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Lesson 55 From the earth:Greetings

来自地球的问候 虚拟语气的省略

与课文关联的 17个单词(点击每个单词可查看详细介绍)



astronomy /ə'strɒnəmi/

n. 天文学

relative * /'relatɪv/ adj. 相对的

infinitely /'ɪnfɪnətli/

adv. 无限地，无穷地

solar * /'səʊlə(r)/ adj. 太阳系的

Venus /'vi:nəs/ n. 金星

Mars /mɑ:z/ n. 火星

orbit /'ɔ:bit/ n. 运行轨道

astronomical /,æstrə'nɒmɪk(ə)l/
adj. 天文学的

generate /'dʒenəreɪt/ v. 产生

particle /'pɑ:tlɪk(ə)l/ n. 微粒，粒子

Jupiter /'dʒu:pɪtə(r)/ n. 木星

blot * /blɒt/ v. 遮暗

analyse /'ænləaɪz/ v. 分析

bacteria * /bæk'tɪəriə/ n. 细菌

Oxygen /'ɒksɪdʒən/ n. 氧气

realm /reɪlm/ n. 领域

endeavour /ɪn'devə(r)/ n. 努力

通过报道引出 难度：3 级

※ Recent developments in astronomy have made it possible to detect planets in our own Milky Way and in other galaxies.

『 **detect** v.to discover or notice sth, especially sth that is not easy to see, hear, etc. 发现，觉察 』

- The tests are designed to **detect** the disease early.
- an instrument that can **detect** small amounts of radiation

『 the Milky Way = the Galaxy 银河 』

- How many of you have seen **the Milky Way, the Milky Galaxy** in the sky? 你们有多少人见过银河, 天上的银河系?
- Supernovas in **the Milky Way** are the likeliest source for most of the cosmic rays reaching Earth. 银河系中的超新星最有可能是大多数宇宙射线到达地球的来源。
- Isn't that strange that **the Milky Way** is the galaxy that the planet earth is in, and most of us have never seen it? 银河系是地球所在的星系, 而我们大多数人从未见过它, 这不是很奇怪吗?
- **The Galaxy** consists of 100 billion stars. 银河系由1千亿颗恒星组成。

※ This **is a major achievement because, in relative terms, planets are very small and do not emit light.**

『 **in relative terms** compared with other, similar things 相对来说 』

- Students have less money **in relative terms**, but spend more on books.
- They can only be our enemies in relative terms.“敌人”只不过是相对而言而已。
- This is a major achievement because,in relative terms这是一个重要的成就, 因为相对来说

※ Finding planets **is proving hard enough, but finding life on them will prove infinitely more difficult.**

『 **prove (to be) + adj. / n.** 被证明是... 』

- The search **proved** difficult, for the puma was often observed at one place in the morning and at another place 20 miles away in the evening.

『 **infinitely** adv. very much — used esp. when comparing things (尤其与比较级连用) ...得多 』

- Your English is **infinitely** better than my German.
- Travel is **infinitely** more comfortable now than it used to be.

『 **far / much / even / still / yet + 比较级** ...得多 』

far + 比较级	This problem is far more complicated than we expected. 这个问题比我们预期的复杂得多。
much + 比较级	The second proposal is much better than the first one. 第二个提议比第一个好得多。
even + 比较级	His latest film is even more successful than the previous one. 他最新的电影比上一部还要成功。

still + 比较级	The situation is still worse than we had anticipated. 情况比我们预想的还要糟糕。
yet + 比较级	The new version is yet more efficient than the last one. 新版本比上一个更高效。

※ The first question to answer **is whether** a planet **can actually support** life.

主系表

『 **support** v. to provide the right conditions, such as enough food and water, for life (提供合适的条件以) 维持生命, 使活下去 』

- The land is **so** poor here **that** it cannot **support** any crops.
- Because of pollution, this lake is now too acid to **support** fish.

