



JOURNAL

考研英语·阅读题源解密

精选外刊

学员姓名：

本课目标：

写给自己的话：

? 跟谁学
学 习 成 就 美 好

跟谁学考研

导读 Preface

对于任何一个考生而言，“不积跬步，无以至千里”。虽然努力很重要，但是从某种意义上讲，努力的方向比努力本身更为重要。所以，在考研英语阅读理解复习的起步阶段，老师给大家精选了与考研真题同源的外刊文章。

这些文章内容涉猎广泛，有着与考研真题完全一样的行文逻辑，其词汇涵盖范围与考研真题也非常一致。对于精选外刊中的文章，我们将会从词、句、翻译三个角度，带领大家开启考研英语阅读理解的学习过程。我们将会学习到考研英语文章的基本行文逻辑、长难句的基本处理方法以及考研英语中词汇学习的方式。

通过这一阶段学习，我们将实现从 0 至 1，揭开考研英语理解的神秘面纱。

跟谁学考研

目录 Contents

Passage 1

Artificial intelligence: The Kamprad test	01
创新人工智能：宜家测试	

Passage 2

Energy: Electric dreams	08
能源：电力梦想	

Passage 3

Warning: counting on too many advertisements	15
may be bad for your health	
警告：仰仗过量广告恐不利健康	

Passage 4

Airport profits: ready to depart	23
机场利润：即将离场	

Passage 5

America's new business model	29
美国新的经济模式	

Passage 6

AI in society — the unexamined mind	35
人工智能走向社会——无法检验的思维	

跟谁学考研

Passage 1

Artificial intelligence: The Kamprad test 创新人工智能：宜家测试

The Economist

阅读难度：☆☆☆☆

【文章导读】

新加坡科学家教会工业机器人组装了一把宜家的椅子，但这一实验中，机器人花费的时间比人类多 20 分钟，这一测试虽然是一个进步，但也显示了莫拉维克悖论这一基本原则，同时 AI 在现实生活中的应用也面临诸多问题和局限。在 AI 热潮中，科学家们对它的未来仍持谨慎态度。

【补充】

- 1.Kamprad: 即 Ingvar Kamprad, 坎普拉德, 瑞典宜家家居创始人, 2018.1 去世。
- 2.Alan Turing: 艾伦·图灵, 英国数学家、逻辑学家, 被称为计算机科学之父、人工智能之父。
- 3.Moravec's paradox: 莫拉维克悖论是由人工智能和机器人学者所发现的一个和常识相佐的现象。和传统假设不同, 人类所独有的高阶智慧能力只需要非常少的计算能力, 例如推理, 但是无意识的技能和直觉却需要极大的运算能力。这个理念是由汉斯·莫拉维克、布鲁克斯、马文·闵斯基等人于 1980 年代所阐释。如莫拉维克所写: “要让电脑如成人般地下棋是相对容易的, 但是要让电脑有如一岁小孩般的感知和行动能力却是相当困难甚至是不可能的。”

COMPUTERS have already proved better than people at playing chess and diagnosing diseases. But now a group of artificial-intelligence researchers in Singapore have managed to teach industrial robots to assemble an IKEA chair—for the first time uniting the worlds of Allen keys and Alan Turing. Now that machines have mastered one of the most baffling ways of spending a Saturday afternoon, can it be long before AIs rise up and enslave human beings in the silicon mines?

在下棋和诊断疾病上, 计算机已经证明了自己强过人类。而现在, 新加坡的一群人工智能 (AI) 研究人员又成功教会工业机器人组装出了一把宜家的椅子。这是艾伦扳手 (也叫内六角扳手) 和艾伦·图灵的世界头一回联结起来。既然机器已经掌握了消磨周六下午最奇怪的方式之一, 那么离 AI 崛起并奴役人类在硅矿里劳作还会远吗?

The research also holds a serious message. It highlights a deep truth about the limitations of automation. Machines excel at the sorts of abstract, cognitive tasks that, to people, signify intelligence—complex board games, say, or differential calculus. But they struggle with physical jobs, such as navigating a cluttered room, which are so simple that they hardly seem to count as intelligence at all. The IKEAbots are a case in point. It took a pair of them, pre-programmed by humans, more than 20 minutes to assemble a chair that a person could knock together in a fraction of the time.

AI researchers call that observation Moravec's paradox, and have known about it for decades. It does not seem to be the sort of problem that could be cured with a bit more research. Instead, it seems to be a fundamental truth: physical dexterity is computationally harder than playing Go. That humans do not grasp this is a side-effect of evolution. Natural selection has had billions of years to attack the problem of manipulating the physical world, to the point where it feels effortless. Chess, by contrast, is less than 2,000 years old. People find it hard because their brains are not wired for it.

That is something to bear in mind when thinking about the much-hyped effects of AI and automation, especially as AI moves out of the abstract world of data and information and into the real world of things you can drop on your foot. On April 13th Elon Musk, the boss of Tesla, an electric-car firm, said that the production problems which have dogged his company's high-tech factory were partly the result of an overreliance on robots and automation. "Humans are underrated," he tweeted. Lots of jobs have

这项研究也传达了一个重要信息。它凸显出一个关于自动化局限性的深层真相。机器擅长抽象的认知型任务，这类任务对人类而言是智力的体现，比如复杂的棋类游戏或微积分学。但它们却很难做好那些非常简单、根本用不到什么智力的体力活，比如穿过一个杂乱的房间。宜家机器人就是个很好的例子。经人们预先编程的两个宜家机器人用了 20 多分钟才装好一把椅子，而一个人用几分钟就拼好了。

AI 研究人员把这称作莫拉维克悖论 (Moravec's paradox)，他们在几十年前就发现了这个现象。这似乎不是那种多做点研究就能解决的问题。相反，它好像是一个基本事实：身体的灵活度比下围棋更难通过计算实现。人们没能透彻地理解这一点，这本身是进化的副作用。自然选择用了几十亿年来解决操纵现实世界的问题，直到达到轻松自如的程度。相比之下，国际象棋只有不到两千年的历史。人们觉得下棋很难，是因为他们的大脑不是为下棋而存在的。

当我们思考 AI 和自动化的影响这一被大肆宣传的议题时，要把这一点铭记于心，尤其是当 AI 走出抽象的数据和信息世界、进入实实在在的现实世界时。四月 13 日，电动汽车公司特斯拉的老板马斯克说，困扰其公司高科技工厂的产能问题在一定程度上是因为过度依赖机器人和自动化。“人类被低估了。”他在推特上写道。很多工作都涉及机器人难以克服的身体活动的问题。例如，机器可能不久就能驾驶送货货车了。但至少在目前，它们很可能无法走过一段滑溜溜的楼梯，把包裹送到楼上的一间公寓，尤其是当花园有只恶狗巡逻时。

physical aspects that robots struggle with. Machines may soon be able to drive delivery vans, for instance. But, at least for now, they could well fail to carry a parcel to a flat at the top of a flight of slippery stairs, especially if the garden was patrolled by a dangerous dog.

Today's AI systems are limited in other ways, too. They are pattern-recognition engines, trained on thousands of examples in the hope that the rules they infer will continue to apply in the wider world. But they apply those rules blindly, without a human-like understanding of what they are doing or an ability to improvise a solution on the spot. Makers of self-driving cars, for instance, worry constantly about how their machines will perform in "edge cases"—complicated and unusual situations that cannot be foreseen during training.

Calibrating excitement about AI is tricky. Researchers complain that great progress is quickly forgotten: as soon as a computer can do something, it ceases to count as "AI". But those same researchers also tend to be more cautious about the future than many pundits. There is no reason, in principle, why a computer could not one day do everything a human can and more. But that will be the work of decades at least. Furniture-assembly helps explain why.

