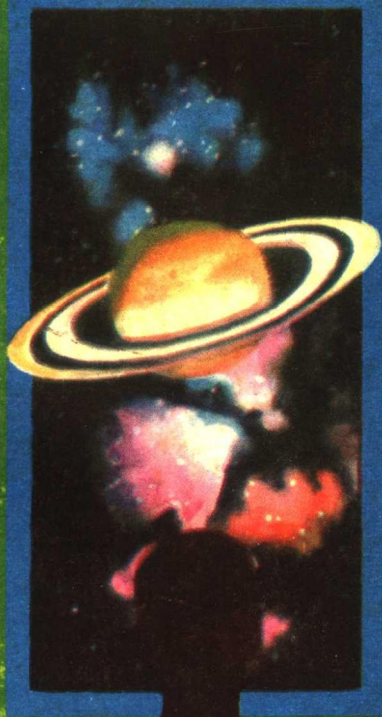


# 太空中有人吗？

〔英〕路易斯·琼斯著  
施明德注释



陕西人民出版社

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## Where are we?

Go outside on a clear night<sup>①</sup> and look up. The black sky is covered with points of light. You know they are stars.<sup>②</sup> But where are they? How far away?<sup>③</sup> How many stars can you see? How many of them can you *not* see? Which star is nearest?

These are the first questions that people ask.<sup>④</sup> Later, the questions become more interesting. What is a star like?<sup>⑤</sup> How hot or cold is it? Is a star a world? With living things?<sup>⑥</sup>

And that brings the most interesting question of all<sup>⑦</sup>.

'Here I am, looking up into the night.<sup>⑧</sup> Is anybody there? Are there other worlds in the sky? With people on them? And at this minute, on one of those worlds, is someone looking into the same night? And is he also thinking: *Is anybody there? Are there other worlds in the sky? With people on them? And at this minute, on one of those worlds, is someone looking into the same night? And is he also thinking: "Is anybody there..."*'

If there are other worlds, how can we find them? Where ought we to look?<sup>⑨</sup> If there are people on them, what are they like? Could we talk to them?<sup>⑩</sup> Send them messages? How? Would they understand? Are they sending messages to us even now? Are we receiving messages without knowing it? Have they visited us? Could we visit them?

Questions like these have been asked for a long time. But the only answers have been found in sto-

ries—in books, in the cinema, on television. The answers have always been made up.<sup>⑩</sup> But now at last we're trying to find the true answers to those questions.<sup>⑫</sup>

No one man can give us the answers. Some people know most about the story of the world, others<sup>⑬</sup> know about radio, some can tell us about the stars, others know a lot about living things. In the last few years, all these people have been coming together<sup>⑭</sup>. They've talked to each other, and learned from each other. And they've made plans to answer the question: Is anybody there?

At this minute<sup>⑮</sup>, some of them are listening for<sup>⑯</sup> messages from the stars. At this minute messages from our world are moving out towards the stars.

Are they all the same, these stars?<sup>⑰</sup> Or are there different kinds? Are they all far away? There are many questions to ask,<sup>⑱</sup> and we can't ask them all at the same time. Where ought we to begin? What ought we to ask first?

Maybe this: where are we? That's something we must know first.<sup>⑲</sup>

'How can I get to<sup>⑳</sup> London?'

'Where are you now?'

'I don't know.'

'Then I can't tell how to get to London.'<sup>㉑</sup>

Before we know where to look (or where to go) we must know where we are. Where is our world—the earth? We can begin by finding something near.<sup>㉒</sup> What is close to<sup>㉓</sup> us? Which star is the nearest to the earth?

It sounds like<sup>㉔</sup> an easy question. With your eye alone, you can see more than two thousand stars on a clear night. Which of those two thousand stars is

the nearest to us?

The answer is—none.

But you can't see all the sky from one place, so suppose you go to another part of the earth. Look up at the night sky again, and again you'll see about two thousand stars. And again the nearest star will not be there.

You may wonder if our nearest star is too small to see.⑤ But it isn't—it's the biggest and brightest star in the sky. So how do we find it?

