

Unit 7

A

It is an interesting reflection on the general climate of thought before the twentieth century that no one had suggested that the universe was expanding or contracting. It was generally accepted that **either** the universe had existed forever in an unchanging state, or that it had been **created** at a finite time in the past more or less as we observe it today. In part this may have been **due to** people's tendency to believe in eternal truths, **as well as** the comfort they found in the thought that even though they may grow old and die, the universe is **eternal** and unchanging.

二十世纪之前，没有人提出过宇宙在膨胀或收缩，这是对当时普遍思想氛围的一个有趣反思。人们普遍认为，宇宙要么是以一种不变的状态永远存在，要么是在过去某个有限的时间被创造出来的，或多或少与我们今天所观察到的一样。部分原因可能是由于人们倾向于相信永恒的真理，以及他们在这样的思想中找到的安慰：即使他们可能变老和死亡，宇宙也是永恒不变的。

Even those who realized that Newton's theory of gravity showed that the universe could not be static did not think to suggest that it might be expanding. **Instead**, they attempted to modify the theory by making the gravitational force repulsive at very large distances. This did not **significantly** affect their predictions of the motions of the planets, but it allowed an infinite distribution of stars to remain in equilibrium—with the attractive forces between nearby stars **balanced** by the repulsive forces from those that were farther away. However, we now believe such an equilibrium would be unstable: If the stars in some region got only slightly nearer each other, the attractive forces between them would become **stronger** and dominate over the repulsive forces so that the stars would continue to fall toward each other. **On the other hand**, if the stars got a bit farther away from each other, the repulsive forces would dominate and drive them farther apart.

即使那些意识到牛顿的万有引力理论表明宇宙不可能是静止的人，也没有想到宇宙可能在膨胀。相反，他们试图修改这一理论，使引力在很大距离上具有排斥性。这并没有明显影响他们对行星运动的预测，但却使无限分布的恒星保持平衡--附近恒星之间的吸引力与较远恒星的排斥力相平衡。然而，我们现在认为这种平衡是不稳定的：如果某个区域的恒星只稍微靠近一点，它们之间的吸引力就会变得更强，并支配着斥力，这样恒星就会继续向对方坠落。另一方面，如果恒星之间的距离稍远一些，斥力就会占据主导地位，使它们之间的距离更远。

B

1. Our car **broke down** and we had to push it off the road.
(我们的车坏了，我们不得不把它推到路边)
2. The proposals that you have **put forward** deserve serious consideration.
(你们提出的建议值得认真考虑)
3. Charities **depend on** people supporting their activities.
(慈善机构的活动有赖于人们的支持)
4. Weight **is proportional to** size.
(重量与大小成正比)
5. How do you intend to **deal with** this problem?
(您打算如何解决这个问题?)
6. You look **as though** you've had a bad time!

（你看起来好像过得很糟糕！）

7. The truth *turn out to be* stranger than we had expected.

（真相比我们预想的还要离奇）

8. They all made the same comment, although they *are independent of* each other.

（他们都发表了同样的意见，尽管他们彼此独立）

9. It is hoped that the kidnappers will not *carry out* their threat to kill the hostages.

（希望绑匪不会实施杀害人质的威胁）

10. Can you *account for* your absence last Friday?

（你能解释一下上周五缺席的原因吗？）

Unit 8

A

STOCKHOLM—This is a high-tax, high-spend country, where employees receive generous social benefits and ample amounts of vacation time. Economic orthodoxy would suggest the dynamics of a welfare state like Sweden would be detrimental (有害的) to entrepreneurship: Studies have found that the more a country's government spends per capita, the smaller the number of start-ups it tends to have per worker—the idea being that high-income taxes reduce entrepreneurs' expected gains and thus their incentive to launch new companies.

斯德哥尔摩——这是一个高税收、高支出的国家，员工可以获得丰厚的社会福利和充足的假期。正统的经济观点认为，像瑞典这样的福利国家的动态是有害的(有害的) 创业：研究发现，一个国家的政府人均支出越多，每个工人的初创企业数量就越少，这是因为高所得税会降低企业家的预期收益，从而降低他们创办新公司的动机。

And yet Sweden excels in promoting the formation of ambitious new businesses, on a level that's unexpected for a country whose population of roughly 10 million puts it at 89th in the world in population size. Global companies like Spotify, the music-streaming service; Klarna, the online-payment firm; and King, the gaming company, were all founded here. Stockholm produces the second highest number of billion-dollar tech companies per capita, after Silicon Valley, and in Sweden overall, there are 20 start-ups per 1,000 employees, compared to just five in the United States.

