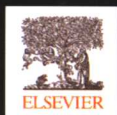


third call

医学英语高阶

*English Course for
Medical Professionals*



北京大学医学出版社
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医学英语高阶

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foreword

Back in January 1996, we could never have imagined when we presented our ALISSA Project on linguistic requirements for health workers to the European Commission's Leonardo da Vinci Program, that we would end up here.

But one thing led to another and, once the study had been successfully completed, we found we had unique knowledge about this important group's needs for scientific English.

Moreover, the demand was seen to be much greater than we had imagined, to the extent that many of us think the day will come when it will be very difficult to practice our profession without at least the basics of English because the bibliography, the international fora and the congresses are all dominated by this language. And, as if this were not enough, the Internet has now come to be an everyday working tool. With its enormous potential for training, information and exchange, it is now placing even more pressure on us as professionals to acquire sufficient medical English.

Since a thorough analysis of needs is the first step for designing specific teaching materials and since this step had already been taken, it seemed only natural to go on to the next one. That is, the production, for the first time, of a course in medical English that was designed as such from the start and that aimed to meet the specific needs of all health sector professionals.

It was a huge task but, thanks to the hard work of a few people and collaboration by many others – from institutions to companies and including people of great prestige in the field of health science, so many of them that they cannot be mentioned here – here I am writing this foreword. This represents the culmination of a project which I am sure will be welcomed by those it addresses.

Ignacio Sánchez Nicolay

Former President of the Spanish Medical Organization

acknowledgements

A complex work of these characteristics always requires assistance and collaboration. This is the time to acknowledge all the advice, support, criticism and contributions so generously given by both individuals and institutions. Special mention must be made of Ruth Forgan for her outstanding dedication, Thomas J. Hoeft for his organizational skills, and Isabel Álvarez and Blanca Díaz for their translations.

We must also express our thanks to Lisa Smith and Chris Benaud of the Royal Flying Doctors, Australia; Dr Pat Butler and Ann Price of the World Health Organization; Shirley Slipman of Nursing Times; Sharon Reader of the British Medical Journal; Dr David Baldwin of the American Association of Experts in Trauma Studies; Pierre Steiner of Gordon and Breach Publishers, Lausanne; Adam Shalson of the Superlative Travel Agency, London; Llana Alroy of International Travel and Congresses, Israel; Kristina Fallenius of The Nobel Foundation, Stockholm; Simon Geller, Editor of Men's Health; Janice Graner, Administrator, and Jessie Bradley, Public Affairs in the Mayo Clinic, Rochester; Nancy Brown, Project Manager for Telemedicine Information Exchange; Kate Cheney of the Boston Consulting Group; Clint Harper of Dream Swing; David Sharp, Deputy Editor of the Lancet; Dr Sandra Goldbeck-Wood of the British Medical Journal; Dr Paul Scully-Power, the first Australian astronaut, and Gorka Beaumont, Gabriel Monreal Goikoetxea, Mrs Shirley Kaye, Yvonne Warrington, Ms Kim Sparrow, Mrs Margaret Chapman, Dr Mirian Berruete, Dr TG Palferman, Dr Maria Teresa Herraiz, Dr Cristina Esteve, Kit Cree, Michelle Mulkeen, Ms Elizabeth Forgan, Maureen Becker, Dr Thomas Forgan, Dr Richard O'Donovan, Sonia Arellano and Manolo Rekalde.

We would also like to acknowledge the many institutions which have provided information and allowed us to reproduce materials belonging to them. Some of them have been kind enough to accept interviews and to send us exclusive articles for which we are especially grateful. They include the Spanish Medical Organization, the Navarre Medical Association, the Lancet, the British Medical Journal, the New England Journal of Medicine, Bats and Biodiversity, the Library of Navarre Hospital, the University Clinic in Pamplona, the Mayo Clinic in Rochester, USA, the Australian Royal Flying Doctors Service, the US National Transport and Safety Board, the Israeli Society for Sedation Analgesia and Anesthesia in Dentistry, the Israel Society of Anesthesiologists, the Aircare Alliance in London, the Nobel Foundation in Stockholm, Men's Health Magazine, the World Health Organization, the Nursing Times, Virtual Hospital, the Telemedicine Information Exchange, the Boston Consulting Group and the American Association of Experts in Trauma Studies.