如今的 AI 系统在其他方面也有局限。它们是模式识别型引擎，经过成千上万的例子训练，希望它们推导出的规则能继续适用于更广阔的世界。但它们只是盲目地应用这些规则，并不像人类那样理解自己所做的事情，也不能在现场即兴发挥解决问题。例如，无人驾驶汽车的制造商一直担心它们的机器在复杂且不常见的“边界情况”下会如何表现，这些情况在训练中无法预见。

要校正对 AI 的兴奋之情是件棘手的事。研究人员抱怨说，伟大的进步很快就会被遗忘：只要一台电脑能做点什么，这就不再算作 AI 了。但与许多高谈阔论的专家相比，这些研究人员对未来的态度往往也更谨慎。原则上，人类能做的所有事计算机没有理由做不到——而且还能做到更多。但那至少是几十年后的事了。组装家具可以解释其中的原因。

【词汇】

diagnose v. 诊断(疾病); 判断(问题的原因)

assemble v. 装配; 组装

Allen key 艾伦螺钉扳手; 六角螺丝小扳手

baffle v. 使困惑; 难住

enslave v. 使受控制; 征服; 制伏; 奴役

silicon n. 硅

highlight v. 突出; 强调

excel v. 擅长; 善于; 突出

signify v. 表示；说明；预示

differential adj. 差别的；以差别而定的；有区别的

calculus n. 微积分

navigate v. (驾车者) 确定行车路线；导航

cluttered adj. 杂乱的；凌乱的；挤满的

fraction n. 小部分；少量；一点儿；分数；小数

paradox n. 矛盾的人（或事物、情况）；悖论

dexterity n. (手) 灵巧，熟练；(思维) 敏捷，灵活

manipulate v. (熟练地) 操作，使用

wired adj. (与计算机系统) 联网的，连线的

hype v. 夸张地宣传（某事物）

dog v. (长期) 困扰，折磨，纠缠

underrate v. 过低评价；低估

patrol v. 巡逻；巡查

infer v. 推断；推论；推理

improvise v. 临时拼凑；临时做；即兴创作

calibrate v. 标定，校准

cease v. (使) 停止，终止，结束

pundit n. 行家；权威；专家

【长难句分析】

1. But now a group of artificial-intelligence researchers in Singapore have managed to teach industrial robots to assemble an IKEA chair — for the first time uniting the worlds of Allen keys and Alan Turing.

「译文」而现在，新加坡的一群人工智能（AI）研究人员又成功教会工业机器人组装出了一把宜家的椅子。这是艾伦扳手（也叫内六角扳手）和艾伦·图灵的世界头一回联结起来。

「语法分析」该句由一个主句和非谓语状语构成，主语是 a group of artificial-intelligence researchers，谓语是 have managed。manage to do sth “设法做某事”，teach sb to do sth “教某人做某事”，unite “连接” 这里用现在分词形式充当状语，对主句进行修饰。

2. Machines excel at the sorts of abstract, cognitive tasks that, to people, signify intelligence — complex board games, say, or differential calculus.

「译文」机器擅长抽象的认知型任务，这类任务对人类而言是智力的体现，比如复杂的棋类游戏或微积分学。

「语法分析」该句由一个简单句和一个定语从句构成，主语是 machines，谓语是 excel，that 引导定语从句，先行词是 tasks，短横线后面是进行补充说明，say 是插入语，相当于 for example。

3. But they struggle with physical jobs, such as navigating a cluttered room, which are so simple that they hardly seem to count as intelligence at all.

「译文」但它们却很难做好那些非常简单、根本用不到什么智力的体力活，比如穿过一个杂乱的房间。

「语法分析」该句由一个简单句和一个定语从句构成，主句主语是 they，谓语是 struggle，which 引导一个非限定性定语从句，从句中用了 so...that... “如此 以至于”的句式。

4. It took a pair of them, pre-programmed by humans, more than 20 minutes to assemble a chair that a person could knock together in a fraction of the time.

「译文」经人们预先编程的两个宜家机器人用了 20 多分钟才装好一把椅子，而一个人用几分钟就拼好了。

「语法分析」该句用了 it takes sb some time to do sth，花费某人多长时间做某事，这里 pre-programmed 是后置定语修饰 them（代指机器人），that 引导定语从句，先行词是 chair，knock together 表示“匆匆拼凑”，a fraction of 表示“一点，少量”。

5. That humans do not grasp this is a side-effect of evolution.

「译文」人们没能透彻地理解这一点，这本身是进化的副作用。

「语法分析」该句虽然短，但困难在于断句的逻辑。该句的主语是 That humans do not grasp this，是 that 引导的主语从句，is 是系动词，a side-effect of evolution 是表语。

6. Natural selection has had billions of years to attack the problem of manipulating the physical world, to the point where it feels effortless.

「译文」自然选择用了几十亿年来解决操纵现实世界的问题，直到达到轻松自如的程度。

「语法分析」该句是一个简单句，主语是 natural selection，谓语是 has had，宾语是 billions of years，attack 这里是“奋力处理，全力对付”的意思，第二个 to 是介词，where 引导定语从句，先行词是 the point。effortless 是“不需费力的；容易的”。

7. That is something to bear in mind when thinking about the much-hyped effects of AI and automation, especially as AI moves out of the abstract world of data and information and into the real world of things you can drop on your foot.

「译文」当我们思考 AI 和自动化的影响这一被大肆宣传的议题时，要把这一点铭记于心，尤其是当 AI 走出抽象的数据和信息世界、进入实实在在的现实世界时。

「语法分析」该句比较长，但其实就是一个主句 + 状语从句 + 定语从句。主干就是 That is something to bear in mind, when 和 as 都是引导时间状语从句，you can drop on your foot 是省略了引导词 that/which 的定语从句，先行词是 things。

8. On April 13th Elon Musk, the boss of Tesla, an electric-car firm, said that the production problems which have dogged his company's high-tech factory were partly the result of an overreliance on robots and automation.

「译文」四月 13 日，电动汽车公司特斯拉的老板马斯克说，困扰其公司高科技工厂的产能问题在一定程度上是因为过度依赖机器人和自动化。

「语法分析」该句主要由宾语从句和定语从句构成，主语有不少限定词，要注意理清逻辑，主语是 Elon Musk, the boss of Tesla 是主语的同位语，后面的 an electric-car firm 又是 Tesla 的同位语，谓语是 said，后面跟宾语从句 the production problems were partly the result of an overreliance on robots and automation，中间是 which 引导的定语从句，先行词是 the production problems。

9. But, at least for now, they could well fail to carry a parcel to a flat at the top of a flight of slippery stairs, especially if the garden was patrolled by a dangerous dog.

「译文」但至少在目前，它们很可能无法走过一段滑溜溜的楼梯，把包裹送到楼上的一间公寓，尤其是当花园有只恶狗巡逻时。

「语法分析」该句的难点在于部分词组搭配的意思，could well 表示“很可能”，a flight of stairs 是“一段楼梯”，这里 flight 并不是“航班”的意思。

10. They are pattern-recognition engines, trained on thousands of examples in the hope that the rules they infer will continue to apply in the wider world.

「译文」 它们是模式识别型引擎，经过成千上万的例子训练，希望它们推导出的规则能继续适用于更广阔的世界。

「语法分析」 该句是一个主句 + 一个同位语从句。主语是 they，系动词是 are，hope 后是 that 引导的同位语从句 the rules will continue to apply in the wider world，具体说 hope 的内容是什么，中间加了一小句定语从句 they infer，省略了引导词，先行词是 the rules。

11. But they apply those rules blindly, without a human-like understanding of what they are doing or an ability to improvise a solution on the spot.

「译文」 但它们只是盲目地应用这些规则，并不像人类那样理解自己所做的事情，也不能在现场即兴发挥解决问题。

「语法分析」 该句主要由一个简单句和状语构成，主语是 they，谓语是 apply，those rules 是宾语，without 引导介宾短语作状语，其后宾语有两个，用 or 连接，一个是名词性从句 a human-like understanding of what they are doing，另一个是 an ability to improvise a solution on the spot。

12. Makers of self-driving cars, for instance, worry constantly about how their machines will perform in "edge cases" — complicated and unusual situations that cannot be foreseen during training.