然而，瑞典擅长促进雄心勃勃的新企业的形成，这一水平对于一个人口约 1000 万、人口规模居世界第 89 位的国家来说是出乎意料的。全球公司，如音乐流媒体服务 Spotify；在线支付公司 Klarna；游戏公司 King 都是在这里成立的。斯德哥尔摩的人均 10 亿美元科技公司数量位居第二，仅次于硅谷。在瑞典，每 1000 名员工中有 20 家初创企业，而美国只有 5 家。

Producing start-ups matters for any economy that strives for efficiency, job creation, and all-around dynamism, but it is especially relevant for countries, such as the U.S., where new-business creation has slowed. Despite the current cultural fascination with start-ups, only 8 percent of all firms in the U.S. meet that definition today, compared to 15 percent in 1978. In Sweden the trend is reversed: The pace of new-business creation has been accelerating since the 1990s. As the U.S.'s GDP growth remains sluggish, Sweden's economy grew at a rate of 4 percent in 2015 and 3 percent in 2016—a big jump, even considering that its economy is a lot smaller than the U.S.'s to begin with. And Sweden's GDP has also outperformed that of other major European countries since the mid-1990s. So, what has Sweden been doing right?

生产初创企业对任何追求效率、创造就业机会和全面活力的经济体来说都很重要，但对美国等新企业创建放缓的国家来说尤其重要。尽管目前对初创企业有着浓厚的文化兴趣，但如今美国只有 8% 的公司符合这一定义，而 1978 年这一比例为 15%。在瑞典，这一趋势发生了逆转：自 20 世纪 90 年代以来，新企业的创建速度一直在加快。由于美国的 GDP 增长仍然低迷，瑞典的经济在 2015 年和 2016 年分别增长了 4% 和 3%，这是一个巨大的飞跃，即使考虑到其经济一开始就比美国小得多。自 20 世纪 90 年代中期以来，瑞典的 GDP 也超过了其他主要欧洲国家。那么，瑞典做得对吗？

B

1. The disease has a worldwide geographical distribution and occurs in all continents, including circumpolar, temperate, subtropical and tropical zones, especially in undeveloped and developing countries.

这种疾病在世界范围内具有地理分布，发生在所有大陆，包括环极、温带、亚热带和热带地区，尤其是在不发达国家和发展中国家。

2. Often, everyone deals directly with the leader, who can make most decisions on the spot.

通常，每个人都直接与领导者打交道，领导者可以当场做出大多数决定。

3. A professor of economics says: "The general lesson is that if you make it more difficult for monopolies to dominate the market, then you will have more start-ups entering the market."

一位经济学教授说：“一般的教训是，如果你让垄断企业更难主导市场，那么你就会有更多的初创企业(注意英文连字符) 进入市场。”

4. When one looks at the figures, one can see the graph of employment opportunities rocketing up over the last 5 years and the unemployment figures trending downwards.

从这些数字可以看出，在过去五年中，就业机会急剧增加，失业率呈下降趋势。

5. Research in Britain shows that low-skilled, low-educated workers and the young are most vulnerable to unemployment in an economic downturn.

英国的研究表明，在经济衰退中，低技能、低教育程度的工人和年轻人最容易失业。

6. A decline in your home's value could leave you underwater—owing more than your home is worth.

你的房子价值下降可能会让你陷入困境——所欠的钱超过了你的房子的价值。

7. Exactly the same phenomenon has played out over a longer period in agriculture.

同样的现象在农业中长期存在。

8. Media coverage of the culture wars makes it look as if the nation is becoming increasingly polarized, but public opinion surveys show little change.

媒体对文化战争的报道使这个国家看起来越来越两极分化，但民意调查显示变化不大。

9. The reforms of 1991 lowered corporate income taxes from 52 percent to 30 percent to stimulate entrepreneurship.

1991 年的改革将企业所得税从 52% 降至 30%，以刺激创业。

10. Those economies which have successfully switched underemployed agricultural labor into manufacturing and service activities have generally achieved significant real economic growth rates.

那些成功地将未充分就业的农业劳动力转变为制造业和服务业活动的经济体，总体上取得了显著的实际经济增长率。

Unit 13

A

Nuclear technology uses the energy **released** by splitting the atoms of certain elements. It was first developed in the 1940s, and during the Second World War research **initially** focused on producing bombs. In the 1950s attention turned to the peaceful use of nuclear fission, controlling it for power generation. Civil nuclear power can now boast more than 17,000 reactor years of experience, and nuclear power plants are **operational** in 30 countries worldwide. In fact, through regional transmission grids, many more countries depend in part on nuclear-generated power; Italy and Denmark, for example, get almost 10% of their electricity from imported nuclear power.