Very special thanks must be given to Dr Ignacio Sánchez Nicolay, Former President of the Spanish Medical Organization, who was the inspiration behind this work and without whose firm advocacy of on-going medical training it would not have been possible.

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Art and Medicine

unit 1

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Reading 1

Many great artists have suffered from illnesses and have found therapy through their art. As an example, Henri Matisse whilst confined to a wheelchair after surgery for cancer, developed a technique with paper cuttings and carvings in colored paper. The German artist, Paul Klee, is another artist who used his art as a method to cope with his disease. The following text describes his story.

Before reading, check the definition of *scleroderma* in your medical dictionary and write a brief description of the illness in your own words in English.

Endure! How Paul Klee's Illness Influenced His Art

Paul Klee (1879-1940) was one of the most influential artists of the 20th century. Although some of his abstract paintings have great form and strength in their

composition, other drawings remind us of cartoons or, even, of sketches done by children in which a few lines clearly emphasise the characteristics of the chosen subjects, often in an amusing way. Klee's work is based on a genuine humanistic attitude and has an intrinsic poetic quality. Recent critical interpretation of his contribution to modern art takes into consideration the social and political circumstances of his period.

Klee was diagnosed with scleroderma at the age of 57 in 1936. His health deteriorated and he died in 1940. Although his productivity declined soon after the diagnosis, Klee adapted his style and managed to produce more than 1,000 works in the last years of his life. Many of these, especially the drawings, deal with fear, suffering, and death; others may reflect Klee's disfigured body, or at least how he perceived his illness. Although there have been attempts at a

psychoanalytical interpretation of some of his work, much of it can be regarded as an immediate expression of his scleroderma. Here I assess how the disease may have influenced his work in the last years of his life.
[.....]

Influence of Disease on Klee's Art

Klee started to keep a diary from 1898, when he was 19 years old until 1918. Although initial entries were about typical issues of adolescence, there was no reference to any serious illness. Despite heavy consumption of alcohol and tobacco, and a somewhat bohemian lifestyle during a long trip to Italy in 1901-02 with his friend the sculptor Hermann Haller, Klee mentioned in his diary only the occasional "stabbing headache". Thus, it is reasonable to assume that he was healthy during his younger years.

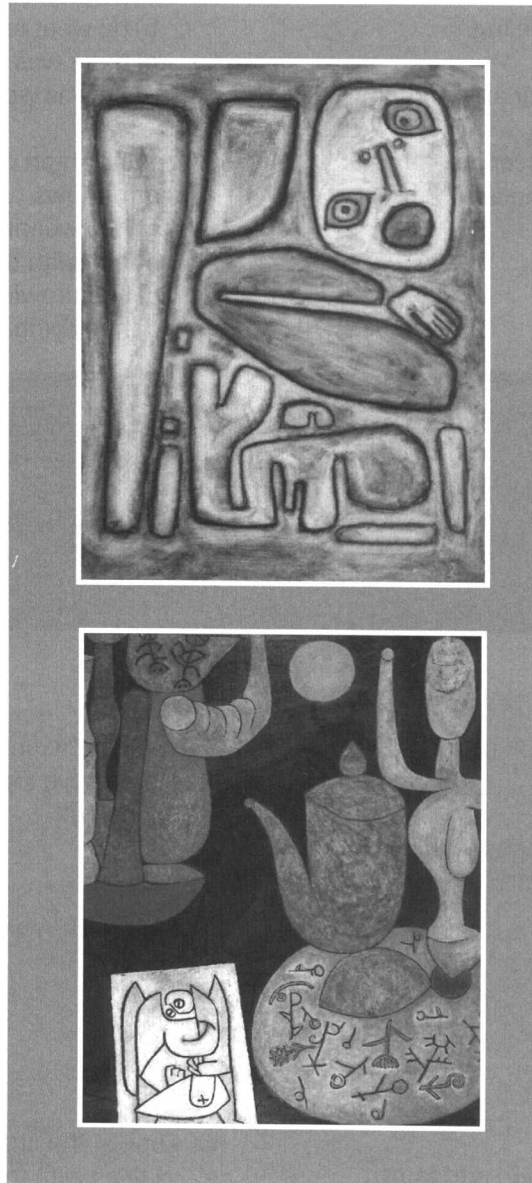
It is difficult to reconstruct the phases of Klee's final illness because, as far as it is known, he left no written account of his personal feelings during the progression of the disease. Letters written since 1933 suggest the presence of Raynaud's syndrome, which is typical of early scleroderma. In 1935, Klee complained in private correspondence of non-specific symptoms, such as fatigue and exhaustion. Soon after, he contracted measles with a slow recovery. The same year, he complained of dyspnoea or exertion and arthritic pain in his hands. Finally, the diagnosis of scleroderma (systemic sclerosis) was made in 1936. Since scleroderma has properties of an autoimmune disease, the measles may have triggered its initiation or exacerbation. On the recommendation of his physician to stop smoking and visit a spa to