※ In our own solar system, **for example**, Venus **is** far too hot **and** Mars **is** far too cold to support life.

『 **sth. be far too adj. and sth. be far too adj. to do** 具有两个过度的特点, 导致做某件事变得不合适或无法完成 (负面表达) 』

- The box **is far too heavy** and the hallway **is far too narrow** *to carry* it through. 箱子太重了, 而且走廊太窄, 根本无法把它搬过去。
- The weather **is far too cold** and the roads **are far too icy** *to go hiking* today. 天气太冷了, 而且路面结冰, 今天根本不适合去远足。
- This project **is far too complex** and the deadline **is far too tight** *to complete* it on time. 这个项目太复杂了, 而且截止日期过于紧迫, 不可能按时完成。
- The movie **is far too long** and the plot **is far too boring** *to keep* the audience engaged. 这部电影太长了, 而且剧情太无聊, 无法让观众保持兴趣。
- The dress **is far too expensive** and the size **is far too small** *to be worth buying*. 这件衣服太贵了, 而且尺码太小, 不值得购买。

※ Only the Earth **provides** ideal conditions, **and** even here it **has taken more than** four billion years for plant and animal life to evolve.

『 **it takes ... (for ...) to do sth.** 对某人来说做某事花了多少时间 』

- **It took a few minutes for** his eyes to adjust to the dark.
- **It can take as long as eight days to rig up rope ladders and to establish supply bases before a descent can be made into a very deep cave.**

提出观点 难度：3级

※ Whether a planet can support life depends on the size and brightness of its star, that is its 'sun'.

『 **that is (to say)** or more exactly 也就是说，确切地说（引出同位语） 』

- The fare is reduced for children, **that is** anyone under 15 years old.
- One solution would be to change the shape of the screen, **that is**, to make it wider.
- Languages are taught by the direct method, **that is to say**, without using the student's own language.
- I loved him — **that is**, I thought I did.
- I'll meet you in the city, **that is**, I will if the trains are running.
- One authority on spiders made a census of the spiders in a grass field in the south of England, and he estimated that there were more than 2,250,000 in one acre, **that is** something like 6,000,000 spiders of different kinds on a football pitch.

『 **i.e.** “也就是说、即：” 』

- The film is only open to adults, **i.e.** people over 18.
- The hotel is closed during low season, **i.e.** from October to March.
- The price must be more realistic, **i.e.** lower.

『 “也就是说” 』

- She has worked at the bank for many years, nine **to be exact**. (后置)
- He was economical with the truth — **in other words**, he was lying.
- It's fairly risky. Or **to put it another way**, don't try this at home.

※ Imagine a star up to 20 times larger, brighter and hotter than our own sun.

『 **Imagine** 引导祈使句 』

- **Imagine** life without hot water.
- **Imagine** that you have just won a million pounds.
- **Imagine** their dismay when they found a beautifully-cooked wallet and notes turned to ash!

『 **up to sth.** 含义1: as much or as many as a certain amount or number but not more 多达 ... 』

- The Olympic Stadium will hold **up to** 80,000 spectators. 多达
- The temperature went **up to** 35°C. 上限 (最高)

『 **up to sth.** 含义2: = up till (时间) 英文解释: for the whole of a period until a certain time or date 直到... 』

- **Up to** the time of his death, Richard Colson was one of the most notable figures in our town.
- **Up to now**, historians have assumed that calendars came into being with the advent of agriculture, for then man was faced with a real need to understand something about the seasons.

※ Alternatively, if the star **were** small, the life-supporting planet **would have to have** a close orbit round it and also **provide** the perfect conditions **for life forms to develop**.

『 **alternatively** adv. used to introduce a suggestion or to mention sth. different to what has just been stated 或者 』

- The agency will make travel arrangements for you. **Alternatively**, you can organize your own transport.
- We could go to the Indian restaurant, or **alternatively**, we could try that new Italian place.

