

本集内容

Mind-reading machine helps man walk again 读脑机械装置让瘫痪者再次行走

学习要点

有关“**technology**（科技）”的词汇

边看边答

How did Thibault practise using the brain implants?

文字稿

It's a small step for Thibault, but could this be a giant leap in paralysis?

虽然这对蒂博来说是一小步，但对治疗瘫痪来说会不会是一大步？

Thibault's arms and legs were paralysed after a fall damaged his spinal cord four years ago.

蒂博四年前在一次跌倒意外后脊髓受损，导致四肢瘫痪。

But when he's strapped into this **robotic** suit, he can use his thoughts to move again.

但当他穿上这套**机器人**服装时，便可通过思想来控制四肢再次移动。

He told me learning to walk came quite quickly, but using the **exoskeleton** to precisely bend and stretch his arms or rotate his wrists took much longer.

他告诉我学走路很快，但用**机械外骨骼**精准地伸屈手臂或扭动手腕则用了更长的时间。

So how does the exoskeleton work? Well, first Thibault has **implants** resting on the surface of his brain. They are reading his thoughts, his brain activity, his brainwaves, and they are being **beamed** to a computer. Now, the computer has to rapidly digest that information and transform that brain activity into instructions, which are sent to the exoskeleton. From thought to movement, it takes less than a third of a second.

机械外骨骼的工作原理是什么？首先，在蒂博的大脑表面上**植入设备**，读取他的想法、大脑活动和大脑信号，这些信息**被传送到**一台电脑上。接着，电脑需快速消化这些信息，并将大脑活动转换成指令，发送给机械外骨骼。从思想转换成运动，只需要不到三分之一秒。

Thibault first used his brain implants to control a computer game before trying the exoskeleton.

在尝试机械外骨骼前，蒂博最初曾使用大脑植入设备控制一款电子游戏。

Now the French researchers plan to test the technology on three more patients.

现在，法国研究人员计划在另外三位患者身上测试这项技术。

This experimental exoskeleton is not going to become widely available soon. If you look, Thibault is attached to the ceiling to stop him falling over. It means the exoskeleton can't be used outside the laboratory. And this **kit** is also too expensive for most of the world to benefit. But this is still a breakthrough and shows the potential of technology to transform lives.

这种实验性的机械外骨骼不会很快普及开来。仔细看就会发现，蒂博与天花板相连，以防止他跌倒。这意味着机械外骨骼不能在实验室以外的地方使用。而且这套**装备**过于昂贵，无法造福大多数国家的患者。但这仍是一项重要的突破，显示出了科技改变人生的潜力。

词汇

robotic 机器人的，机器人似的

exoskeleton 机械外骨骼

implants 植入人体的设备，植入物

beamed (信号) 被发射

kit 装备

视频链接

<https://bit.ly/2nwttaJ>

问题答案

Thibault practised using the brain implants by controlling a computer game.