「译文」 例如，无人驾驶汽车的制造商一直担心它们的机器在复杂且不常见的“边界情况”下会如何表现，这些情况在训练中无法预见。

「语法分析」 该句由主句和一个定语从句构成，主语是 makers of self-driving cars，for instance 是插入语，谓语是 worry，宾语是 how their machines will perform in "edge cases"，complicated and unusual situations 是对 edge cases 的补充说明，相当于后置定语，that 引导定语从句，先行词是 situations。

【篇章结构】

第一段：机器人被教会组装宜家椅子
第二段：关于自动化局限性的深层真相
第三段：莫拉维克悖论

第四段：斯特拉公司受困于莫拉维克悖论
第五段：AI 系统在其他方面的局限
第六段：研究人员对 AI 未来的谨慎态度

Passage 2

Energy: Electric dreams

能源：电力梦想

The Economist

阅读难度：☆☆☆☆

【文章导读】

后石油时代的世界将更清洁安全，难题在于如何抵达那里。石油不再是曾经的能源支柱，转向电力才是目前动力来源的首选。但是，当我们大踏步迈入电力时代时，矛盾依然是不可避免的……

Oil shaped the 20th century. In war, the French leader Georges Clemenceau said, petroleum was "as vital as blood". In peace the oil business dominated stock markets, bankrolled despots and propped up the economies of entire countries. But the 21st century will see oils influence wane. Cheap natural gas, renewable energy, electric vehicles and coordinated efforts to tackle global warming together mean that the power source of choice will be electricity.

That is welcome. The electricity era will diminish the clout of the \$2trn oil trade, reduce the choke points that have made oil a source of global tension, put energy production into local hands and make power more accessible to the poor. It will also make the world cleaner and safer—reassuringly dull, even. The trouble is getting from here to there. Not just oil producers, but everyone else, too, may find the transition perilous.

Oil and electricity are a study in contrasts. Oil is a wonder fuel, packed with

石油塑造了 20 世纪。在战争时期，石油如法国前领导人乔治·克里孟梭所言“和鲜血一样重要”。在和平年代，石油业主宰了股市，为专制政权提供了资金，支撑起整个国家的经济。但在 21 世纪，石油的影响力将逐渐减弱。廉价的天然气、可再生能源、电动汽车，以及协同应对全球变暖的努力意味着未来首选的动力来源将是电力。

这样的变化很受欢迎。电力时代将削弱价值两万亿美元的石油贸易的影响力，减少令石油成为全球紧张局势源头的咽喉点，使能源生产本地化，让穷人更容易获得能源。电力还会让世界变得更清洁、更安全——甚至让人安心到颇感沉闷。难题在于如何进入电力时代。不止石油生产国，其他所有国家都可能发现这一转变路途艰险。

石油和电力差异鲜明。石油是一种奇妙的燃料，与同等重量的煤炭和同等体积的天然气

more energy by weight than coal and by volume than natural gas (both still the main sources of electricity). It is easy to ship, store and turn into myriad refined products, from petrol to plastics to pharmaceuticals. But it is found only in specific places favoured by geology. Its production is concentrated in a few hands, and its oligopolistic suppliers—from the Seven Sisters to OPEC and Russia—have consistently attempted to drip-feed it on to the market to keep prices high. Concentration and cartelization make oil prone to crises and the governments of oil-rich states prone to corruption and abuse.

Electricity is less user-friendly than oil. It is hard to store, it loses its oomph when shipped over long distances, and its transmission and distribution require hands-on regulation. But in every other way, it promises a more peaceful world.

Electricity is hard to monopolise because it can be produced from numerous sources of fuel, from natural gas and nuclear to wind, solar, hydro and biomass. The more these replace coal and oil as fuel for generation, the cleaner it promises to be. Given the right weather conditions, it is abundant geographically, too.

True, the technologies used to produce electricity from renewable resources, and the rare earths and minerals that some, including solar panels and wind turbines, rely on, could be subject to protectionism and trade wars. Yet the vital substances involved in generating and storing electricity are not burned up like oil. Once a stock of them exists it can for the most part be recycled. And, even if today's output is concentrated, for most materials the planet has undeveloped deposits or substitutes that can thwart a would-be monopolist.

相比,石油蕴含的能量更多(煤炭与天然气仍是电力的主要来源)。石油便于运输和储存,并可加工成无数精炼产品,从汽油到塑料再到药品,不一而足。但只有在地质条件适宜的地方才能找到石油。石油开采集在少数企业和国家手中。石油的寡头供应方——从石油“七姊妹”到欧佩克和俄罗斯——一直试图通过限产来保持高价。资源集中和联合垄断容易造成石油危机,产油国政府也容易滋生腐败、滥用权力。

电力不像石油那样使用方便。它储存困难,长距离传输会有能量损失,而输配电需要细致具体的监管。但从所有其他方面来看,电力将带来一个更和平的世界。

电力很难垄断,因为可用于发电的能源很多,有天然气、核能、风能、太阳能、水力和生物质。这些能源越多替代煤和石油来发电,电能的清洁度就越高。天气条件合适的话,电能可以说是无处不在。

诚然,可再生能源发电技术,以及包括太阳能电池板和风力涡轮机在内的部分这类技术所依赖的稀土和矿物,可能会受到贸易保护主义和贸易战的影响。不过,发电和储电所用到的重要物质不像石油那样会耗尽。一经开发出来,它们大部分都可以回收再利用。而且,即使今天这些物质的生产是集成的,对于其中大多数来说,地球上还有未开发的矿藏或替代品,可以阻止任何国家或企业垄断市场。

Electricity also rewards cooperation. Because renewables are intermittent, regional grids are needed to ship electricity from where it is plentiful to where it is not. More likely, as grids are interconnected so as to diversify supply, more interdependent countries will conclude that manipulating the market is self-defeating. After all, unlike gas, you cannot keep electricity in the ground.

An electric world is therefore desirable. But getting there will be hard, for two reasons. First, as rents dry up, authoritarian oil-dependent governments could collapse. Few will miss them, but their passing could cause social unrest and strife.

That will lead to the second danger: the fallout for investors in oil assets. America's frackers need only look at the country's woebegone coalminers to catch a glimpse of their fate in a distant post-oil future. The International Energy Agency, a forecaster, reckons that, if action to limit global warming to below 2° C accelerates in coming years, \$1trn of oil assets could be stranded, ie, rendered obsolete. If the transition is unexpectedly sudden, stockmarkets will be dangerously exposed.

The tension is inescapable. On the one hand government policy should press forward with the transition as fast as it can. On the other, a rapid transition will cause upheaval. Expect the big consumers, especially India and China, to force the pace.

