are combined with. On the face of it, this result suggests that *bouba* and *kiki* may be similar to English onomatopoeic words such as “crash” and “crunch,” where the consonants supply a sound-symbolic meaning of noisy impact, regardless of the vowels. The difference would be that *b*, *m* and *l* supply their meanings in many languages, not just in English, as do *k* and *t*.

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A small follow-up experiment, however, showed that the effect was not limited to a few consonants. A sample of 23 people also matched *d*, *n*, *s*, *p*, *sh* and *zh* words with round shapes and *f*, *v* and *z* words with spiky shapes. As before, subjects seemed to ignore the vowels. This result, which sound symbolism cannot explain, suggests that we humans have fundamental reactions to certain sounds, which persist despite the vastly different soundscapes of the world's existing languages. The consonants in each group must have something in common that triggers such associations in our brain, but scientists have not figured out what that property is yet—simple acoustics cannot explain it. In any case, the finding shows that consonants in general have an outsize role to play in language.

Indeed, certain languages such as Arabic and Hebrew clearly prioritize consonants over vowels, often omitting vowels from texts. The root for “writing” in Arabic is */ktb/*. Fill that in with different vowels to get a variety of writing-related words, such as *kataba* (“he wrote”), *yaktubna* (“they write”) and *kitab* (“book”). The presence of such languages in the world—and the absence of any languages that prioritize vowels—adds further support to the idea that consonants are key. Vowels remain necessary because they make it possible to say words out loud. But it is consonants that do the hard work of conveying meaning.



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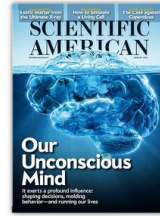
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