『 **life-supporting** 复合形容词 』

- the planet which supports life ⇒ the **life-supporting** planet

『 **复合形容词简化定语从句** 』

- animals which eat insects ⇒ **insect-eating** animals
- silverware which is made by hands ⇒ **hand-made** silverware
- diseases which are related to stress ⇒ **stress-related** diseases
- **state-owned** enterprises 国有企业
- **flower-selling** girls 卖花女孩
- **epoch-making** masterpieces 划时代的作品
- **cancer-causing** substances 致癌物质

Alternatively, if the star were small, the life-supporting planet **would have to** have a close orbit round it and (would) also (have to) provide the perfect conditions for life forms to develop. 并列句的省略

『 **for...to do** 引出动词不定式的逻辑主语 (介词后用宾格) 』

- He opened a door and stood aside **for** her *to pass*.
- Her circumstances had never been good enough **for** her hopes *to be realized*.

❖ But how **would** we **find** such a planet? 虚拟语气的省略

But how **would** we **find** such a planet **if** there **were** such a planet? 课文补全

❖ **At present**, there **is** no telescope in existence that is capable of detecting the presence of life. 双定语修饰“telescope”

『 **in existence** 存在 』

- The organization has been **in existence** for 25 years. 介词短语做表语
- This is the oldest Hebrew manuscript **in existence**. 这是现存最古老的希伯来语手稿。

come into existence 开始存在

Scientists have many theories about how the universe first **came into existence**.

『 **presence** n. the existence of sb. or sth. in a particular place 存在 』

- The somewhat acid flavour is caused by the **presence** of lactic acid. 略有的酸味是由乳酸的存在造成的。
- He barely registered our **presence**. 他几乎没有注意到我们的存在。
- The cameras were not an intrusive **presence**. 这些摄像机的存在不会造成干扰。

one's presence 某人的存在

- Her **presence** during the crisis had a calming effect.
- **We enjoy staring at them entranced as they go about their business, unaware (we hope) of our presence.**

the presence of的存在

- Tests revealed **the presence of** poison in the blood.
- **The presence of** pollen in the atmosphere causes hay fever in some people.

detect the presence of ... 寻找...

- a device for **detecting the presence of** submarines
- The dogs were trained to **detect the presence of** explosives.

❖ The development of such a telescope will be one of the great astronomical projects of the 21st century.

『 **develop** v. to design or make a new idea, product, system etc. over a period of time 开发, 研制 』

- Scientists are **developing** new drugs to treat arthritis.
- Local entrepreneurs **developed** fashionable restaurants, bars and discotheques in the area. 当地的企业家在这个地区开办了时尚的餐馆、酒吧和迪斯科舞厅。
- He claims that several countries have **developed** nuclear weapons secretly. 他声称几个国家已经秘密开发了核武器。

『 **development** n. the process of creating a new product or method 开发, 研制 』

- His work is mainly in software **development**.
- The funds will be used for product **development**.
- The talks will focus on economic **development** of the region. 会谈将聚焦于该地区的经济开发。

『 **正规书面语中名词更正式** (中文喜欢用动作、英文喜欢用名词) 』

GRE范文

The resolution of some problems of today is urgent and critical for the survival of a society.

Overemphasis upon some existing problems could cause harmful effects.

The efforts to solve problems of the future is sometimes of paramount importance for the avoidance of potential threats or even catastrophes we can anticipate.

- **His acceptance of** bribes led **to his arrest**.
- **My arrival** coincided with **his departure**.