电力还会鼓励合作。由于可再生能源发电时断时续的特点，需要区域性的电网将电力从电充裕的地方输送到匮乏的地区。但更有可能的是，由于电网之间相互连接以实现供电方式多样化，更多相互依存的国家会得出这样一个结论：操纵市场于己不利。毕竟，和天然气不同，电不能存在地下不用。

因此，一个用电的世界令人期待。但要实现这个目标并非易事，有两方面原因。首先，由于石油租金收入枯竭，依赖石油的专制政府可能会垮台。虽然没什么人会怀念它们，但它们的倒台可能会引发社会动荡和冲突。

这将导致第二个危险：对石油资产投资者的冲击。美国的页岩油生产商只要看看本国那些满脸愁容的煤矿主，就可以一窥自己在遥远的后石油未来中的命运。国际能源署预测，如果将全球变暖限制在 2° C 以下的行动在未来几年内加速，可能会有一万亿美元的石油资产被搁浅淘汰。如果转型比预期更突然，股市将面临巨大风险。

矛盾不可避免。一方面政府政策应该尽快推动转型，而另一方面，快速转型又会引发动荡。预计能源消费大国——特别是印度和中国——将加快这一进程。

【词汇】

vital adj. 至关重要的；生死攸关的	oomph n. 吸引力；精力；性感
dominate v. 控制，支配；处于支配地位	transmission n. 传动装置，变速器；传递； 传送；播送
bankroll v. 提供资金；提供财务上的资助	monopolise v. 垄断，获得专卖权
despot n. 专制君主，暴君；独裁者	biomass n. (单位面积或体积内的) 生物量
prop up v. 支撑；支持	protectionism n. 保护主义，贸易保护主义； 贸易保护制度
vehicle n. 车辆	thwart v. 挫败；反对；阻碍；横过
coordinate v. 使……协调	monopolist n. 垄断者；独占者；专利者
diminish v. 减少，缩小；变小	intermittent adj. 间歇的；断断续续的
clout n. 影响力；势力	manipulate v. 操纵；假造
tension n. 张力，拉力	self-defeating adj. 弄巧成拙的；不利于自 己的企图的
reassuringly adv. 安慰地；鼓励地	authoritarian n. 权力主义者；独裁主义者
dull adj. 钝的；迟钝的；无趣的；呆滞的； 阴暗的	frackers n. 水力压裂
perilous adj. 危险的，冒险的	coalminer n. 煤矿工人
myriad adj. 无数的；种种的	forecaster n. 预报员
pharmaceutical n. 药物	reckon v. 测算，估计；认为；计算；猜想
oligopolistic adj. 寡占的；由少数垄断的	inescapable adj. 不可避免的；逃脱不了的
drip-feed v. 以静脉滴注法给（病人）输液	obsolete adj. 废弃的；老式的
cartelization n. 组成卡特尔；组成企业联盟	
prone adj. 俯卧的；有…倾向的，易于…的	
corruption n. 贪污，腐败；堕落	

【长难句分析】

1. Cheap natural gas, renewable energy, electric vehicles and coordinated efforts to tackle global warming together mean that the power source of choice will be electricity.

「译文」廉价的天然气、可再生能源、电动汽车，以及协同应对全球变暖的努力意味着未来首选的动力来源将是电力。

「语法分析」该句主干为 natural gas, energy, vehicles and efforts mean that。主语为并列名词 natural gas, energy, vehicles and efforts, to tackle 不定式做后置定语修饰 efforts, mean 是谓语, that 引导宾语从句, the power source of choice 是从句主语, will be 是从句谓语, electricity 是从句表语。

- 2.The electricity era will diminish the clout of the \$2trn oil trade, reduce the choke points that have made oil a source of global tension, put energy production into local hands and make power more accessible to the poor.

「译文」电力时代将削弱价值两万亿美元的石油贸易的影响力，减少令石油成为全球紧张局势源头的咽喉点，使能源生产本地化，让穷人更容易获得能源。

「语法分析」该句主干为 The electricity era will diminish the clout, reduce the choke points, put energy production and make power. 主语为 the electricity era, will 后面跟四个并列动词，diminish、reduce、put 和 make 作谓语，points 后面的 that 引导定语从句修饰 choke points，make sth n to sb 固定用法。

- 3.Oil is a wonder fuel, packed with more energy by weight than coal and by volume than natural gas (both still the main sources of electricity).

「译文」石油是一种奇妙的燃料，与同等重量的煤炭和同等体积的天然气相比，石油蕴含的能量更多（煤炭与天然气仍是电力的主要来源）。

「语法分析」该句主干为 Oil is a wonder fuel. 主语为 oil, is 是谓语，a wonder fuel 作表语，packed 过去分词做后置定语修饰 oil，后跟比较级，by weight 和 by volume 分别意为“按照重量”和“按照体积”。

- 4.Its production is concentrated in a few hands, and its oligopolistic suppliers—from the Seven Sisters to OPEC and Russia—have consistently attempted to drip-feed it on to the market to keep prices high.

「译文」石油开采集中在少数企业和国家手中。石油的寡头供应方——从石油“七姊妹”到欧佩克和俄罗斯——一直试图通过限产来保持高价。

「语法分析」该句主干为 Its production is concentrated, and its suppliers have attempted. 并列句，前半句主语为 its production, is 是谓语，be concentrated in 固定搭配，“集中于”；后半句主语是 its oligopolistic suppliers, have attempted 是谓语，to keep 不定式表目的。

- 5.It is hard to store, it loses its oomph when shipped over long distances, and its transmission and distribution require hands-on regulation.

「译文」它储存困难，长距离传输会有能量损失，而输配电需要细致具体的监管。

「语法分析」该句主干为 It is hard to store, it loses oomph, and its transmission and distribution require regulation。并列句，第一句主语为 it, is 是谓语；第二句主语是 it, loses 是谓语；第三句主语是 its transmission and distribution, require 是谓语，hands-on 意为“亲身实践的”。

6. Electricity is hard to monopolise because it can be produced from numerous sources of fuel, from natural gas and nuclear to wind, solar, hydro and biomass.

「译文」电力很难垄断，因为可用于发电的能源很多，有天然气、核能、风能、太阳能、水力和生物质。

「语法分析」该句主干为 Electricity is hard to monopolise。主语为 electricity, is 是谓语，后接 because 原因状语从句，它是从句主语，can be produced 是从句谓语，fuel 后面的 from……to 词组表 fuel 的举例。

7. True, the technologies used to produce electricity from renewable resources, and the rare earths and minerals that some, including solar panels and wind turbines, rely on, could be subject to protectionism and trade wars.

「译文」诚然，可再生能源发电技术，以及包括太阳能电池板和风力涡轮机在内的部分这类技术所依赖的稀土和矿物，可能会受到贸易保护主义和贸易战的影响。

「语法分析」该句主干为 The technologies and the rare earths and minerals could be subject to protectionism and trade wars。主语为 the technologies 和 the rare earths and minerals, 谓语为 could be, subject to 作表语，technologies 后面的 used 过去分词做后置定语修饰 technologies, minerals 后面的 that 引导定语从句修饰 rare earths and minerals, some 是从句主语，rely 是从句谓语，including 解释前面的 some。

8. And, even if today's output is concentrated, for most materials the planet has undeveloped deposits or substitutes that can thwart a would-be monopolist.

「译文」而且，即使今天这些物质的生产是集成的，对于其中大多数来说，地球上还有未开发的矿藏或替代品，可以阻止任何国家或企业垄断市场。

「语法分析」该句主干为 the planet has deposits or substitutes。先是 even if 引导让步状语从句，today's output 为从句主语，is 是从句谓语，concentrated 作表语；主句主语为 the planet，has 是主句谓语，undeveloped deposits or substitutes 是宾语，that 引导定语从句修饰宾语，can thwart 做从句谓语，a would-be monopolist 做从句宾语。

9. More likely, as grids are interconnected so as to diversify supply, more interdependent countries will conclude that manipulating the market is self-defeating.

「译文」但更有可能的是，由于电网之间相互连接以实现供电方式多样化，更多相互依存的国家会得出这样一个结论：操纵市场于己不利。

「语法分析」该句主干为 countries will conclude that。先是 as 引导原因状语从句，grids 是从句主语，are 是从句谓语，interconnected 作表语，so as to 引导目的状语，主句主语是 more interdependent countries，主句谓语是 will conclude，后跟 that 引导的宾语从句，manipulating the market 动名词做从句主语，is 是从句谓语，self-defeating 作从句表语。

10. The International Energy Agency, a forecaster, reckons that, if action to limit global warming to below 2° C accelerates in coming years, \$1trn of oil assets could be stranded, ie, rendered obsolete.

