开言会员课后讲义

C2-The Neuralink chip



Dialogue/对话

A: Isaac, the future is here! Elon Musk's Neuralink will give human brains <u>direct interfaces</u> to digital devices; cure <u>paralysis</u>, mental illness and everything in between!

A: Issac,未来已经来了!埃隆·马斯克的脑机接口公司Neuralink能让人脑和电子设备直接连接,可以治愈从精神疾病到瘫痪的各种疾病!

B: Well Jacob, as cool or scary as having a wonder chip in your head may sound, current science can't <u>live up</u> to the hype. Thus, such claims are highly <u>speculative</u>.

B: Jacob,把一个神奇芯片植入你的脑袋里,虽然这种事听上去又酷又有点吓人,但其实当今的科技还达不到大肆宣传的那样发达。所以这样的说法纯属推测。

A: But didn't you see the recent presentation where they unveiled the pig with a brain chip implant and displayed recordings of its <u>neurons</u> firing in real time?

A: 但是最近他们公开展示了脑部被植入芯片的小猪,而且实时捕获了它的脑部活动信号,难道你没看过?

B: I did. But, this is nothing new to neuroscience. In the late 1990s, researchers began placing <u>probes</u> in the brains of paralyzed people to show that signals could move robot arms.

B: 我看到了,但这在神经科学领域已经不是新鲜事了。90年代末的时候,科学家们就开始在瘫痪者的大脑中放置探测器了,以此证明人脑中的信号可以让机器手臂动起来。

A: I had no idea.

A: 我完全不知道。

B: Besides, merely displaying the firing of <u>neurons</u> and actually understanding what it translates to is like night and day.

B: 另外,仅仅展示神经元的活动,和真正"读懂"脑信号,这两者之间可是天壤之别。

A: I'm no brain surgeon, but it sounds like what you're saying is that we still don't understand the brain enough yet to use Musk's 1,000 <u>electrode</u> chip technology to achieve <u>AI symbiosis</u>.

A: 我也不是专家,但听起来你的意思是,我们目前对大脑的了解还不够,还无法用马斯克这个一千个电极的芯片技术实现人类与人工智能的"共生"。

B: Exactly. We basically need to experience a series of massive breakthroughs in neuroscience before science-fiction becomes reality.

B: 没错。在科幻变成现实之前,神经科学领域还得经历一系列的重大突破呢。

A: And even then, there's bound to be ethical concerns regarding actually placing a coin-sized, Fitbit-like <u>contraption</u> in one's skull for overall general population purposes.

A: 而且即使到了那个时候,在人头骨中植入像Fitbit一样硬币大小的奇怪装置,并广泛应用到人类身上,这也一定会引发伦理道德上的争议。

- B: Without a doubt. Either way, to quote Musk himself, "The future is going to be weird."
- B: 确实如此。不管怎样,用马斯克自己的话说, "未来将会很奇怪"。

Key vocabulary/重点词汇

direct interfaces /dɪˈrekt ˈɪntəfeɪsɪz/ 直连接口

paralysis /pəˈræləsɪs/ 麻痹, 瘫痪

live up to the hype /lɪv ʌp tu ðə haɪp/ 不负众望

speculative /'spekjələtɪv/ 猜测的;推测的,推断的

neurons /'njʊərɒnz/ 神经元,神经细胞

probes /proʊbz/ 探针;探测器

I'm no brain surgeon / aɪ'em noʊ breɪn 'sɜ-:dʒən/ 我不是脑外科医生(泛指不是专家)

electrode /i'lektroʊd/ 电极;电焊条

AI symbiosis /ˌeɪˈaɪ ˌsɪmbɪˈoʊsɪs/ 与人工智能共生

Expansion/例句

probe

1. There was a probe into their fundraising methods.

有一项针对他们募资方式的调查。

2. The aliens placed a probe in an unimaginable part of the body.

外星人把探测器放在了身体意想不到的地方。

3. Don't probe into their private affairs. You won't like what you find.

不要打探他们的私事。你不会喜欢你发现的事情的。

contraption

1. I can't seem to work this contraption!

我好像没法使用这个奇怪的装置!

2. What's that strange contraption you have in your garage?

你车库里的那个奇怪的装置到底是什么?

3. So you're telling me that that contraption is a time machine?

你是在告诉我那个奇怪的玩意儿是个时光机?

speculative

1. Such a theory is too speculative for me to accept.

我无法接受这样太过猜测性的理论。

2. We can't put our assets at risk for speculative investments.

我们不能冒险把资产用于投机性的投资。

3. This type of polling is less scientific and more speculative.

这种类型的民调更多的是推测而不是科学。

Grammar/语法

As + adj. + as sth. may sound, S + V

Today's use of the "as + adjective + as" grammatical pattern is merely a colloquial way of expressing the term "although." We often use this pattern to first acknowledge a condition, state or quality of a particular thing, place, person or situation, but then follow this acknowledgment with a negation of some sort.

今天的课程中"as + 形容词 + as"的语法结构仅仅是表达"although (尽管)"的一种较为口语化的方式。我们通常用这个结构先去对某事物、地点、人或情境表示认可,但是紧接着再表达某种否定。

For example, in today's lesson Isaac said, "As cool or scary as having a wonder chip in your head may sound, current science can't live up to the hype." Here he could have also said, "although having a wonder chip in your head may sound cool or scary, current science can't live up to the hype."

比如在今天的课程中,Issac说,"As cool or scary as having a wonder chip in your head may sound, current science can't live up to the hype. (虽然这种事听上去又酷又有点吓人,但其实当今的科技还达不到大肆宣传的那样发达)"。这里他也可以说,"Although having a wonder chip in your head may sound cool or scary, current science can't live up to the hype."

Here is the pattern: As + adjective + as + something + is/may sound/seem, subject + verb.

结构是: As + 形容词 + as + sth. + is/may sound/seem, 主语 + 谓语。

Example: As wonderful as that is, I still can't afford it.

比如, As wonderful as that is, I still can't afford it. (虽然那非常好,但我还是买不起。)

1. As good as you two look together, I don't know that you're meant for each other.

虽然你们俩看起来很般配,但我不知道你们合不合适。

2. As amazing as that sounds, I won't have the time to go this weekend.

虽然那听上去特别好,但我这周末没时间去。

3. As fantastic as this new technology may seem, I'm still highly skeptical of its effectiveness.

虽然这项新技术似乎很了不起,但我对它的效果还是持高度怀疑态度。