结论 难度: 3 级

✧ **It is impossible to look for life on another planet using earth-based telescopes.**

『 **-based** 含义1: combines with nouns referring to places to mean sth. positioned or existing mainly in the place mentioned, or operating or organized from that place 位于 (常用语构成复合形容词的词根) 』

- a **Washington-based** organization
- **land-based** missiles
- **earth-based** telescopes

『 **-based** 含义2: used with some names to make adjectives describing the main substance in a product 主要成分为... 』

- **lead-based** paints
- **carbon-based** fuels
- **nitrogen-based** fertilizer
- pasta and other **wheat-based** products

❖ Our own warm atmosphere and the heat generated by the telescope would make it impossible to detect objects as small as planets. 虚拟语气的省略

Our own warm atmosphere and the heat generated by the telescope would make it impossible to detect objects as small as planets if we looked for life on another planet using earth-based telescopes. 课文补全

❖ Even a telescope in orbit round the earth, like the very successful Hubble telescope, would not be suitable because of the dust particles in our solar system. 虚拟语气的省略

Even a telescope in orbit round the earth, like the very successful Hubble telescope, would not be suitable because of the dust particles in our solar system if we looked for life using a telescope in orbit round the earth. 课文补全

『 **Hubble Space Telescope (HST)** 哈勃望远镜: Hubble Edwin Powell 1889-1953. American astronomer who discovered (1929) that the velocities of nebulae increase with distance 』

The **Hubble Space Telescope** is a telescope in orbit around the Earth. Its position outside the Earth's atmosphere allows it to take extremely sharp images, and since its launch in 1990, it has become one of the most important telescopes in the history of astronomy. It has been responsible for many ground-breaking observations and has helped astronomers achieve a better understanding of many fundamental problems in astrophysics.

『 **particle** n. a very small piece of sth. 微粒 』

- dust **particles**
- tiny **particles** of soil

『 **elementary particle** n. one of the types of pieces of matter including **electrons, protons,** and **neutrons** that make up **atoms** 基本粒子 』

- A proton is an **elementary particle** of matter that possesses a positive charge. 质子是带正电荷的物质的基本粒子。
- **Elementary particle** masses are thought to come about from the interaction with the higgs field. 物理学家认为基本粒子的质量来自于粒子与希格斯场的交互作用。

※ A telescope **would have to be as far away as the planet Jupiter** to look for life in outer space, **because the dust becomes thinner the further we travel** towards the outer edges of our own solar system. 虚拟语气的省略

A telescope would have to be as far away as the planet Jupiter to look for life in outer space **if we looked for life in outer space**, because the dust becomes thinner the further we travel towards the outer edges of our own solar system. 课文补全

『“越...越...”比较 两个the 分别放在句首，前半句从句，后半句是主句，从前往后翻译』

- The harder they worked the hungrier they became.
- The more he gets, the more he wants
- The harder you work, the greater progress you will make.

『主句倒装』

- The younger the child is (从句), the more is the child's need of sleep. (主句, 倒装)
- The more democracy spreads, the stronger become the forces of peace.

『谓语动词是be动词 可省略』

- The younger the child is, the more is / will be the child's need of sleep.
- The younger the child, the more the child's need of sleep. (be动词省略)
- The higher the standard of living, the greater the amount of paper used. (be动词省略)
- The higher the standard of living is, the greater is / will be the amount of paper used.

Needless to say, the bigger the risk an insurance company takes, the higher the premium you will have to pay.

Needless to say, the bigger the risk an insurance company takes is, the higher will be the premium you will have to pay.

『“越...越...”比较 第一句the加比较级放在句中，第二句the加比较级放在句首，只能先翻译后半句，再翻译前半句』

- They became (the) hungrier the harder they worked. 前主后从
- A telescope would have to be as far away as the planet Jupiter to look for life in outer space, because the dust becomes thinner the further we travel towards the outer edges of our own solar system.
- We are so familiar with the fact that man ages, that people have for years assumed that the process of losing vigour with time, of becoming more likely to die the older we get, was

something self-evident, like the cooling of a hot kettle or the wearing-out of a pair of shoes.

because	the dust becomes thinner	the further we travel towards the outer edges of our own solar system.
引导原因状语从句		原因状语主句 (先翻译)
The thinner the dust becomes the further we travel. 灰尘越薄, 我们走得越远。(The + 比较级..., the + 比较级...)		
The further we travel the thinner the dust becomes. 我们走得越远, 灰尘就越稀薄。(语法相同, 但强调的顺序不同)		

※ Once we detected a planet, we would have to find a way of blotting out the light from its star, so that we would be able to 'see' the planet properly and analyse its atmosphere.

