

## Why are some languages spoken faster than others

Were this article written in Japanese, it would be longer. A Thai translation, meanwhile, would be shorter. And yet those reading it aloud, in either language or in its original English, would finish at roughly the same time. This **peculiar** phenomenon is the subject of new research which finds that languages face a trade-off between **complexity** and speed.

peculiar 奇怪的; 罕见的

complexity 复杂

In a study published this month in Science Advances, Christophe Coupé, Yoon Mi Oh, Dan Dediu and François Pellegrino start by quantifying the information density of 17 **Eurasian** languages, as measured by the ease with which each syllable can be guessed based on the **preceding** one. Next, they record the rate at which 170 native speakers read 15 texts out loud. Finally, armed with data about the information contained in a piece of text and the speed at which it can be spoken, the authors derive the rate at which information is communicated.

Eurasian 欧亚的

preceding 前述的; 之前的

The results suggest that there is an optimal range of speeds within which the brain can process information most efficiently. Speakers of simple languages pick up the pace to keep conversations brief. Speakers of complex languages exert more effort planning sentences and **articulating** syllables, causing discussions to **drag on**. “It is like bird wings,” says Dr Coupé, one of the authors, “you may have big ones that need few beats per second or you have to really **flap** the little ones you got, but the result is pretty much the same in terms of flying.”

articulate 发音

drag on 拖延

flap 拍打