

Why We Can Dream in More Than one Language

为什么我们会在梦里说外语

Date: Feb. 17, 2023

If you speak more than one language, you may have had the experiences of them **mingling** in your sleep. But how and why do our brains **come up with** these **multilingual** dreams and could they have an impact on our real-life language skills?

如果你会说不止一种语言,你可能经历过在睡梦中它们混杂在一起。 但是,我们的大脑是如何产生这些包含多种语言的梦境,其背后的原因又 是什么呢?它们会对我们现实生活中的语言技能产生影响吗?

To understand the link between sleep and language, let's start with just one language: your own. You may think you mastered your native language long ago, but you are actually still constantly updating it. Even adults still learn about one new word every two days in their mother tongue.

为了理解睡眠和语言之间的联系,让我们从你的母语开始讲起。你可能认为你早就掌握了母语,但实际上你还在不断地更新它。就连成年人每两天也要学会一个母语新词。

It's during sleep that the **integration** of old and new knowledge happens. During the day, our **hippocampus**, which **specialises** in absorbing information quickly, **soaks up** new words. At night, it passes the new information on to other parts of the brain, where it can be stored and connected to other **relevant** information.

新旧知识的整合正是在睡眠中发生的。白天,专门负责快速吸收信息 的海马体学习新单词。到了晚上,海马体将新信息传递到大脑的其他部分, 在那里信息得以储存,并与其他相关信息联系在一起。

What we do know is that **aside from** processing daytime information, our brain can also learn new words while asleep.

431 Words

mingle [ˈmɪŋgl] v. 混合,混杂; 应酬,交际 | The sounds of laughter and singing mingled in the evening air. 笑声和歌声交织在夜空中。

come up with 想出,提出;拿出,提供(钱款) | We've been asked to come up with some new ideas. 我们被要求想出些新的点子来。

multilingual [ˌmʌltiˈlɪŋgwəl] *adj*. 会说多种语言的,以多种语言表达的

master ['mæstər] v. 精通,掌握; 控制(情绪) n. 主人,雇主; 大 师,能手 adj. 最重要的,主要的; 熟练的 | Students are expected to master a second language. 学生应该 掌握一门第二语言。

integration [ˌmtrˈgreɪʃn] *n*. 结合,整合,一体化;混合,融合 | His music is an integration of tradition and new technology. 他的音乐结合了传统和新技术。

hippocampus [ˌhɪpəˈkæmpəs] *n*. 海马体(大脑中被认为是感情和记忆中心的部份)

specialise ['spefəlaɪz] v. 专门研究(或从事),专攻 | He specialized in criminal law. 他专攻刑法。

soak up 吸收,学会;吸收(液

我们所知道的是,除了在白天处理信息,我们的大脑也可以在睡觉时 学习新单词。

Matthieu Koroma, a post-doctoral researcher at the University of Liège in Belgium, who specialises in sleep and cognition, co-authored a number of studies that add to this nuanced picture of how and when we engage with language in our sleep.

比利时列日大学的博士后研究员马蒂厄·科罗马专门研究睡眠和认知,他与人合著了一系列研究,细致地描述了我们在睡眠中怎样以及何时接触语言。

"Basically, the message is that you are able to learn [words in other] languages during sleep, even new languages you never heard before, but you do it in a very different way than when you are awake," he says.

他说: "基本上,研究发现,你可以在睡眠中学习其他语言的单词, 甚至是你从未听过的新语言,但你的学习方式与清醒时大不相同。"

Does all this mean we can effortlessly learn a language in our sleep, as long as we play a language lesson all night long?

这是否意味着我们可以在睡梦中毫不费力地学习一门语言,只要我们整晚都播放语言课程?

Not necessarily. It might actually **backfire**, by **disturbing** your rest, Koroma says. He also points out that in the study, participants learned the words much faster when they were awake than when they were asleep: "It's **way** more efficient when you're awake."