「译文」国际能源署预测，如果将全球变暖限制在 2° C 以下的行动在未来几年内加速，可能会有一万亿美元的石油资产被搁浅淘汰。

「语法分析」该句主干为 The International Energy Agency reckons that。主语为 The International Energy Agency, a forecaster 同位语解释主语，reckons 是谓语，后跟 that 引导的宾语从句，if 引导条件状语从句，action 是条件状语从句主语，accelerates 是条件状语从句谓语，\$1trn of oil assets 是宾语从句的主语，could be stranded 是宾语从句的谓语，ie 表示“换句话说”。

【篇章结构】

第一段：石油影响力由盛转衰
第二段：电力成为代替石油的首选
第三段：石油和电力差异鲜明
第四段：电力不像石油使用方便
第五段：电能无处不在，难以垄断

第六段：可再生能源发电技术的优势
第七段：鼓励电力合作，实现供电方式多样化
第八段：步入电力时代的政府阻力
第九段：步入电力时代的投资者阻力
第十段：能源转型矛盾不可避免

Passage 3

Warning: counting on too many advertisements may be bad for your health

警告：仰仗过量广告恐不利健康

The Economist

阅读难度：☆☆☆☆☆

【文章导读】

未来世界，广告可能无处不在，我们身边每时每刻都将充斥着各种各样的宣传语。然而广告极乐世界的到来其实并不乐观，广告规模并不会无限扩大，传统媒体广告收入也可能快速下跌。

Imagine a world in which you are manipulated by intelligent advertisements from dusk until dawn. Your phone and TV screens flash constantly with commercials that know your desires before you imagine them. Driverless cars bombard you with personalized ads once their doors lock and if you try to escape by putting on a virtual-reality headset, all you see are synthetic billboards.

Jaron Lanier, a Silicon Valley thinker worries that this could be the future. He calls it a world of ubiquitous "digital spying". A few platform firms, he fears, will control what consumers see and hear and other companies will have to bid away their profits (by buying ads) to gain access to them. Advertising will be a tax that strangles the rest of the economy, like medieval levies on land.

It may sound outlandish, but this dystopia is increasingly what stock market investors are banking on. The part of America's economy that is ad-centric has become systemically important, with a

想象你身处这样一个世界：从黄昏到黎明，你一直被智能广告操纵。你的手机和电视屏幕不断播放着广告，它们比你更先一步知道你的欲望。你钻进无人驾驶汽车，车门一关上，专门为你定制的广告就开始对你狂轰滥炸。为了躲避，你戴上了虚拟现实头罩，结果扑面而来的全是数字广告牌。

硅谷思想家雅龙·拉尼耶担心这可能就是我们的未来。他称之为一个“数字间谍”无处不在的世界。他担忧少数几家平台公司将控制消费者的所见所闻，而其他企业得把自己的利润都拿来竞争广告位才能接触到消费者。广告将变成扼杀其他经济成分的税赋，就像中世纪的土地税那样。

这听来也许难以接受，但这种暗黑前景正日益成为股市投资者押注的未来。美国经济中以广告为核心的行业已变得具有系统重要性，市值超过了银行业。

market value that is larger than the banking industry.

But the chunky valuations of America's giant TV broadcasters imply that their ad revenues will fall very slowly, or not at all. Startups that rely on advertising, such as Snap, are floating their shares at prices that suggest huge growth. Large deals, too, are being justified by potential ad revenues. Microsoft's \$26bn acquisition of LinkedIn in 2016 was partly premised on "monetising" its user base through adverts. The main reason AT&T says it wants to buy Time Warner for \$109bn is to create a digital ad platform linking AT&T's data to Time Warner's TV content.

There are reasons why it might go on a tear, points out Rob Norman of GroupM, another media agency. In the old days adverts in Time magazine or on billboards in Times Square were big- ticket items that only giant firms could afford. But tech platforms have done a brilliant job of persuading smaller companies to spend money targeting customers. Facebook has 6m advertisers, equivalent to a fifth of all American small firms.

Adverts could become even more effective at identifying customers and enticing them to spend money, using troves of data that have been gathered to anticipate their needs. As commerce shifts online, firms will cut back on conventional marketing (for example, the fees that consumer goods and food firms pay to Walmart to ensure products are displayed prominently on its shelves), freeing up budgets to spend more on digital ads.

Yet there are two logical limits to the size of the advertising market. First, the irritation factor, or how much consumers can absorb

但从美国电视大鳄的巨额估值看，它们的广告收入未来会下跌得非常缓慢，甚至根本不跌。从 Snap 这类依赖广告收入的创业公司的股价浮动看，它们有巨大的增长机会。大型并购协议的达成也有赖于潜在广告收入的支撑。微软在 2016 年以 260 亿美元收购 LinkedIn，部分假设是能通过广告将其用户群“变现”。美国电话电报公司（AT&T）称，其欲以 1090 亿美元并购时代华纳的主要原因是创建一个数字广告平台，将自己的数据和时代华纳的电视内容连接起来。

另一家媒体代理机构群邑媒介集团的罗布·诺曼指出，广告收入可能狂飙猛进的背后有几个原因。过去，《时代》杂志上的广告和纽约时报广场上的广告牌都是唯有巨头企业才买得起的大手笔开销。但技术平台在说服小企业花钱发布定向广告方面干得漂亮。Facebook 拥有六百万广告客户，占全美所有小企业的五分之一。

通过使用收集到的海量数据预测人们的需求，广告在识别顾客和引诱他们消费上还将变得更富成效。随着商业向网络转移，企业会收缩花在传统营销手段上的费用（比如消费品和食品公司向沃尔玛付费，确保自家产品被摆放在货架上最显眼的位置），从而腾出更多预算来购买数字广告。

不过，广告市场的规模仍存在两大合理限制。首先是心理刺激因素，即消费者能吸纳多少广告而不至于被激怒。数字世界已经开始显

without being put off. The digital world is already showing signs of saturation. More people are using ad-blocking software. Tech brands that eschew bombarding customers with ads, such as Apple and Netflix, are wildly popular.

The second limit on the size of the advertising market is how much cash all other firms, in aggregate, have at their disposal to spend on ads. In theory they could spend more and more until their overall returns on capital drop below the cost of capital, compromising their financial viability.

Imagine if advertising spending really did rise to 1.8% of GDP in America by 2027. Most firms' costs would have to rise, cutting total corporate profits (excluding those of ad platforms) from about 6.5% to 5.7% of GDP, the kind of drop normally associated with a recession. Alternatively, imagine if the firms in the S&P 500 index (excluding ad platforms) bore all the additional cost of the advertising boom. Their combined return on capital would drop from the present 10% to 8%, at or just below their cost of capital. America Inc would go from being the world's greatest profit machine to flirting with Japanese-style financial-zombie status.

That does not seem realistic. More probably, hopes for a new age of advertising nirvana are too optimistic. Perhaps the ad sales of conventional media firms (which are about half of the total, with TV dominating) will drop fast rather than merely stagnate. Or perhaps digital firms will struggle to increase ad sales at compound annual rates of 15-20% or a decade, as their valuations imply. Expectations for both groups are surely too high. In the advertising world, and on Wall Street, something does not add up.