核技术利用某些元素原子分裂释放的能量。核技术最早开发于 20 世纪 40 年代，在第二次世界大战期间，研究工作最初集中于制造原子弹。20 世纪 50 年代，人们将注意力转向和平利用核裂变，控制核裂变用于发电。现在，民用核能已拥有超过 17,000 年的反应堆使用经验，核电站已在全球 30 个国家投入运行。事实上，通过地区输电网，还有更多的国家部分依赖核能发电；例如，意大利和丹麦近 10% 的电力来自进口核电。

Around 11% of the world's electricity is generated by about 450 nuclear power reactors. About 60 more reactors are under construction, **equivalent** to about 15% of existing capacity. In 2017 nuclear plants supplied 2487 TWh of electricity, up from 2477 TWh in 2016. This is the fifth **consecutive** year that global nuclear generation has risen, with output 142 TWh higher than in 2012.

全世界约 11% 的电力由约 450 座核反应堆产生。还有大约 60 座反应堆正在建设中，相当于现有发电能力的 15%。2017 年，核电厂供电 2487 太瓦时，高于 2016 年的 2477 太瓦时。这是全球核能发电量连续第五年上升，产量比 2012 年高出 142 太瓦时。

There is a clear need for new generating capacity around the world, both to **replace** old fossil fuel units, especially coal-fired ones, which **emit** a lot of carbon dioxide, and to meet increased demand for electricity in many countries. In 2016, 65.0% of electricity was generated from the burning of fossil fuels. **Despite** the strong support for, and growth in, intermittent renewable electricity sources in recent years, the fossil fuel contribution to power generation has remained virtually unchanged in the last 10 years or so (66.5% in 2005).

全球显然需要新的发电能力，一方面是为了取代老旧的化石燃料机组，尤其是排放大量二氧化碳的燃煤机组，另一方面是为了满足许多国家日益增长的电力需求。2016 年，65.0% 的电力来自燃烧化石燃料。尽管近年来对间歇性可再生能源的大力支持和可再生能源的增长，化石燃料对发电量的贡献在过去 10 年左右几乎没有变化（2005 年为 66.5%）。

The OECD International Energy Agency publishes annual scenarios related to energy. In its World Energy Outlook 2018 there is an ambitious "Sustainable Development Scenario" which is **consistent** with the provision of clean and reliable energy and **reduction** of air pollution, among other aims.

经合组织（OECD）国际能源机构每年都会发布与能源相关的情景预测。在其《2018 年世界能源展望》中，有一个雄心勃勃的 "可持续发展情景"，该情景与提供清洁可靠的能源和减少空气污染等目标相一致。

B

1. It is a widely held belief that copyright law does not reach popular platforms such as Instagram. The misconception stems from the belief that participating in these online platforms is akin to giving up one's rights.

（人们普遍认为，版权法不适用于 Instagram 等流行平台。这种误解源于人们认为参与这些网络平台就等于放弃自己的权利）

2. When heated to high temperatures, cooking oils can leave a residue on nonstick surfaces.

（高温加热时，食用油会在不粘表面留下残留物）

3. To take advantage of the opportunities and respond to risks attendant to climate change, certain sectors of the economy must adapt or reinvent their business.

（为了抓住机遇，应对气候变化带来的风险，某些经济部门必须调整或重塑业务）

4. The spokesman said, "We can't rule out the possibility that the situation would be prolonged, despite our diplomatic efforts to resolve the issue".

（发言人说："尽管我们为了解决这一问题做出了外交努力，但我们不能排除局势长期化的可能性"）

5. Police questioned the prisoner for several hours, but were unable to extract any further information.

（警方对囚犯进行了几个小时的讯问，但未能获得任何进一步的信息）

6. European Community environment ministers agreed to tighten controls on the production, transport and disposal of waste.

（欧洲共同体环境部长同意加强对废物生产、运输和处置的控制）

7. All wood used in our furniture comes with a certificate saying it comes from sustainable forests.

（我们家具中使用的所有木材都有证书，证明其来自可持续发展的森林）

8. Tourism in the South Muntenia region is one of the most dynamic sectors that contribute substantially to the economic revival of the region.

（南蒙泰尼亚地区的旅游业是最具活力的行业之一，为该地区的经济振兴做出了巨大贡献）

9. Official said Washington recognizes India's need for significant oil imports and is having conversations to ensure there are alternative supplies of the fuel so that India's economy is not adversely affected.

（官员说，华盛顿认识到印度需要大量进口石油，并正在进行对话，以确保有替代燃料供应，从而使印度的经济不会受到不利影响）

10. The President dismissed criticisms suggesting that his speech Thursday was a smear on his anti-corruption stance.

（有批评称总统周四的讲话是对其反腐败立场的抹黑，总统对此予以驳斥）