improve his well-being, Klee took a cure at the spas of Tarasp and Montano in 1936, and visited Ascona in 1937.
[.....]

In February, 1940, Klee had a major exhibition at the Kunsthhaus, Zurich, where he showed more than 200 works. After this exhibition, which was not well received by the public, he became exhausted, and in May, 1940, went to convalesce at the sanitarium in Orselina-Locarno. Klee's dyspnoea worsened, and he was admitted to the Sant'Agnes hospital in Locarno-Muralto. He died on June 29, 1940, of acute heart failure. Since Klee's medical records were destroyed by a fire at the hospital after his death, there is no indication either of how his illness was managed or of the circumstances of his heart failure. There was no necropsy. Klee was cremated on July 1, 1940, in Lugano, and a funeral service was held in Bern.

A photograph of Klee, taken 4 months before his death in 1940, shows some of the typical skin abnormalities of scleroderma, including shiny and taut skin and the beginnings of flexion contractures, small stretched lips surrounded by wrinkles, and shrunken skin over the base of the nose and cheek bones giving the whole face a rigid, mask-like appearance. Klee was aware of the profound changes in his image and one of

his last drawings was entitled *Durchhalten!* (*Endure!*), which shows a wholly disfigured face remarkably resembling the photographs of the artist.
[.....]

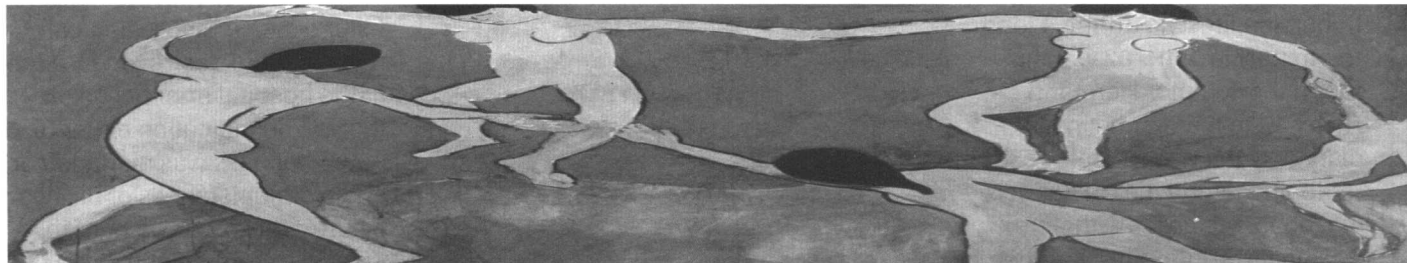


Gunter Wolf
The Lancet; Vol 353, May 1, 1999

Reading Comprehension Questions

Choose the best answer.

- 1) What is the basis of Paul Klee's artwork?
 - a) Pictures drawn by children.
 - b) Funny cartoons.
 - c) Modern art of his period.
 - d) Poetry and a humanistic feeling.
- 2) What did Klee express in his later artwork?
 - a) His bohemian life-style.
 - b) The problems of his adolescence.
 - c) Typical symptoms of his illness.
 - d) A lack of interest in life.
- 3) In his letters, Klee mentioned...
 - a) feelings of tiredness and breathlessness.
 - b) how the measles had started the disease.
 - c) how he had managed to stop smoking.
 - d) his personal feelings about his condition.
- 4) Following Klee's exhibition at the Kunsthaus, Zürich...
 - a) he didn't like going out in public.
 - b) he went to get better at the Sant' Agnes hospital.
 - c) there was a fire at the hospital.
 - d) he was worn out and tired.
- 5) A photograph of Klee, taken 4 months before his death, shows...
 - a) him wearing a mask.
 - b) him with the usual skin symptoms of scleroderma.
 - c) him drawing a self-portrait.
 - d) him dying.



