# L4 The Future Body Network

# 課文翻譯

你是否對那些滿佈桌面,又會把可樂絆倒在鍵盤上的電纜線感到很厭煩?如果這樣的話,你可以考慮使用無線網路或藍芽,這兩種科技裝備都毋須使用電纜線傳送資料。聽起來很棒,對吧?不過,整個進展過程並非就此打住。

科學家們目前正嘗試利用人體來發揮類似的功能,而他們所想出的點子是利用皮膚表面的微電場來傳送資料。達成這個功效的作法是將傳輸器內建在口袋或者類似MP3播放器的移動式裝置。這個傳輸器就會利用皮膚上的電場把資料傳送到接收裝置。因為這種傳輸模式的範圍僅僅只有二十公分,接收器必須靠近人體部位。

利用這種人體網路,不需透過電纜線,就可以讓耳機直接收到口袋內的MP3 播放器

或讓電腦直接收到掛在頸上的數位相機所傳來的照片。此外,你還可以在握手時和別人互換電子名片,在近距離貼身跳舞時交換音樂檔或在親吻對方時互相給對方電話。

現在有個問題是,既然已經有無線網路和藍芽,怎麼會有人大費周章去透過人體網路傳輸資料呢?這個問題的解答就在於事實上,目前還很難將無線網路和藍芽的訊號專供使用者單獨使用。在人群熙熙攘攘的地方,你絕對無法知道誰可能會竊取你的資訊。

相形之下,人體網路安全得多了。其他人很難收取你皮膚表面所傳送的訊號,因為人體網路的傳輸範圍僅僅在身體外圍二十公分內,這麼一來,就沒有人能輕易 攔截到你的訊號加以判讀了。

此外,未來人體網路的最重要用途很有可能是人體內的通訊,而非僅僅在人體表面而已。想像一下如下情景,你讓一些微裝置植入到皮膚內層,然後用來控制你自己的神經系統。換句話說,你所想像的情景就是,你擁有一件強大的體內微電腦並能加以控制。你覺得這個點子如何呢?會不會聽起來很酷,彷彿你就是電影《機器戰警》裡面的人物?還是你寧可當個普普通通的人類呢?

# 單字例句翻譯

### 1. cable

I need a cable to link this printer to my computer. 我需要一條電纜線來把這部印表機連接到我的電腦上。

#### 2. spread

I was frightened when the water started to spread across the floor.

當水開始在地板上漫流而過時,我十分害怕。

If you spill coffee on the carpet, do not rub it; otherwise, you will spread the stain. 如果你把咖啡灑在地毯上,不要揉擦地毯;不然,你會使污漬擴散。

News of the fire spread quidkly and was soon reported on TV.

大火的消息傳得很快,不久後就被電視報導出來。

We must find out who is spreading the rumors.

我們必須找出是誰在散佈謠言。

### 3. tumble

tom tumbled down the stairs and got badly hurt.

湯姆從樓梯上跌下來,並且受了重傷。

# 4. similar

There are a lot of similarities between the two countries.

他的嗜好和你的相似。

# similarity

There are a lot fo similarities between the two countries.

這兩個國家有許多相似之處。

There is some similarity in the way they view the world.

他們看世界的觀點有些相似之處。

# 5. data

You can store a lot more data on a DVD than on a CD.

你在數位視訊光碟上可以儲存的資料比一般光碟多很多。

# 6. transmitter

With this new transmitter, signal can be sent at a greater distance.

藉由這台新的傳輸器,訊號可以傳送更長的距離。

#### transmit

This computer allows users to trasmit data wirelessly.

這部電腦能讓使用者利用無線傳輸資料。

# transmission

Wireless transmission of data makes it possible to access the Internet anywhere.

利用無線的方式傳輸資料使得人們可以到處使用網際網路。

# 7. portable

Portable computers are getting more and more popular because of their small size and light weight.

手提式電腦由於體積小重量輕,越來越受到歡迎。

#### 8. receive

Tom was happy to receive a phone call from his girlfriend.

湯姆很高興接到他的女朋友的來電。

When you buy something big like a computer, you should keep the receipt.

當你購買電腦這類大的物件時,應該要保留收據。

# 9. range

His blood pressure has gone above the normal range.

他的血壓超過了正常範圍。

The price of these diamonds ranges from two to six million dollars.

這些鑽石的價格從兩百萬到六百萬元不等。

#### 10. centimeter

This new cell phone is just ten centimeters in length.

這支新手機只有十公分長。

There are 1,000 meters in one kilometer.

