英语注释读物

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Great Men of Medicine

湖南公共外语协会

编 注 说 明

为了巩固提高大专院校学生阅读英语的能力和为爱好英语的读者们提供适合的课外阅读材料，我们选了近年来美国雷敦出版公司发行的“世界伟人丛书”之一“医学伟人”这本书，并加上注释和选择提问，便于大家阅读。本书所介绍的十位伟人都是在医学史上作出巨大贡献的医生和科学家，他们献身科学事业的精神非常感人，可以激励读者献身四化。同时又可帮助我们学到丰富多采的语言知识，可谓一举多得，是本值得一读的好书。书中各篇的语言难点，均作了通俗易懂的注释并有选择提问（附答案）帮助读者进一步掌握语言知识和加强阅读理解能力。但由于我们水平有限加上时间仓促，错误遗漏在所难免，还望读者多加指导与提供宝贵的意见。

本书是由湖南医学院外语教研组教师李东来蔡宣培注释的。朱铁蓉老师作的选择提问和答案。我们互相进行了校审并承在湖医任教的美籍老师 Alice Hadler 和 Bill Watkins 帮助解决了某些疑难问题，同时得到我院陈慕竹老师和湖大谢卓杰老师的大力支持，特在此致谢。

编 注 者

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Great Men of Medicine

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ANDREAS VESALIUS[1]

1514—1564

The Founding of Modern Medicine[2]

Jacobus Sylvius[3], who was said to be[4] the greatest teacher of medicine in all Europe, was a surly little man with a red nose and a bad temper. As he climbed to the elevated platform in the middle of the lecture hall to begin his first class of the year 1533, he said fretfully, "Two of you have not paid all your fees[5]. If they are not paid by tomorrow there will be no class for anyone!" He coughed a few times to soothe his ruffled feelings and then began to lecture.

In the first row of benches there sat a young Belgian student who had come to Paris for the express purpose of studying with this man Sylvius. For years he had

dreamed of the day when[6] he, Andreas Vesalius, the apothecary's son, would be sitting in a lecture hall of the great University of Paris, listening to the famous teacher. And here he was. Here too, alas, was Jacobus Sylvius! So far[7], Jacobus Sylvius was a great dis appointment.

Sylvius held up a large, well-worn book[8]. "This divinely inspired volume, young gentlemen," he said, "is the *De Usu Partium*[9]—On the Use of the Parts—by Galen[10]. From it you will learn your art. Learn well from this book, young scholars, for I tell you that progress beyond Galen is impossible! He has said all that there is to be said about the human body[11]." Then he opened the book and began to read from it in a low, monotonous voice. The class took notes at a furious pace, fearful of missing a single word. Very few students four hundred years ago could afford to own anything as rare and expensive as a book[12].

Vesalius, too, began copying down the words of Galen, although it occurred to the brilliant young man that someone must have learned *something* new about the human body in thirteen hundred years[13]. Neither he nor anyone else in Paris, however, was prepared to argue with Galen.

Galen, the Greek physician of the wise Roman emperor, Marcus Aurelius[14][15], was truly a mighty man, as powerful in the year 1533 as he had been thir-

teen centuries earlier. For the idea had become firmly fixed in most people's minds that the ancient Greek and Roman writers had somehow or other known all there was to know about medicine and science[16]. The influence of Galen's writings was so strong that it was considered irreverent to dispute a word of them.

The anatomy course dragged on[17] as it had begun. Sylvius read from the book, and the students copied down the words of Galen. Occasionally a dissection was made on the body of a dog or a pig. If any part of the animal's body differed from the description of the same part in the book, Sylvius informed the class that the dog or pig was "wrong" and had no business contradicting Galen[18].

Dissections on the human body were rarer still. The practice was frowned upon and was seldom permitted. And when the city officials did[19], on occasion, hand over the body of an executed criminal to the University professors, the valuable material was wasted.

Neither Jacobus Sylvius nor John Guinther, Vesalius' other professor of anatomy, enjoyed or excelled in dissection. "I would not mind having as many cuts inflicted on me," Vesalius later wrote about Guinther, "as I have seen him make either on man or other brute—except at the banqueting table[20]."

Such activity as cutting up dead bodies was far beneath the dignity of a professor. Ignorant barber-

surgeons, the cheaper the better[21], were called in to do the job. From his earliest days in Paris, Vesalius had resented this custom. The sight of a barber hacking away at a muscle or blood vessel, often destroying the very structure he was supposed to be uncovering, infuriated the young man[22].

