

Lesson 19
The stuff of dreams
话说梦的本质

First listen and then answer the following question.
听录音，然后回答以下问题。

What is going on when a person experiences rapid eye-movements during sleep?

It is fairly clear that sleeping period must have some function, and because there is so much of it the function would seem to be important. Speculations about its nature have been going on for literally thousands of years, and one odd finding that makes the problem puzzling is that it looks very much as if sleeping is not simply a matter of giving the body a rest. 'Rest', in terms of muscle relaxation and so on, can be achieved by a brief period lying, or even sitting down. The body's tissues are self-repairing and self-restoring to a degree, and function best when more or less continuously active. In fact a basic amount of movement occurs during sleep which is specifically concerned with preventing muscle inactivity.

If it is not a question of resting the body, then perhaps it is the brain that needs resting? This might be a plausible hypothesis were it not for two factors. First the electroencephalograph (which is simply a device for recording the electrical activity of the brain by attaching electrodes to the scalp) shows that while there is a change in the pattern of activity during sleep, there is no evidence that the total amount of activity is any less. The second factor is more interesting and more fundamental. Some years ago an American psychiatrist named William Dement published experiments dealing with the recording of eye-movements during sleep. He showed that the average individual's sleep cycle is punctuated with peculiar bursts of eye-movements, some drifting and slow, others jerky and rapid. People woken during these periods of eye-movements generally reported that they had been dreaming. When woken at other times they reported no dreams. If one group of people were disturbed from their eye-movement sleep for several nights on end, and another group were disturbed for an equal period of time but when they were not exhibiting eye-movements, the first group began to show some personality disorders while the others seemed more or less unaffected. The implications of all this were that it was not the disturbance of sleep that mattered, but the disturbance of dreaming.

CHRISTOPHER EVANS The stuff of dreams from The Listener

New words and expressions 生词和短语

- speculation
- n. 推测
- literally
- adv. 确实
- odd
- adj. 奇特的
- tissue
- n. 组织
- plausible
- adj. 似乎有理的
- hypothesis
- n. 假说
- electroencephalograph

- n. 脑电图仪
electrode
- n. 电极
scalp
- n. 头皮
psychiatrist
- n. 精神病学家
punctuate
- v. 不时介入
jerky
- adj. 急动的
disorder
- n. 失调
implication
- n. 表明

参考译文

很清楚，睡眠必然具有某种作用。睡眠占去那么多时间，所以其作用似乎还是很重要。人们对睡眠作用的种种猜测，确实有数千年之久。一项使人对这个问题感到困惑的奇怪的发现是，睡眠在很大程度似乎并不仅仅是为了使身体得到休息。“休息”，从使肌肉得到放松等方面来看，只要稍微躺一躺，甚至坐一坐就能达到。人体组织在一定程度上有自我修补和自我恢复的能力，有张有弛地连续活动时，其功能最佳。事实上，睡眠状态下仍有着基本的活动量，以防止肌肉活动停止。

如果睡眠的功能不是在于使身体得到休息，那么也许是让大脑得以休息？若不是下面两点，这种假使似乎是有道理的。第一点，脑电图记录仪（不过是一种把电极接到头皮上记录脑电活动的仪器）显示，人在睡眠时大脑活动的方式有变化，但没有迹象表明，其活动总量有任何减少。第二点更有意思，也更重要。前些年，美国一位精神病学者发表了一篇报告，报告中记录了眼球在睡眠时的活动情况。他指出，平常人的睡眠周期中不时伴有一阵阵奇怪的眼球队活动，这些活动有的飘忽而缓慢，有的急剧而快速。在眼球活动期间被叫醒的人都说自己在做梦；在其他期间叫醒他们，则说没有做梦。如果有两组人，一组人连续几夜在眼球队活动时被叫醒；另一组人也是连续几夜被叫醒，但是在眼球队没活动时被叫醒的。结果，第一组人开始出现性格失常，而第二组人似乎没受什么影响。这一切暗示我们：睡眠受到干扰没关系，而做梦受到干扰是有问题的。