### 注 释

- ① on a clear night 在一个晴朗的夜晚。“在夜晚”英语为 at night, 或 in the night, 但“在…的夜晚”, 即“夜晚”前有修饰语时, 介词用 on, 例如 on the first night 在第一夜, on Sunday night (或 on the night of Sunday) 在星期天夜晚。
- ② You know they are stars. 你知道它们是星星。know 后面省略了连接词 that, they are stars 是 know 的宾语从句。know, say, believe, expect 等动词后面有宾语从句时, 连接词 that 往往省略。
- ③ How far away? 本句是一个不完全句, = How far away are they? 它们离这儿多远?
- ④ These are the first questions that people ask. 这些是人们首先提出的问题。that people ask 是定语从句, 修饰 questions。
- ⑤ What is a star like? 星体是什么样的东西? What is ...like? (…是怎样的?) 是一个常见的句型, 如: What is Tom like? 汤姆是个怎样的人?
- ⑥ With living things? 上面有人吗? 这是个省略疑问句, 是紧跟上文的一个问题而提出来的, = Is a star a world with living things? 一颗星就是一个有人的世界吗?
- ⑦ the most interesting question of all = the most interesting of all questions 所有的问题中的最有趣的问题。of = among, 常用于有最高级的句子中。
- ⑧ Here I am, looking into the night. 我在此抬头观看夜晚的



天空。Here I am 是倒装句 = I am here. looking into the night 是分词短语，修饰 am，起陪衬说明的作用。

⑨Where ought we to look? 我们该往哪儿看呢？在疑问句中，ought 移到主语之前。

⑩Could we talk to them? 我们能跟他们谈话吗？这里的 could 并不表示过去的动作，而是表示不确定的可能性。

⑪The answers have always been made up. 答案一直是编造的。

⑫true answers to those questions 那些问题的正确答案。answer 后面常用介词 to，表示“…的答案”，例如：answer to my letter 对我的信的答复，The answer to  $3 \times 7$  is 21. 三乘七的答案是二十一。

⑬some..., others... 一些人...另一些人...

⑭have been coming together 一直聚在一起。“have + been + 现在分词”是现在完成进行时态，表示一个从过去某时刻开始 直到目前还在进行的动作。

⑮At this minute 在此刻（在写这句句子的时刻）。

⑯listen for... 等着听...，注意着听（...的到来）。

⑰Are they all the same, these stars? 这些星星都是相同的吗？these stars 是 they 的同位语。

⑱There are many questions to ask... 有许多问题可以问...，to ask 用作定语，修饰 questions，是主动的形式，被动的意义。

⑲That's something we must know first. 那是我们必须首先知道的事。We must know first 是省略了关系代词的定语从句，修饰 something。

⑳get to 到达。例如：They will soon get to the station. 他们马上就要到达车站了。

㉑Then I can't tell how to get to London. 那末我就说不上怎样才能到达伦敦了。tell, know 等动词后常接“疑问词 + to ...”的短语。

㉒We can begin by finding something near. 我们可以从寻找我们附近的東西米开始。by (+ 动名词)表示“通过...方式、方法”。

㉓close to 靠近，= near. 例如：Steam power has to be used close to the spot where it is generated. 蒸气只能在产生蒸气的附近使用。

㉔sound like 听起来像是...。sound, look, taste, feel 等动词后面经常用 like。

㉕too small to see 太小因而看不见。too... 后的动词不定式表示结果。

## Nine worlds

You can read a book by the light of ① our nearest star. It's so close that it can make you feel hot. It's so bright that ② when it shines you can't see any other stars. We have a name for the time when it's in the sky; daytime. And we have a name for the star; the Sun. So here is one close star we can study.

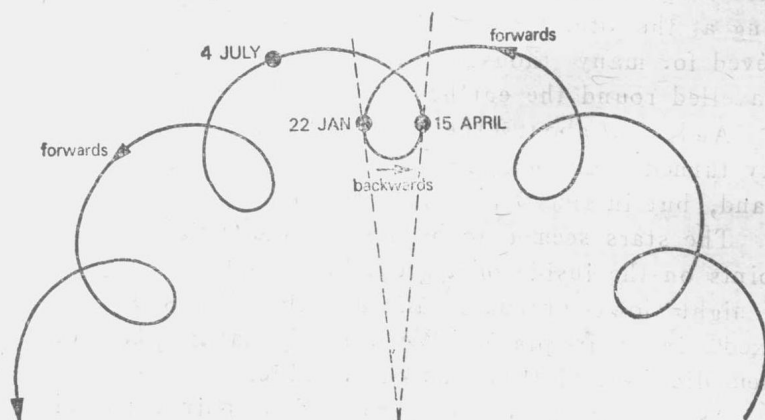
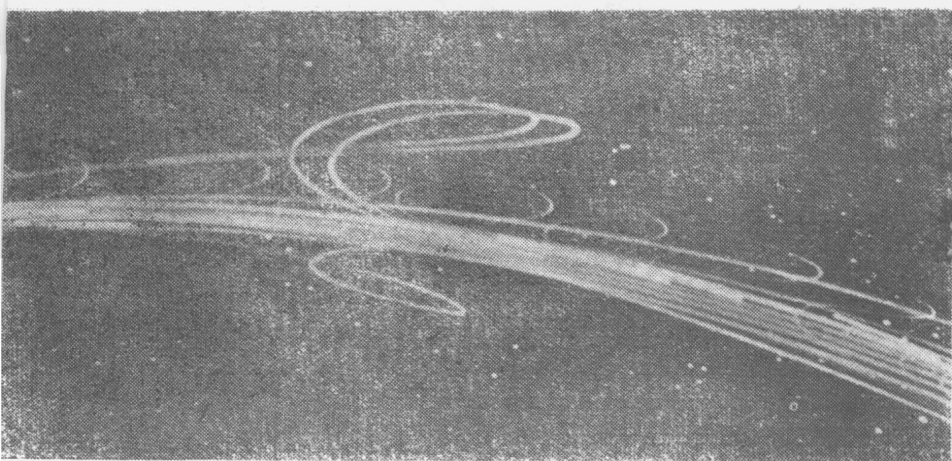
It's hot and it's bright and it looks large. It comes up every morning, journeys across the sky during the day, and sinks again at night—like a lamp that drops behind ③ the earth, and comes up next morning at the other side. And that's what was believed for many thousands of years ④—that the sun travelled round the earth.