On one such occasion, the barber announced that the part he was looking for was not to be found. Sylvius then grumbled that mankind had apparently changed, and changed for the worse, since Galen's day. At this point the fiery-tempered Belgian could bear no more[23]. He rose, walked over to the table, snatched the knife from the barber's hand, and skillfully uncovered the missing part. After a few such incidents the question of dissection was settled very sensibly. At the request of[24] the professors and the students, the young foreigner took over[25] the job completely. Sylvius, although he was undoubtedly jealous of Vesalius' skill, must have been pleased[26] with this arrangement. It saved the price of a barber.

Vesalius had not been in Paris very long before he realized that he would never learn what he wanted to learn unless he took matters into his own hands[27]. Copying notes from Galen and making an occasional dissection during a lecture could not satisfy his restless zeal for knowledge. He began to collect and dissect every animal he could get his hands on[28]. But animals, he

knew very well, were not the answer[29].

"The devil take the corpse of every pig that ever lived[30]!" he said one day, looking up from the animal he was dissecting for the benefit of[31] some fellow students. "I want to know what *men* are, not pigs! Believe me, my friends, there is only one book from which to learn about the human body, and that's the human body itself!"

There was a moment of shocked silence. Some of the students then made for[32] the door as quickly as they could. The *human* body, he said. And just how did *he* intend to get his hands on a human body, when even the great professors of the University of Paris could hardly ever get hold of one[33]? This Belgian was clearly headed for trouble[34]. It would not be wise to be seen associating with him.

But some of his classmates stayed. The boldest of them said, "Could we really get hold of a human body?"

"I know where we could get some bones, anyway," Vesalius said eagerly. "There's a tavern half a square from the main gate of the Cemetery of the Innocents. Meet me there tonight at eleven."

From then on the young gentlemen of the University had a new sport to add to their already plentiful ways of getting into trouble[35] with the townspeople. Vesalius and his friends made almost nightly tours of Paris in search of material. They knew perfectly well what would

happen to them if they were ever caught. But the greater the danger, the more they enjoyed it.

The grim hill of Montfaucon was a rich hunting ground. Here the bodies of all executed criminals were brought and hung from wooden beams. In the dark of the night such a place was not likely to attract crowds of passers-by. Except for a pack of wild dogs that once attacked them, the anatomy students had the place to themselves.

For bone-searching, the Cemetery of the Innocents was an unrivaled location. Here a rebuilding of the city walls had disturbed the bones of thousands of plague victims. Vesalius and his band turned up[36] "an abundant supply," he later wrote. "Having learned by long and tiring observation, we, even blindfolded, dared at times to wager with our companions, and in the space of half an hour no bone could be offered us ... which we could not identify by touch. This had to be done the more zealously by us who desired to learn inasmuch as there was a great lack of the assistance of teachers in this part of medicine[37]."

In 1536 the French king, Francis I, on bad terms[38] as usual with nearly every other king in Europe, came close to declaring war on the Emperor Charles V. Life in Paris became difficult for foreign students. Vesalius, who was a loyal subject of the Emperor Charles, left France. He returned to Belgium to study and then to lecture

at the University of Louvain.

Now that he was teaching, Vesalius found the usual shortage of material more annoying than ever[39]. But he quickly introduced the students of Louvain to the Paris method of research. One night while he and his friend Regnier Gemma, a mathematician, were out prowling, he made the most spectacular find of his bone-hunting career[40].

Chained to a stake on the gallows hill he saw, to his astonishment, what was to all appearances a perfect and complete human skeleton. It was the remains of a criminal who had been burned at the stake. Birds of prey had been at work and had left nothing but the bare bones.

If Vesalius had just been handed a chest full of gold pieces he could not have been more excited[41]. In a matter of seconds[42] he was up on his friend's shoulders, eagerly reaching for the bones. "After I had brought the legs and arms home in secret and successive trips," he wrote, "I allowed myself to be shut out of the city in the evening in order to obtain the thorax which was firmly held by the chain. I was burning with so great a desire ... that I was not afraid to snatch in the middle of the night what I so longed for[43] ... The next day I transported the bones home piecemeal through another gate of the city."

A few days later a human skeleton, expertly wired

together, was hung in the lecture hall. Vesalius answered suspicious questions by saying, "Oh, this? I had it sent from Paris[44]."