一公里等於一千公尺的長度。

# 11. digital

My cell phone can play various digital music files, including MP3s.

我的手機可以播放各類型的數位音樂檔案,包括MP3 檔。

The largest three-digit number is 999.

最大的三位數數字是九百九十九。

#### 12. moreover

She has a good singing voice. Moreover, she can play several instruments.

她的歌聲很優美,此外,她還會演奏一些樂器。

#### 13. exchange

They will exchange gifts with each other at the party.

他們將在聚會當中互相交換禮物。

I'll give you both of my bikes in exchange for your motorcycle. Is that a fair exchange?

我把我的兩台腳踏車都給你,來換你的摩托車,這樣的交換公平吧?

#### 14. trade

Would you trade your MP3 player for my cell phone?

你要不要拿你的MP3 播放器和我換手機?

Silk was mainly traded in this town two hundred years ago.

絲綢在二百年前主要是在這個城市進行交易。

Our company will continue to trade with Japan next year.

我們公司明年將繼續和日本進行貿易。

#### 15. cheek

He kissed her on the cheek.

他吻了她的臉頰。

### 16. exist

If the problem still exists, you may call him for help.

如果這個問題仍舊存在的話,你可以打電話向他求助。

Can any living thing exist in an airless place?

有任何生物可以在沒有空氣的地方存活嗎?

This problem has been in existence for ten years.

這個問題已經存在十年了。

These people all depend on this land for their existence.

這些人全仰賴這塊土地存活。

#### 17. limit

They all agree that freedom of speech should not be limited.

他們都同意言論自由不應該受到限制。

Working hours are limited to ten hours a day in this country.

這個國家限制一天的工時最多為十小時。

This program offers limitless opportunities to students interested in biology.

這個計劃提供給對於生物學有興趣的學生無限的機會。

# 18. signal

There is a problem with her TV; it fails to receive any signal.

她的電視有點問題,無法收到任何訊號。

When you see that signal, just run!

當你看到那個訊號時,儘管跑就是了!

The man signaled to the waiter to bring him the check.

這位男士向侍者打個信號,要他把帳單拿來。

Some birds make loud sounds to signal danger.

有些鳥發出巨大的叫聲以示警有危險。

#### 19. contrast

English is my favorite subject. In contrast, math does not appeal to me.

英文是我最喜愛的科目。相對之下,數學對我沒有吸引力。

There exist sharp contrasts between the two cultures.

這兩種文化之間存在著強烈的對比。

In this report, the chemist contrasts this newly found metal with other chemical elements.

在此份報告中,這位化學家把這種新發現的金屬拿來和其他的化學元素相比 較。

His bravery contrasted sharply with the cowardice of the other passengers.

他的英勇和其他乘客的懦弱形成了強烈的對比。

### 20. extend

These mountains extend across this small island.

這些山戀綿延於這個小島上。

My ideal college is one with an extensive campus.

我理想中的大學要有遼闊的校園。

# 21. interpret

We all found it hard to interpret this English poem.

我們覺得解析這首英詩很困難。

Our teacher asked us to come up with our own interpretation of the English poem.

我們教師要我們想辦法自己解析這首英詩。

# 22. implant

A microchip has been implanted into the cat's ear.

這隻貓耳朵裏面植入了一塊微晶片。

#### 23. possess

It is against the law to possess guns in this country.

在這個國家擁有槍枝是違法的。

He was caught in possession of guns.

他因持有槍枝而被逮捕。

# 24. prefer

He prefers to live in the countryside.

他比較喜歡住在鄉下。

Generally speaking, people in Asian countries show a stronger preference for male babies

一般說來,亞洲國家的人民比較偏好生男孩。

Most businesses give preference to applicants with working experiences.

多數企業偏愛有工作經驗的應徵者。

# 25. normal

Although he is a famous movie star, he just wants to lead a normal life.

雖然他是著名的影星,他卻只想過普通日子。

# **Idioms and Phrases**

# 1. come up with

The officials came up with a plan to solve the traffic problems.

官員們想出了一個計畫來解決交通問題。

# 2. lie in

His success lies in his willingness to try new things.

他的成功原因在於他願意嘗試新事物。

# 3. pick up

My mobile phone can pick up wireless signals even in the mountains.

我的手機即使在山區也可以收到無線訊號。

# 4. may well

It may well rain tomorrow.

明天極可能下雨。

# 5. rather than

He usually goes to school by bus rather than by train. 他通常搭公車上學,不是坐火車。

# 6. in other words

He got up late this morning. In other words, he was late for school again. 他今天早上睡晚了,换句話說,他上學又遲到了。