Words in the Text

In this section, you may need a dictionary to help you answer these questions.

1. Look at the first two paragraphs. Which words could you replace with the following?

configuration	
funny	
compassionate	
dropped	
deformed	

2. Which of the words in the third and fourth paragraph have the following meanings?

- displaying an unconventional and very informal way of life
- something very sharp and sudden, usually associated with pain
- expressed annoyance or dissatisfaction
- caused an immediate and often violent reaction
- the state of being healthy

3. Look at the first four paragraphs again. Which words have the opposite meaning to the following?

weakness	
old	
bravery	
adulthood	
final	

4. Look at the final paragraph. What words could you replace with the following?

glossy	
firm	
lines	
deep	
completely	

Grammar Check 1 Parts of Speech

When you are studying a foreign language, you will find it very useful if you are familiar with some grammatical terminology and are able to identify different parts of speech. In some cases it may seem obvious that a word is a noun, verb or adjective, etc. Other times it is less clear. Test your knowledge of parts of speech with this

activity. Bear in mind that many words have more than one function depending on the context.

Match the parts of speech from column **A** with their definition in column **B**. Then find an example in column **C**. All of these words are from the text about Paul Klee.

A	B	C
1. A noun ...	has no meaning on its own and is used in front of a noun or pronoun.	here, finally, soon, wholly
2. A pronoun ...	describes a noun or pronoun.	a, an, the
3. An adjective ...	stands in place of a noun.	he, which, others, us
4. A verb ...	describes a verb, adjective or other adverb.	drawings, fear, health, illness
5. An adverb ...	expresses a relationship between a noun or pronoun and some other part of the sentence.	remind, done, left, worsened
6. A preposition ...	names a person, thing or abstract idea.	although, despite, and, because
7. A conjunction ...	expresses an action or state of being.	influential, early, small, slow
8. An article ...	joins two words or groups of words.	during, since, until, in

Learning Strategies Studying by Yourself

While it is easy to begin a language course on your own, it takes considerable willpower to complete one. Ultimately it is you who will determine the degree of your own success. There are various factors you should take into account to optimize your success. For busy professionals, spare time is at a premium. Learning a language is an art (one of the many explored in this unit) that requires self-discipline. Decide how much time you have and how much time you want to dedicate to progressing in English. The more you invest in learning, the more you will advance. Some people find it useful to stick to a routine, others are more anarchic. Whatever your style, take it little by little to avoid burn out after a week.



It's Your Turn 1

Look at the following sentences and say which part of speech the words underlined are.

- Many of the drawings deal with fear and suffering.
- Klee's medical records were destroyed by a fire after his death.
- He didn't have a healthy lifestyle.
- His abstract paintings have great form and strength.
- Although there have been attempts to analyse his work, the results are inconclusive.
- Music can help build and strengthen connections of nerve cells.
- The paintings were completely destroyed in the fire.

Vocabulary 1 Medical Phrasal Verbs

Although most of the following phrasal verbs have a general application, they are particularly useful in a medical context. Do you know what the ones in the left-hand column mean? Link the phrasal verbs with their synonyms in the right-hand column.

1. to look back	A. to reduce (the quantity of)
2. to break out	B. to appear
3. to come on	C. to contract
4. to go down with	D. to stop
5. to cut down	E. to test
6. to try out	F. to tolerate
7. to pass away	G. to erupt, to appear suddenly
8. to put up with	H. to die
9. to give up	I. to remember

Listening Medical Phrasal Verbs



Now listen to the nine sentences about the life of Paul Klee. Each one contains a phrasal verb from the vocabulary activity.

Without looking back at the text or the vocabulary activity, write down each phrasal verb you hear in the correct form or tense in which it appears in the sentence.