露饱和的迹象。越来越多的人开始使用广告屏蔽软件。像苹果和 Netflix 这样摒弃了广告轰炸模式的科技品牌目前极受欢迎。

广告市场规模的第二道限制是其他企业总共能拿出多少现金花在广告上。理论上它们可以花得越来越多,直到自己的总体资本回报率跌至资本成本以下,危及自己的财务可行性。

假设广告支出到 2027 年真的上升到了 GDP 的 1.8%,那么大部分企业的成本都将增加,使得企业总利润(不包括那些广告平台)从占 GDP 的约 6.5% 降至 5.7%,而这样的跌幅通常都和经济衰退相关联。或者,想象一下如果标普 500 指数企业(不包括广告平台)承担了广告增长的所有额外成本。它们的合并资本回报率将从目前的 10% 下跌至 8%,与资本成本持平甚至略低。“美国公司”这一全球最大的利润机器有可能陷入日本式的金融僵尸状态。

这看起来不大现实。对“广告极乐”新时期的预期应该是太过乐观了。或许传统媒体公司的广告销售额(占总额约一半,由电视广告主导)将快速下跌而非仅仅停滞。又或许,数字企业无法令其广告销售额在未来十年达到其估值所预测的 15% 到 20% 的复合年增长率。对这两批企业的预期无疑都过高了。在广告界,以及在华尔街上,有些东西说不通。

【词汇】

manipulate v. 操纵；操作；巧妙地处理

intelligent adj. 智能的；聪明的

driverless adj. 无人驾驶的

bombard v. 轰炸；炮击

synthetic adj. 综合的；合成的，人造的

ubiquitous adj. 普遍存在的；无所不在的

bid v. 投标；出价；表示；吩咐

strangle v. 勒死；使窒息

medieval adj. 中世纪的；原始的

outlandish adj. 古怪的；奇异的；异国风格的

dystopia n. 糟透的社会；地狱般的处境；非理想化的地方

systemically adv. 全身地；系统地；影响全身地

broadcaster n. 广播公司；广播员

monetise v. 使货币化

advert n. 广告

equivalent adj. 等价的，相等的

entice v. 引诱

trove n. 被发现的东西；收藏的东西

anticipate v. 预期，期望；预先准备

conventional adj. 符合习俗的，传统的；常见的

prominently adv. 显著地

saturation n. 饱和；色饱和度

eschew v. 避免；避开；远避

disposal n. 处理；支配；清理

viability n. 生存能力，发育能力；可行性

bear v. 承担；忍受

capital n. 资金；资本家

flirt v. 调情；玩弄；轻率地对待；摆动

optimistic adj. 乐观的；乐观主义的

stagnate v. 停滞；淤塞；变萧条

struggle v. 奋斗，努力；挣扎

compound adj. 化合的；混合的

valuation n. 评价，估价；计算

【长难句分析】

1. Driverless cars bombard you with personalized ads once their doors lock and if you try to escape by putting on a virtual-reality headset, all you see are synthetic billboards.

「译文」你钻进无人驾驶汽车，车门一关上，专门为你定制的广告就开始对你狂轰滥炸。为了躲避，你戴上了虚拟现实头罩，结果扑面而来的全是数字广告牌。

「语法分析」该句主干为 Driverless cars bombard you and all you see are synthetic billboards. 并列句，前半句主语为 driverless cars，谓语是 bombard，宾语是 you，once 引导条件状语从句，their doors 是从句主语，lock 是从句谓语；后半句 if 引导条件状语从句，you 是从句主语，try 是从句谓语，to escape 是从句宾语，by 引导方式状语，all you see 是主句主语，are 是谓语，synthetic billboards 是表语。

2. A few platform firms, he fears, will control what consumers see and hear and other companies will have to bid away their profits (by buying ads) to gain access to them.

「译文」 他担忧少数几家平台公司将控制消费者的所见所闻，而其他企业得把自己的利润都拿来竞争广告位才能接触到消费者。

「语法分析」 该句主干为 firms will control and other companies will have to bid away profits。并列句，前半句主语为 a few platform firms, he fears 是插入语, will control 作谓语, what consumers see and hear 做宾语；后半句主语为 other companies, will have to 做谓语, to gain 不定式作目的状语。

3. The part of America's economy that is ad-centric has become systemically important, with a market value that is larger than the banking industry.

「译文」 美国经济中以广告为核心的行业已变得具有系统重要性，市值超过了银行业。

「语法分析」 该句主干为 The part has become important。主语为 The part of America's economy, economy 后面的 that 引导定语从句修饰主语，谓语是 has become，表语是 important, systemically 副词修饰形容词 important, with a market value 作状语, value 后面的 that 引导定语从句修饰 market value。

4. Startups that rely on advertising, such as Snap, are floating their shares at prices that suggest huge growth.

「译文」 从 Snap 这类依赖广告收入的创业公司的股价看，它们有巨大的增长机会。

「语法分析」 该句主干为 Startups are floating their shares。主语是 startups, 第二个 that 引导定语从句修饰 prices, are floating 是谓语, their shares 做宾语, at prices 作状语。

5. The main reason AT&T says it wants to buy Time Warner for \$109bn is to create a digital ad platform linking AT&T's data to Time Warner's TV content.

「译文」 美国电话电报公司（AT&T）称，其欲以 1090 亿美元并购时代华纳的主要原因是要创建一个数字广告平台，将自己的数据和时代华纳的电视内容连接起来。

「语法分析」 该句主干为 The main reason is to create a digital ad platform。主语是 the main reason, AT&T says it wants to buy Time Warner for \$109bn 做同位语从句, is 作谓语, to create 作表语, linking 动名词作定语修饰 platform。

6. In the old days adverts in Time magazine or on billboards in Times Square were big-ticket items that only giant firms could afford.

「译文」过去，《时代》杂志上的广告和纽约时报广场上的广告牌都是唯有巨头企业才买得起的大手笔开销。

「语法分析」该句主干为 adverts were big-ticket items。In the old days 做时间状语，主语是 adverts，were 是谓语，big-ticket items 作表语，that 引导定语从句修饰 big-ticket items，giant firms 做从句主语，could afford 做从句谓语。

7. Adverts could become even more effective at identifying customers and enticing them to spend money, using troves of data that have been gathered to anticipate their needs.

「译文」通过使用收集到的海量数据预测人们的需求，广告在识别顾客和引诱他们消费上还将变得更富成效。

「语法分析」该句主干为 Adverts could become more effective。主语为 adverts，could become 作谓语，more effective 作表语，at identifying customers and enticing them to spend money 作状语，using 动名词做方式状语，that 引导定语从句修饰 data，have been gathered 做从句谓语，to anticipate 不定式做目的状语。

8. As commerce shifts online, firms will cut back on conventional marketing (for example, the fees that consumer goods and food firms pay to Walmart to ensure products are displayed prominently on its shelves), freeing up budgets to spend more on digital ads.

「译文」随着商业向网络转移，企业会收缩花在传统营销手段上的费用（比如消费品和食品公司向沃尔玛付费，确保自家产品被摆放在货架上最显眼的位置），从而腾出更多预算来购买数字广告。

「语法分析」该句主干为 firms will cut back on conventional marketing。As commerce shifts online 作状语，firms 是主语，will cut 作谓语，cut back on 削减，conventional marketing 作宾语，fees 后面的 that 引导定语从句修饰 fees，consumer goods and food firms 做从句主语，pay 做从句谓语，to ensure 不定式做目的状语，products are displayed prominently on its shelves 做宾语从句，freeing up 动名词作状语，to spend 不定式做目的状语。

9. The second limit on the size of the advertising market is how much cash all other firms, in aggregate, have at their disposal to spend on ads.

「译文」广告市场规模的第二道限制是其他企业总共能拿出多少现金花在广告上。

「语法分析」该句主干为 The second limit is how much cash all other firms have. 主语为 The second limit, on the size of the advertising market 介词短语作定语修饰 limit, is 作谓语, how much 引导表语从句, at their disposal 作状语。

10. In theory they could spend more and more until their overall returns on capital drop below the cost of capital, compromising their financial viability.

「译文」理论上它们可以花得越来越多,直到自己的总体资本回报跌至资本成本以下,危及自己的财务可行性。

「语法分析」该句主干为 they could spend more and more. In theory 作状语,主语为 they, could spend 做谓语, more and more 作状语, until 引导时间状语从句, their overall returns on capital 是从句主语, drop 是从句谓语, below the cost of capital 做从句状语, compromising 动名词做状语表结果。

11. Most firms' costs would have to rise, cutting total corporate profits (excluding those of ad platforms) from about 6.5% to 5.7% of GDP, the kind of drop normally associated with a recession.