And what about ⑤ the night sky? Maybe the whole sky turned round us. It was an easy picture to understand, but in time ⑥ it caused trouble.

The stars seemed to be fixed—like bright little points on the inside of a great black ball. The ball of night slowly turned, and all the lights stayed fixed ⑦ in their places. Well, *nearly* all. Five of them didn't—and that was the trouble.

As the night went by ⑧, those five points moved about ⑨ among the stars. Some of the five followed a course that turned and went backwards; then turned again and followed the first course. Clearly something was wrong with ⑩ the picture of fixed stars and a fixed earth. Men began to call the moving stars *planets*.

Suppose now that ⑪ the earth is also moving—



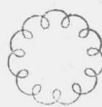
Venus



Mercury



Mars

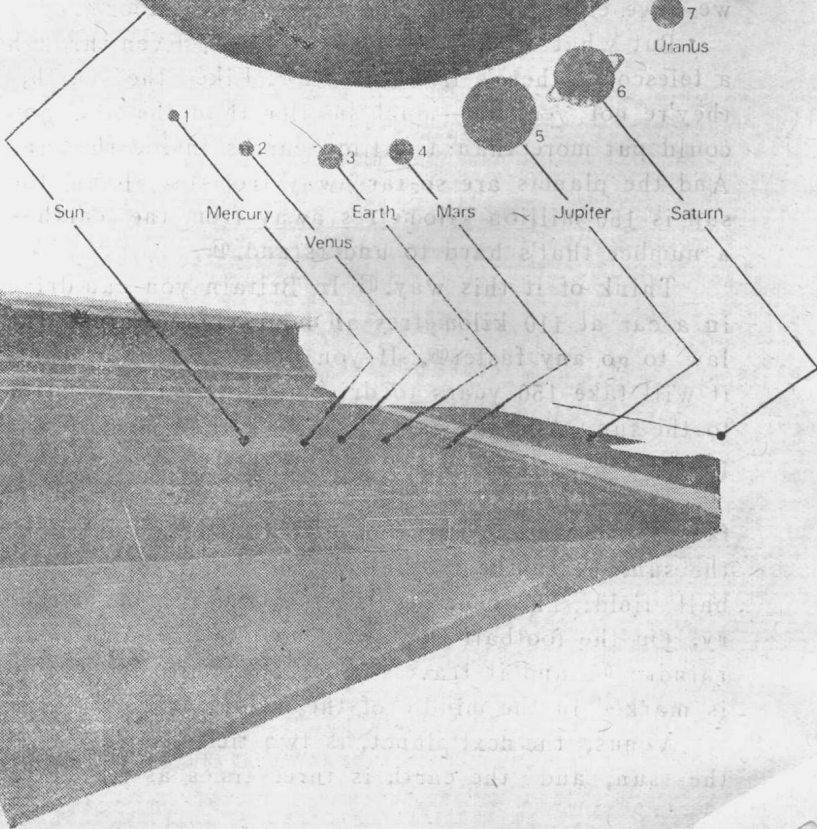
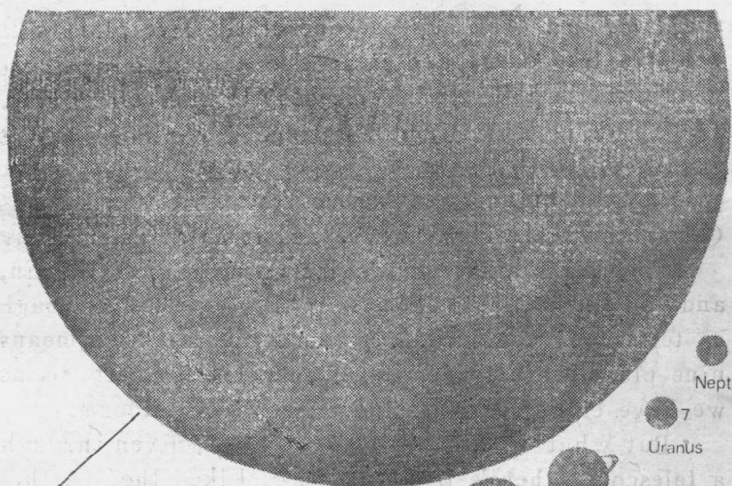