Example:

1. He had to cut down. (infinitive).



Functions

Using Prepositions to Describe a Structure



The Skin and the Brain

Modern artists such as Klee and Picasso were famous for their reinterpretation of form. Their mature work dissects the human body into its component parts. The unique perspective of medical diagrams might also be considered a form of expressionist art! Look at the diagram of the structure of the skin. Then complete the description below using the words in the box.

by, by, by, below, from, of, of, bacteria, vessels, away, sweat, inner

The whole body is covered (1) by skin, which protects it (2)..... injury and (3)..... and helps to regulate body temperature. Skin is made up (4)..... two main layers; the dermis and the epidermis. The dermis, the lower layer, contains nerve endings, hair follicles, (5)..... glands, sebaceous glands and blood (6)..... . The epidermis consists (7)..... an upper layer of dead cells and an (8)..... layer of living cells. The upper layer is continually worn (9)..... and replaced (10)..... cells produced (11)..... the basal layer. The hair shaft is above the surface of the skin and the root is (12)..... it.

Practice

Now practice describing a structure by describing the brain.

Use the diagram, prepositions of place and the words and phrases on the right to help you.



- largest part – cerebrum
- divided into
- right hemisphere/left hemisphere
- outer layer – gray matter
- inner layer – white matter
- cerebrum (cerebral cortex) – conscious behavior
- different area, different functions – e.g. movement, touch, vision, hearing, thought
- cerebellum – balance and movement
- brain stem – regulates vital functions e.g. breathing and heartbeat
- such as
- consists of

Reading 2

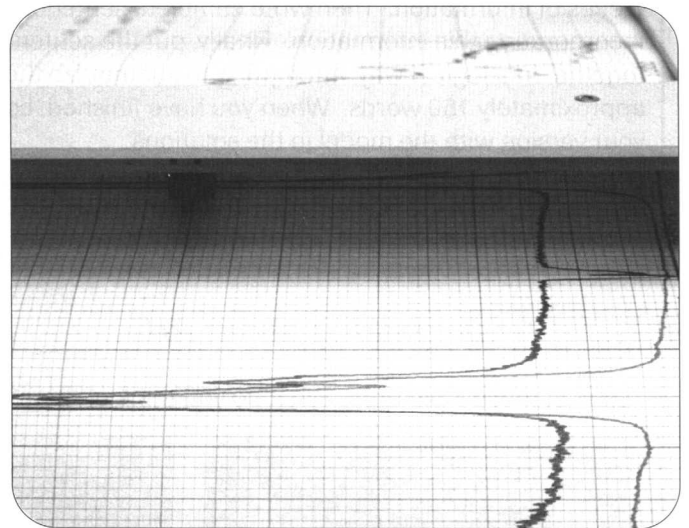
In the previous activity you looked at the physical structure of the brain and how different areas are responsible for different functions. There are still, however, many theories about the brain and human behavior which remain unsolved. The following text looks at how the brains of artistic people differ from those of the rest of us.

Artists Really Do Have Different Brains

In a pioneering experiment, portrait painter Humphrey Ocean allowed his brain to be scanned while he made a drawing from a photograph.

This was done at Stanford University using function magnetic resonance imaging (fMRI), which monitors activity in different parts of the brain. When Ocean drew, there was activity in the back of the brain, which gathers visual signals as expected. But there was also activity in the frontal, 'thinking', part of the brain, which was not seen when non-artists carried out the task. This suggests that an artist uses his brain to 'think' a drawing while the rest of us merely copy the material in front of us.

So, have we found the signature of artistic activity in the brain? And if so, what's the point? Well, call me a philistine, but I suggest the next artist shortlisted for the Turner Prize should be required to have a brain scan before submitting their work. The result should be hung next to their creation and then we'll know if we're being conned or not.



Musicians are also coming under scrutiny. In a recent experiment at the University of Texas, eight conductors were scanned as they listened to a Bach chorale while following the score. When the rhythm was altered from the score, the scan showed a sudden burst of activity in the cerebellum. This was surprising because the cerebellum is normally associated only with movement and balance. Further experiments showed that the cerebellum actually increases in volume with musical practice.

So it looks as if the brains of artists really are different. But whether people are born with artistic brains, or the brain is shaped by exercising talent, remains an open question.

From Susan Aldridges' article in *Focus*, February, 1999.