『 way of doing sth. 做某事的方式 』

- a new **way of storing** information
- Is there any **way of stretching** shoes? 有什么办法能把鞋撑大吗?
- I've worked out a new **way of doing it**. 我想出了做这事的一个新方法。
- I'm not happy with this **way of working**. 我不喜欢这种工作方法。

way to do sth. 做某事的方式	What is the best way to clean this?
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『 blot n.a mark or dirty spot on sth., esp. made by ink 污点, 墨迹 』

- ink **blots**
- This is a serious **blot** on your career. (派生: 污点)

blot out to cover sth. so that you can no longer see it 遮住	Dark clouds overhead had blotted out the sun.
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『 so (that) 作连词时的两种用法 』

- The one with the money got **such** a fright **that** he dropped the bag. 结果状语从句
- The ball struck him **so** hard **that** he nearly fell into the water. 结果状语从句
- This time he was barking **so that** someone would let him out! 目的状语从句

<p>结果状语从句 “所以”，从句谓语动词中一般没有情态动词</p>	<ul style="list-style-type: none"> • We paid him immediately, <u>so (that)</u> he left contented. • The pie committee decided that the best way to transport the dish would be by canal, <u>so</u> they insured it for the trip. • In the new country he became absorbed in making a new life for the two of us, <u>so that</u> he gradually ceased to grieve.
<p>目的状语从句 “以便”= in order that ..., 从句谓语动词中多出现情态动词</p>	<ul style="list-style-type: none"> • We paid him immediately, <u>so (that)</u> he would leave contented. • It had been purchased by a local authority <u>so that</u> an enormous pie could be baked for an annual fair. • This time they fixed heavy metal clamps to both sides of the dish <u>so that</u> they could fasten the chains.

『 **properly** adv. (BrE) completely, fully, thoroughly 完全地, 彻底地 』

- Is the chicken **properly** defrosted?
- He got **properly** beaten by the world champion.

※ **In the first instance**, we would be looking for plant life, rather than 'little green men'. 虚拟语气的省略

If we looked for life on a planet, in the first instance, we would be looking for plant life, rather than 'little green men'. 课文补全

『 **in the first instance** (fml.) as the first part of a series of actions 首先, 第一 』

- **In the first instance**, notify the police and then contact your insurance company.
- Anyone wishing to join the society should apply **in the first instance** to the secretary.
- **In the first instance**, increasing the temperature is out of the question. 在第一种情况下, 提高温度是不可能的。

『 **Little green men** 【idiom】 is a popular expression used to describe extraterrestrial life. 』

- **Little green men** from space. 来自太空矮绿种人。
- You believe in **little green men**? 你相信有小绿人?
- Are **little green men** bagging the best sunbeds by the hotel pool? 是小绿人正在享受酒店泳池边最好的日光浴床么?

※ The life forms most likely to develop on a planet would be bacteria. 虚拟语气
气的省略

The life forms most likely to develop on a planet would be bacteria **if** the planet could support life. 课文补全

※ It is bacteria that have generated the oxygen we breathe on earth. 强调句

Bacteria have generated the oxygen we breathe on earth. 不强调

※ For most of the earth's history they have been the only form of life on our planet.

※ As Earth-dwellers, we always cherish the hope that we will be visited by little green men and that we will be able to communicate with them.

『 dweller 居民 』

- The city dweller never experiences anxieties of this sort.
- The number of city dwellers is growing. 城市居民的数量日渐增长。

『 cherish v. to keep hopes, memories or ideas in your mind because they are important to you and bring you pleasure 长期怀有某种感情 』

- Like a scientist bent on making a discovery, he must cherish the hope that one day he will be amply rewarded.
- He cherished the hope of winning an Olympic medal.
- He cherished the memory of his late wife.
- He cherished the illusion that the girl was in love with him.