并不一定。科罗马说,这样做实际上可能会适得其反,因为它会影响你的休息。他还指出,在研究中,参与者在清醒的时候学习单词的速度要比睡着的时候快得多,"清醒的时候学习单词的效率要高得多。"

"Wakefulness is good for learning, and sleep is more to replay, not for new language **acquisition**," Koroma says. "It's an interactive process, it's **complementary**, meaning that you learn during the day, and during sleep you **sort** through this 关注公众号: 拾点外刊 免费下载电子版 附音频

体);沉浸于,充分体验 | Children soak up language incredibly quickly. 小孩子学语言快得让人难以置信。

relevant ['relevent] *adj*. 紧密相关的,切题的;有价值的,有意义的 | Do you have the relevant experience? 你有相关的经验吗?

aside from(=apart from) 除了……外 | Aside from a few scratches, I'm OK. 除了几处擦伤外,我安然无恙。

cognition [kɑːgˈnɪʃn] n. 认知,感 知

nuanced ['nu:a:nst] *adj*. 细致入 微的 | a skilful and nuanced performance 高超细腻的表演

backfire [ˌbækˈfaɪər] v. 事与愿违,适得其反;(车辆或其发动机)逆火,回火 | Unfortunately the plan backfired. 不幸的是,计划产生了适得其反的结果。

disturb [dr'stɜ:rb] v. 打扰,妨碍; 弄乱,搞乱;使焦虑,使不安 | Sorry to disturb you, but I have an urgent message. 对不起打扰一下, 我有个紧急消息。

way [wei] *adv*. 远远地,大大地; 非常 *n*. 方式;道路 | The tickets were way more expensive than I thought. 票比我预想的要贵多了。

acquisition [ˌækwɪˈzɪʃn] *n*. (知识、技能等的)获得,得到;(对公司的)收购,并购 | the acquisition of language 语言的习得

complementary

information, consolidate some of your memories, and try to put it in new contexts."

科罗马说: "清醒的状态有利于学习,睡眠更多的是为了回放,而不 是学习新语言。""这是一个相互影响的过程,二者互为补充,这意味着 你在白天学习, 而在睡觉时你会整理这些信息, 巩固一些记忆, 并尝试将 它放在新的情境中。"

"The best way to do it is probably to learn a new language before going to sleep, and then play some of the words you just heard, while being asleep," says Koroma. "Here the results are mostly that if you play them quietly enough, it will boost your learning abilities. But if you play it too loudly, it will actually lower you learning ability. So there is some **fine-tuning**."

科罗马说: "最好的方法可能是在睡觉前学习一门新语言,然后在睡 觉的时候播放一些你刚刚听到过的单词。""这样做的结果主要是,如果 你播放的音量足够低(不至于影响休息),它会提高你的学习能力。但如果 你放得太大声,反而会降低你的学习能力。所以会有一些微调。"

[ka:mpli mentri] adj. 互补的,补充 的,相互补足的

sort [so:rt] v. 整理, 把······分类; 妥善处理,安排妥当 n. 种类,类 别 | I sorted through my paperwork. 我把文件纸张都归整好了。

consolidate [kənˈsɑːlɪdeɪt] v. 使 加强, 使巩固; (使) 结成一体, 合 并 | Italy consolidated their lead with a second goal. 意大利队的第 二个进球巩固了其领先的地位。

fine-tune v. 对(机器、系统、计 划等)进行微调,精密调节 | Over the next few days, we fine-tuned the scheme and made some useful improvements. 接下来的几天,我们 对计划进行微调, 作了些有益的改 进。

脉络梳理

提出问题: 为什么梦中会出现多种语言,这对我们现实生活中的语言技能有何影响? Para. 1

Para. 2-3 介绍母语中新单词的学习过程: 白天学习新单词,晚上大脑进行储存和整合

Para. 4-6 指出人们可以在睡眠中学习新单词

分析在睡觉的时候学新单词的原理,并提出建议 Para. 7-10

长难句拆解

同位语,解释说明 Matthieu Koroma 主语

Matthieu Koroma, a post-doctoral researcher at the University of Liège in Belgium,

定语从句,修饰 Matthieu Koroma 谓语+宾语

who specialises in sleep and cognition, co-authored a number of studies

定语从句,修饰 studies 宾语从句,作 of 的宾语

that add to this nuanced picture of how and when we engage with language in our sleep.