「译文」那么大部分企业的成本都将增加,使得企业总利润(不包括那些广告平台)从占GDP的约6.5%降至5.7%,而这样的跌幅通常都和经济衰退相关联。

「语法分析」该句主干为 Most firms' costs would have to rise. 主语为 Most firms' costs, would have to 作谓语, cutting 动名词做结果状语, from about 6.5% to 5.7% of GDP 作状语, the kind of drop 做同位语解释前面企业利润的下降。

12. Perhaps the ad sales of conventional media firms (which are about half of the total, with TV dominating) will drop fast rather than merely stagnate.

「译文」或许传统媒体公司的广告销售额(占总额约一半,由电视广告主导)将快速下跌而非仅仅停滞。

「语法分析」该句主干为 The ad sales will drop. 主语为 the ad sales of conventional media firms, which 引导定语从句修饰主语, are 是从句谓语, half of the total 做从句表语, with TV dominating 做状语, will drop 做主句谓语, fast 副词修饰动词 drop, rather than 做并列连词。

【篇章结构】

第一段：想象广告无处不在的场景

第二段：广告面临垄断局面

第三段：以广告为核心的行业的重要性

第四段：广告收入未来下跌缓慢

第五段：广告收入狂飙背后的原因

第六段：广告在顾客消费上卓有成效

第七段：广告市场规模的第一道限制

第八段：广告市场规模的第二道限制

第九段：广告收入上升所带来的问题

第十段：对广告新时代的预期太过乐观

Passage 4

Airport profits: ready to depart 机场利润：即将离场

The Economist

阅读难度：☆☆☆

【文章导读】

与早期机场不同，如今的机场不仅通过航空业务获利，更重要的一部分收入来源于非航空业务，如机场免税店。但是，随着种种迹象表明非航空业务收入即将见顶，业界开始忧心自身的商业模式。

When Heathrow airport opened, in 1946, the only retail facilities were a bar with chintz armchairs and a small newsagent's. The first terminal was a tent, a far cry from the four halls, resembling vast shopping malls, at the London airport today. Retail spending per passenger is the highest of any airport.

Heathrow's journey from waiting room to retail paradise is the story of many airports. Before the 1980s, most income came from airlines' landing and passenger-handling charges. Then "non-aeronautical" revenue from shops and so on rose to around two-fifths of their revenues. But amid signs that non-aeronautical income is peaking, especially in mature aviation markets such as North America and Europe, the industry fears for its business model.

Britain led the way with privatisation in the 1980s. Canada leased its major airports to private-sector entities in 1994, and is now considering whether to sell them completely. Squeezed state budgets in America mean that

希思罗机场在 1946 年开放时，仅有的零售设施是一个有着印花棉布扶手椅的酒吧和一个小报亭。第一个航站楼就是一个帐篷，相比今天这个伦敦机场里好似大型购物中心的四个航站楼，简直是天壤之别。该机场目前的乘客人均零售支出是所有机场中最高的。

希思罗机场从候机厅到零售天堂的转变是许多机场的共同经历。20 世纪 80 年代以前，机场大部分收入来自航空公司的起降费和地勤费。后来，来自商店等方面的“非航空”业务收入上升到机场收入的五分之二左右，但是，随着种种迹象表明非航空业务收入即将见顶，特别是在北美和欧洲这样成熟的航空市场，业界开始忧心自身的商业模式。

20 世纪 80 年代，英国率先实行私有化。1994 年，加拿大将其主要机场租赁给私营实体，现在正在考虑是否将它们彻底出售。美国各州预算吃紧，令大多数公有机场都交由必须保持收支平衡的独立机构来管理。私有化浪潮正席

most publicly owned airports are managed by arms-length organisations that must break even. And a wave of privatisation is sweeping Europe, where nearly half of terminal capacity is now owned by the private sector. France's main airports in Paris are still partly in state hands, but Emmanuel Macron, the president, aims to sell the rest.

Their timing may be off. Although passenger numbers are still booming — growing worldwide by 6.3% last year, according to IATA, an airline-industry group — non-aeronautical revenues per person are falling across North America and Europe, a trend that is offsetting some of the rise in aeronautical revenues from higher passenger numbers.

There are structural causes. Tyler Brûlé, an airport-design guru and editor-in-chief of *Monocle*, a British magazine, notes that the duplication of nearly identical duty-free and luxury-goods outlets at airports across the world has left many passengers unexcited by the range of items on offer.

Revenues are stagnating just when airports in America and Europe need more cash to expand, to cope with demand for flights. Without expansion beyond current plans, by 2035, 19 of Europe's biggest airports will be as congested as Heathrow today, which operates at full capacity, according to Olivier Jankovec, director-general of ACI Europe.

For those tramping through airports, this is bad news. Without space for extra airlines, established carriers can raise their fares without fear of new competitors moving in. Neither are incumbent airlines keen to foot the bill for expansion. IAG, an Anglo-Spanish

卷欧洲，现在近一半的机场容量都归私营企业所有。法国在巴黎的主要机场仍然部分控制在国家手中，但总统马克龙的目标是全部卖掉。

它们可能错过了私有化的好时机。虽然全球旅客人数仍在迅速增长——航空业组织国际航空运输协会的数据显示去年的增幅为 6.3%，但北美和欧洲机场的人均非航空业务营收却在下滑，部分抵消了旅客人数增加带来的航空收入增长。

有结构性的原因。机场设计大师、英国杂志《Monocle》总编 Tyler Brûlé 指出，世界各地机场的免税店和奢侈品奥特莱斯店几乎一模一样，让许多旅客对陈列的商品提不起兴致。

正当美国和欧洲的机场需要更多的现金来扩张，以满足对航班的需求之时，机场收入却停滞不前。根据国际机场理事会欧洲地区分会 ACI Europe 的总干事 Olivier Jankovec 的说法，如果不能实现超出当前计划的扩张，到 2035 年，欧洲最大的 19 个机场将和现在已满负荷运转的希思罗机场一样拥挤。

对于那些搭乘飞机的人来说，这是个坏消息。如果机场没有多余的空间提供给其他航空公司，现有航空公司就可以提高票价，而不用担心新的竞争对手进入。现有的航空公司也不想为机场扩建买单。希思罗机场和都柏林机场为支付新跑道的建设费用而计划增收起落费，英西合资的国际航空集团（IAG）为旗下英国航

group, is fighting plans to levy higher landing fees on its airlines, including British Airways, to pay for new runways at Heathrow and in Dublin.

空等公司提出抵制。

【词汇】

retail n./v. 零售

facility n. 设施, 设备

newsagent n. 报刊经销商

terminal n. 航站楼; 终点; 末端

resemble v. 像, 类似

paradise n. 天堂

airline n. 航空公司; 航线

landing charges 起降费

passenger-handling charges 地勤费

non-aeronautical adj. 非航空的

revenue n. 营收

amid prep. 在其中

peak n. 山峰; 顶点 v. 达到最高点

aviation n. 航空

privatisation n. 私有化

lease v. 出租

entity n. 实体

squeezed adj. 挤压的; 吃紧的

budget n. 预算

even adj. 相等的, 均衡的

sweep v. 席卷

capacity n. 容量

timing n. 时机

booming v. 兴旺

offset v. 抵消, 补偿

luxury goods n. 奢侈品

outlets n. 奥特莱斯店

structural adj. 结构的

cause n. 原因

guru n. 专家, 领袖, 大师

note v. 指出

duplication n. 复制

identical adj. 一致的

duty-free adj. 免税的

luxury goods 奢侈品

stagnate v. 停滞, 萧条

cope with v. 处理, 应对

expansion n. 扩张

congest v. 拥挤

tramp v. 踏

carrier n. 载体, 运送者, 这里引申为‘航空公司’

incumbent adj. 现任的

keen adj. 敏锐的, 渴望的

【长难句分析】

1. The first terminal was a tent, a far cry from the four halls, resembling vast shopping malls, at the London airport today.