※ But this hope is always in the realms of science fiction.

『 realm(s) (单复数含义类似) 』

- an idea that belongs in the realm(s) of science fiction
- I suppose it's not beyond the realm(s) of possibility.
- This is not really within the realm(s) of my experience.

『 **science fiction (also informal sci-fi)** n. [U] a type of book, film/movie, etc. that is based on imagined scientific discoveries of the future, and often deals with space travel and life on other planets 科学幻想 (科幻) 』

- He loves **science fiction** in particular. 他特别喜欢科幻小说。
- In this section you'll find horror and **science fiction**. 你可以在这一部分找恐怖和科幻小说。
- The idea of cloning extinct life forms still belongs to **science fiction**. 对绝种的生命形式进行克隆的想法仍然属于科学幻想。

※ **If we were able to discover** lowly forms of life like bacteria on another planet, it **would completely change our view of ourselves**.

『 **lowly** adj. low in rank, importance, or social class 卑微的, 低等的 』

- He was a **lowly** assistant gardener.
- Certainly the metabolism function will be also **lowly**. 当然新陈代谢机能也会低下。
- The **lowly**-ranked often feel misjudged, and say so. 低排名的总是感觉被无牌, 而且他们也是这样说的。
- Though I am **lowly** and despised, I do not forget your precepts. 我微小, 被人藐视。却不忘记你的训词。

『 **low** adj. & adv. 低的 (地) 』

- bow **low** to the Queen ^{adv.}
- That plane's flying too **low**! ^{adj.}
- **We were, however, worried about our nearest neighbours, whose farm was low lying and who were newcomers to the district.** ^{adv.}

※ **As Daniel Goldin of NASA observed**, 'Finding life elsewhere **would change everything**. No human endeavour or thought **would be unchanged by it.**' 虚拟语气的省略

Finding life elsewhere would change everything **if** life were found elsewhere. **If** life were found elsewhere, no human endeavour or thought would be unchanged by it. 课文补全

『 **observe** v. (fml.) to make a written or spoken comment about someone or something (评论) 说 』

- "I've always found German cars very reliable," he **observed**.
- She **observed** that it would soon be time to stop for lunch.

『 **observation** n. a spoken or written remark about something you have noticed 言论, 评论 』

- A young English writer made the pertinent **observation** a year or two back that the talent goes into the first draft, and the art into the drafts that follow.
- She has good powers of **observation**. 她有很强的观察力。
- Is that a criticism or just an **observation**? 那是一种批评呢，还是一种观察评论而已？
- The diaries are a mixture of confession and **observation**. 这些日记混合着自白和一些观察。

『 **elsewhere** adv. in, at, or to another place 在别处，到别处 』

- The answer to the problem must be sought **elsewhere**.
- Our favourite restaurant was full, so we had to go **elsewhere**.

『 **Daniel Goldin** 人物介绍 』

Daniel Saul Goldin (born July 23, 1940) served as the 9th and longest-tenured Administrator of NASA from April 1, 1992, to November 17, 2001. He was appointed by President George H. W. Bush and served under three presidential administrations.

『 **NASA** n. National Aeronautics and Space Administration a US government organization that controls space travel and the scientific study of space (美国) 国家航空航天局 』

- **NASA is now going to put the telescope right, so it will soon be sending up four astronauts to repair it.**
- **NASA** is an abbreviation for "National Aeronautics and Space Administration."



That's the way the ball bounces.

这就是球弹跳的方式("天意"或"命中注定");人生百态，世事难料；只能如此

受限于个人水平，笔记若有疏漏之处，恳请发送邮件至 hibenba@gmail.com 批评指正。

同时可通过网址(ncego.com)页面底部“举报”错误 (更新于:2026-03-01)。

一场孤独的修行，需要相信积累的力量。专注当下、珍惜时间、心怀感恩、顶峰相见。