Jupiter



Saturn

*How the planets seem to move*



9  
Pluto

8  
Neptune

7  
Uranus



6  
Jupiter

Mars

Earth

Venus

Mercury

Sun

*round the sun.* And suppose one of the five planets is a world like ours, and it is also moving—*round the sun.* Notice how things become easy to understand now. The earth is travelling in a ring. And the planet is moving outside us—in a larger ring. When we're passing the planet, it seems to move backwards (like a slower train when we pass it in a faster one).

The five planets *are* worlds going round the sun, and you can still see them with the eye alone. Through a telescope you could see three more. That means nine planets are travelling round the sun. It seems we have eight other worlds right at our door<sup>⑫</sup>.

But what do we know about them? Even through a telescope, there's little to see<sup>⑬</sup>. Like the earth, they're not very big—much smaller than the sun. You could put more than a million earths inside the sun. And the planets are so far away from us. Even the sun is 150 million kilometres away from the earth—a number that's hard to understand.<sup>⑭</sup>

Think of it this way.<sup>⑮</sup> In Britain you can drive in a car at 110 kilometres an hour—it's against the law to go any faster<sup>⑯</sup>. If you drive as fast as that, it will take 150 years to drive all those kilometres to the sun. And the earth is closer than most of the planets.<sup>⑰</sup>

It may help to have a picture of the sun and its family of planets. Think of a football, and let it be the sun. Place the football in the middle of a football field. The nearest planet to the sun is Mercury. On the football field, it's no bigger than a small raindrop<sup>⑱</sup>, and it travels along the white ring that is marked in the middle of the field.

Venus, the next planet, is two times as far<sup>⑲</sup> from the sun, and the earth is three times as far. Both

are a little bigger than Mercury,<sup>①</sup> but they're still raindrops. On the sideline is Mars—another raindrop.

Jupiter is the largest of the planets—a finger-ring dropped behind all the people watching<sup>②</sup>. Saturn is nearly as big, but it's outside in the street. Uranus—a fly in the road, half a kilometre away. Neptune is another. And Pluto—last of all—is a full kilometre away<sup>③</sup> from the football. Even today, telescopes have not told us how big Pluto is. It seems to be nearly as small as Mercury, but no one is quite certain.

These are the nine children of the sun. You can touch one of them—you stand on it and walk on it. Do living things walk on the other eight? No one has made the journey from earth to another planet yet. We can see, but we cannot touch, so it's not easy to study the planets.

### 注 释

①by the light of 凭借…的光亮。

②so…that… 如此地…以致于…。that 引起结果状语从句，例如：  
The temperature of the sun is so high that no material can be a solid or a liquid there. 太阳的温度高到在太阳里不可能存在固体或液体的物质。

③drop behind 落到…的后面。

④And that's what was believed for many thousands of years… 几千年来，人们相信情况就是这样。

⑤what about…? …的情况如何? what about 后面接一个名词或和名词相当的词，可以构成一个句子。

⑥in time 过了一段时间以后。

⑦stay fixed 保持静止。stay=keep, 用作联系动词，表示“保持”，“一直是”等意义，后面常接形容词或分词等，例如：Stay still; I want to take your photograph. 不要动，我要给你照个相。