He had not been in Louvain more than two years before he clashed with the most powerful and influential professor of the University. The subject of their dispute was the proper method of blood-letting, at that time the most controversial topic in all of medicine. Vesalius had already begun to grow restless in Louvain. Now that he had managed to make enemies of the entire medical faculty, he decided to seek his fortune elsewhere. He packed up his books, his notes, his drawings, and his bones, and headed south to Italy.

It was a wise move. The Italians, unlike the French, had no objections to the study of anatomy or the use of the human body for dissection, for the Church encouraged such study as a means of improving medical education. Less than a year after his arrival in Italy, Vesalius was appointed professor of surgery at the University of Padua His duties included the teaching of anatomy. Vesalius was young for such an honor, the University faculty realized. But did that matter when you considered that he could sit blindfolded and identify any bone in the body simply by touching it[45]? The wagers he had once made in the taverns of Paris were still paying handsomely[46].

Vesalius quickly became one of the most famous men

in Italy. His lectures were an immediate success. Three weeks of intensive work, at twelve hours a day, completed the course. A new series began the day after the previous series ended. In addition to the medical students, the hall was always crowded with people who wanted to see the novel sight of an anatomy professor dissecting and talking at the same time. And an anatomy professor who rarely read from a book of Galen except to point out some error in it! Vesalius' lectures became fashionable. The Italians of that period were hungering for new knowledge and new intellectual experiences, and these the Belgian professor certainly had to offer.

During his very first lectures at Padua, Vesalius introduced something absolutely new to his classes. He drew and hung up in the hall large charts showing the veins, the arteries, and the nerves, so that the students could see at a glance what had once taken hours of explanation[47]. The charts were such a success that the professor went a step further. He hired an artist named Jan Stefan van Kailkar, a pupil of the great Titian[48]. Together the two men prepared six large plates of anatomical drawings. They were published in 1538. In an introduction to these unique charts, Vesalius wrote, "If I find this work is accepted ... someday I hope to add something greater[49]."

This was the first hint of a work that marks the turning point in the history of medicine and is, indeed,

one of the landmarks in the development of human thought.

No one knows exactly when Vesalius decided to write his own book on anatomy—a book that would go for its authority[50] not to tradition and hearsay, not to Galen or any other ancient writer, but to the human body itself. But the young professor began the actual work on it very shortly after his arrival in Italy.

His lecture fees alone were now bringing him much more money than he had ever had before. As his income grew, plans for his book became more and more elaborate. His labors were punctuated by violent arguments with the artist or artists who worked with him. Like many collaborators who need each other, the men got along[51] very badly. Vesalius wrote angrily that the book had cost him a monstrous amount of work in directing the eye, the hand, and the intelligence of the artist. At times, he added, he had felt much more unfortunate than the criminal whose body he was dissecting[52].

This is only one side of the story. No doubt the artist—it was probably Jan Stefan van Kalkar—suffered too. Vesalius took revenge[53] by refusing to mention his name at any point in the book. Future generations of scholars suffered from this whim. To this day no one is sure exactly who did the marvelous illustrations.

At last, in August of 1542, Vesalius sent the plates

of the book across the Alps[54] to Basel, Switzerland, with a long letter of instruction and pleading. He commended the project to the care of a certain John Oporinus[55], professor of Greek, who owned a fine printing press. The following January he himself arrived at Oporinus' shop to supervise the final steps. He watched, burning with impatience[56], as the last of the 701 magnificently printed pages came from the press. And at last he held the book in his hands:

Andreae Vesalii Bruxellensis
DE HUMANI CORPORIS FABRICA
Basileae, 1543

Andreas Vesalius of Brussels
ON THE STRUCTURE OF THE HUMAN BODY
Basel, 1543

"The greatest book ever written," said the revered Dr. William Osler[57], "from which modern medicine dates[58]."

Vesalius' work is important not only because it was the first textbook of anatomy ever written. It stands supreme as the greatest work in the history of medicine because it showed, for the first time, what could be done

when a man, relying on his eyes and his own brain, went straight to nature to learn the secrets of human life.

In 1628 a book was published that, together with Vesalius' *De Fabrica*[59], finally broke the power of ancient authority. The book was *An Anatomical Treatise on the Movement of the Heart and Blood in Animals, by William Harvey*[60], *the Englishman, Physician to the King*. It proved once and for all[61] that the human body is the only true source of knowledge about itself.