- ⑧go by 过去, 经过。这里的 by 是副词, 经常用在 fly, drive, hurry, pass, run, walk 等具有“行进”意义的动词的后面。
- ⑨move about 向各个方向运动。about 作“向各处”解, 是副词, 常和 go, fly, run, jump 等动词连用。
- ⑩something was wrong with... = there was something wrong with... …有点毛病, …有些不对。
- ⑪Suppose now that... = Let us suppose now that..., 现在让我们假定…。that 引起的是宾语从句。
- ⑫right at our door 就在我们的门口。right 是副词, 用于加强语气, 意为“恰恰”, “正好”, 例如 right in the middle 在正中, right here 就在这儿。
- ⑬there's little to see 看不到什么东西。这里的 little 表示否定的意义, 它和 a little (有一点) 不同, 后者表示肯定的意义。
- ⑭a number that's hard to understand 难于理解的数字。这个短语作 150 million kilometres 的同位语。
- ⑮Think of it this way. 这样来想一下。this way 用作状语, 前面省略了 in。
- ⑯any faster 再快一点。any 常和比较级连用, 表示“稍”、“丝毫”等意, 例如: Is the sick man any better? 那个病人好一些了吗?
- ⑰And the earth is closer than most of the planets. 而地球比起大部分的行星来离太阳还算是近的。closer 后面省略了 to the sun。
- ⑱it's no bigger than a small raindrop 它不比一颗雨点大一些。no 用在比较级之前, 表示“并不…”, = not any, 例如: She went no farther than the station. 她走到车站就不再往前走了。
- ⑲two times as far 远一倍 (乘以二)。
- ⑳Both are a little bigger than Mercury, ... 这两个行星都比水星稍大一些。a little (稍微) 常用在比较级之前。
- ㉑a finger-ring dropped behind all the people watching (它的大小好像是) 丢在所有的观众身后的一枚戒指。dropped... 是过去分词短语, 修饰 finger-ring, watching 是现在分词, 修饰 people。
- ㉒a full kilometre away 十足一公里以外。full 表示“完全”的意思, 例如: a full hour 整整一小时, a full dozen 整整一打。

## A world in cloud

The closest planet to earth is Venus, and at night it's brighter than any other planet or star. Sometimes you can even see it during the day. It was one of the first things men looked at through a telescope. They hoped they would see land, seas, mountains—perhaps even people. But they couldn't see Venus at all. It's the same today; Venus is clothed in heavy white cloud. Venus hides herself from① even our biggest telescopes. So the study of our sister planet has become like a detective story.

What is under those clouds? Countries, towns, houses, plants, animals, men? How do you study something that's millions of kilometres away? But if Venus sends us anything at all, we can study that. And she does send us something—light-waves.②

But that's not all.③ Anything hot④ sends out another kind of waves, and they can tell us how hot it is. These heat-waves are sent out by everything, even the planets (which are not all hot). So we've turned our telescopes towards⑤ Venus, and studied the heat-waves she sends out.

The first answer from Venus was  $-40^{\circ}\text{C}$ ⑥; almost as cold as our own Antarctic. We may not like a place as cold as that, but life there would not be impossible. But perhaps we were only studying heat-waves from the clouds; perhaps the land under those clouds is not as cold as that. Certainly many people wanted to believe that our sister planet was suitable for life⑦.



In the 1960s<sup>⑧</sup> the Americans sent spacecraft, Mariner Two<sup>⑨</sup> and Mariner Five. As the spacecraft flew past Venus, they looked for<sup>⑩</sup> heat-waves that could pass through the clouds. And the Russians sent a spacecraft that went through the clouds to the planet itself.

We know now that the night side<sup>⑪</sup> of Venus is about 300°C, and the day side can be about 700°C. There can be no water, no rain. The air is heavy, and the clouds are there all the time<sup>⑫</sup>. They stop the heat from leaving the planet.<sup>⑬</sup> If the sun is ever seen at all, it looks brick-red.<sup>⑭</sup> In places the land must be red-hot, and living things would be burnt black<sup>⑮</sup>.

## 注 释

- ①hide oneself from 躲藏起来不让...看见。  
②And she does send us something -- light-waves. 她(金星)的确给我们发出一些东西——光波。  
③But that's not all. 但并不就是这些, 并非就此而止。  
④anything hot 任何热的东西。anything, something 等复合词如带有定语时, 这些定语后置, 例如: something new 某种新东西, anything strange 任何奇怪的事情。  
⑤turn... towards... 把...转向..., 也可以说 point...at...。  
⑥-40°C 读如 minus forty degrees Centigrade。  
⑦suitable for life 适合于生物生存。suitable 后常接 for, 例如: Do you think this present is suitable for a little boy? 你认为这件礼物送给一个小男孩合适吗?  
⑧1960s 二十世纪六十年代。读如 nineteen sixties  
⑨Mariner Two 海员二号 (宇宙飞船)。  
⑩look for 寻找。例如: Scientists are looking for ways of converting the sun's energy directly into power. 科学家们正在寻找把太阳能直接变成动力的方法。  
⑪night side 夜晚的一面 (太阳照不到的一面)。  
⑫all the time 始终, 一直。例如: Conditions are changing