Like the *De Fabrica*, Harvey's book caught the world unprepared. Harvey's theory was such a complete break with the traditional view—Galen's view—that people could not easily grasp it. To assert that blood moved in a circle was bad enough. But to claim that the *same* blood is used over and over again was not only an absurdity but an insult to nature herself[62]. How long, after all[63], could a body remain healthy if the same old used-up[64] blood was pumped through it again and again? "'Twas believed by the vulgar that he was crack-brained[65]," a historian of the times wrote, "and all the physicians were against him." Harvey's long life was nearly over before anyone began to take his work seriously[66].

Yet Harvey's proof of the circulation of the blood has been called "the greatest single discovery ever made

about the human body." His little book did for physiology what Vesalius' did for anatomy[67]. On these two foundation stones, modern medicine was built.

"医学伟人"注释

第一篇　现代医学奠基人—韦萨留斯(1514—1564)

1. Andreas Vesalius：A·韦萨留斯是十六世纪比利时伟大的解剖学家。有些解剖学名词即以他的名字命名，如支气管粘液腺称为韦萨留斯腺（Vesalius glands）。

2. The Founding of Modern Medicine：现代医学奠基人（或创始人）。

3. Jacobus Sylvius：J·西耳维厄斯，1533年是法国巴黎大学医学教授。

4. Who was said to be……：他据说是……

5. Two of you have not paid all your fees：你们中间有两人未交清学费。

6. … when he … sitting：when 是关系副词，引导定语从句修饰 the day.

7. So far, Jacobus Sylvius was a great disappointment：so far 迄今。全句可译为 J.西耳维厄斯迄今十分令人失望。

8. A well-worn book：一本相当破旧的书。

9. "De Usu partium" 是法文相当于英语 "On the Use of the Parts"（"论身体各部分的用途"）。

10. Galen：盖仑（约公元130—200）古罗马著名医生。

11. He has said all that …… body：that 是关系付词引导定语从句修饰 all。全句可译为：他已阐明了有关人体的一切问题。

12. Very few students …… a book：意译为：四百年前很少有学生买得起一本书，因为即时书既稀少又昂贵。

13. … although it occurred to …… that：it 是形式主语，that 连接的从句是真正主语。全句可译为：尽管这位有才华的年轻人认为在过去的一千三百

年内必定有人已经了解到人体的某些新东西。

14. Marcus Aurelius：M·奥里欧斯（公元121—180）是斯多噶学派哲学家，于161—180年为罗马皇帝。

15. Galen …… earlier：the Greek physician of the wise Roman emperor 是 Galen 的同位语，M. Aurelius 是 Roman emperor 的名字。全句可译为：盖仑——聪明的罗马皇帝M·奥里欧斯的希腊医生——确实是一位强有力的人物，在一千五百三十三年他仍像一千三百年以前一样享有权威。

16. For the idea … that … science：that 连接的从句作 the idea 的同位语，somehow or other 相当于 in one way or another 是设法、莫明其妙地的意思。全句可译为：认为古代希腊罗马的作者们不知怎的已掌握医学和科学全部知识的观点，在绝大多数人的心目中已形成了一种固定不变的概念。

17. to drag on：冗长乏味地进行着。

18. had no business contradicting Galen：意思是不能怀疑和反驳盖仑。to have no business：无权、无关。

19. did hand：助动词 did 用来加强 hand 的语气。

20. "I would not mind … table：全句可译为：后来关于约翰·崑特尔，韦萨留斯曾写到："我不在乎他在我身上解剖就像他解剖人体或其他动物一样。"（这是幽默的说法，实际是崑特尔除了在宴会桌上动刀叉以外从不作解剖）。

21. The cheaper the bettter：愈便宜愈好。

22. The sight …… young man：hacking … 是现在分词短语作后置定语修饰 barber；destroying … 也是现在分词作状语，表示与 hacking 的伴随情况。he was surprised to be uncovering 是省略了关系代词 that（which）的定语从句修饰 structure。全句可译为：理发师任意砍掉一块肉或一根血管，往往破坏了正是韦萨留斯想要解剖清楚的结构，使这位年轻人极为愤怒。

23. could bear no more 相当于 couldn't bear any more，意思是"再也无法忍受"。

24. at the request of：应 …… 请求。

25. to take over：接管、接收、取代。

26. must have been pleased with：必定对 …… 很高兴。

27. to take matters into one's own hands：将事情置于某人亲自掌握之下。