「译文」第一个航站楼就是一个帐篷，相比今天这个伦敦机场里好似大型购物中心的四个航站楼，简直是天壤之别。

「语法分析」该句主干为 the terminal was a tent。a far cry from the four halls at the London airport today 作状语修饰主句。resembling vast shopping malls 为插入语，作状语修饰 the four halls。

2. But amid signs that non-aeronautical income is peaking, especially in mature aviation markets such as North America and Europe, the industry fears for its business model.

「译文」但是，随着种种迹象表明非航空业务收入即将见顶，特别是在北美和欧洲这样成熟的航空市场，业界开始忧心自身的商业模式。

「语法分析」该句主干为 the industry fears for its model。amid signs 作状语修饰主句。that 引导定语从句修饰 signs。especially...Europe 作状语修饰 that 引导的定语从句。

3. Squeezed state budgets in America mean that most publicly owned airports are managed by arms-length organisations that must break even.

「译文」美国各州预算吃紧，令大多数公有机场都交由必须保持收支平衡的独立机构来管理。

「语法分析」该句主干为 budgets mean。mean 之后的 that 引导宾语从句。organisations 后的 that 引导定语从句修饰 organisations。

4. Although passenger numbers are still booming — growing worldwide by 6.3% last year, according to IATA, an airline-industry group — non-aeronautical revenues per person are falling across North America and Europe, a trend that is offsetting some of the rise in aeronautical revenues from higher passenger numbers.

「译文」虽然全球旅客人数仍在迅速增长——航空业组织国际航空运输协会的数据显示去年的增幅为 6.3%，但北美和欧洲机场的人均非航空业务营收却在下滑，部分抵消了旅客人数增加带来的航空收入增长。

「语法分析」该句主干为 revenues are falling. Although 引导让步状语从句，修饰主句。破折号中间的部分用于解释说明 although 引导的从句的内容。according to IATA 为插入语，作状语。an airline-industry group 为 IATA 的同位语。a trend 为主句内容的同位语，that 引导定语从句修饰 trend。

5. Tyler Brûlé, an airport-design guru and editor-in-chief of *Monocle*, a British magazine, notes that the duplication of nearly identical duty-free and luxury-goods outlets at airports across the world has left many passengers unexcited by the range of items on offer.

「译文」机场设计大师、英国杂志《Monocle》总编 Tyler Brûlé 指出，世界各地机场的免税店和奢侈品奥特莱斯店几乎一模一样，让许多旅客对陈列的商品提不起兴致。

「语法分析」该句主干为 Tyler Brûlé notes. that 引导 note 的宾语从句。从句主干为 the duplication has left passengers. unexcited by the range of items on offer 为宾补。an airport-design guru and editor-in-chief of *Monocle* 为 Tyler Brûlé 的同位语。a British magazine 为 *Monocle* 的同位语。

6. Without expansion beyond current plans, by 2035, 19 of Europe's biggest airports will be as congested as Heathrow today, which operates at full capacity, according to Olivier Jankovec, director-general of ACI Europe.

「译文」根据国际机场理事会欧洲地区分会 ACI Europe 的总干事 Olivier Jankovec 的说法，如果不能实现超出当前计划的扩张，到 2035 年，欧洲最大的 19 个机场将和现在已满负荷运转的希思罗机场一样拥挤。

「语法分析」该句主干为 airports will be as congested as Heathrow. which 引导定语从句修饰主句。Without expansion beyond current plans 作状语修饰主句。according to Olivier Jankovec, director-general of ACI Europe 也作状语修饰主句，说明预测的依据。

7. IAG, an Anglo-Spanish group, is fighting plans to levy higher landing fees on its airlines, including British Airways, to pay for new runways at Heathrow and in Dublin.

「译文」希思罗机场和都柏林机场为支付新跑道的建设费用而计划增收起降费，英西合资的国际航空集团（IAG）为旗下英国航空等公司提出抵制。

「语法分析」该句主干为 IAG is fighting plans. to levy...airlines to pay for new...Dublin 作宾补，说明目的。including British Airways 为插入语，作状语修饰前面句子。

【篇章结构】

第一段：希思罗机场的发展

第二段：机场收入的商业模式

第三段：各国机场私有化

第四段：机场收入的下滑原因之一——私有化时机不对

第五段：机场收入下滑的其他结构性的原因

第六段：机场收入的现状

第七段：现有机场商业模式的后果

Passage 5

America's new business model 美国新的经济模式

The Economist

阅读难度：☆☆☆

【文章导读】

特朗普新政虽然受人欢迎，但也存在很多问题，高关税的贸易保护主义是对企业的霸凌，如果不放弃贸易保护主义，最终美国经济、公司以及工人都会受害。

DONALD Trump has sent shock waves through American business. Chief executives and their companies' shareholders are giddy at the president's promises to slash burdensome regulation, cut taxes and boost the economy with infrastructure spending. Blue-collar workers are cock-a-hoop at his willingness to bully firms into saving their jobs.

Popular but problematic. The emerging Trump strategy towards business has some promising elements, but others that are deeply worrying. The promise lies in Mr. Trump's enthusiasm for corporate-tax reform, his embrace of infrastructure investment and in some parts of his deregulatory agenda. The dangers stem from the muddled mercantilism that lies behind his attitude to business. American capitalism has flourished thanks to the predictable application of rules. If, at the margin, that rules-based system is superseded by an ad hoc approach in which businessmen must take heed and pay homage to the whim of King Donald, the

特朗普冲击波传遍了整个美国商界。首席执行官们及其公司股东被这位总统的承诺搞得头晕目眩——他说要大幅减少繁重的监管，要减税，还要通过增加基础设施支出促进经济。蓝领工人们则志得意满，因为特朗普愿意威逼公司保住他们的饭碗。

虽受人欢迎却也问题多多。特朗普对商界的策略逐渐显现，有些因素充满希望，其他的则令人深感忧虑。希望在于特朗普对公司税改革的热情、积极推动基础设施投资，以及放松监管的某些主张。而危险则源自：导致他对商界采取这种态度的混乱的重商主义。美国资本主义的繁荣得益于规则贯彻的可预见性。从边际角度来看，如果这个基于规则的体系被即兴的解决方式取代，商人必须小心听命于特朗普的突发奇想，那么对美国经济的长期损害将非常严重。

long-term damage to America's economy will be grave.

The president believes that America's workers are harmed when firms move production to cheaper locations offshore. That is why he wants to impose a 35% tariff on the products of any company that moves its production abroad. Such tariffs would be hugely disruptive. They would make goods more expensive for American consumers. By preventing American firms from maximizing their efficiency using complex supply chains, they would reduce their competitiveness, deter new investment and, eventually, hurt workers' wages across the economy. They would also encourage a tit-for-tat response.

Precisely because tariffs would be so costly, many businessmen discount Mr. Trump's protectionism as mere rhetoric. To profit from a business-friendly bonanza, the logic goes, clever executives simply have to make sure they stay in the president's good books.

Mr. Trump's approach is worrying. Mr. Trump's meddling is thus likely to be the new normal. Worse, his penchant for unpredictable and often vindictive bullying is likely to be more corrosive than the handouts most politicians favour. If this is the tone of the Trump presidency, prudent businesses will make it their priority to curry favour with the president and avoid actions that might irk him.

The costs from this shift may be imperceptible at first, exceeded by the boon from economic stimulus and regulatory reform. And as president of the world's largest economy, Mr. Trump will be able to ride roughshod over firms for longer with

这位总统相信，如果企业将生产搬到海外更便宜的地方，美国的工人会受到损害。因此他想要对任何把生产迁到国外的公司征收 35% 的产品关税。如此高的关税会造成巨大的破坏。这会让美国消费者购买的产品变得更加昂贵。高关税让美国公司无法利用复杂的供应链使效率最大化，从而降低了它们的竞争力，抑制了新的投资，并且最终伤及整个经济领域中工人的工资。高关税还会激起以牙还牙的对策。

正是因为高关税的代价如此高昂，很多商界人士低估了特朗普的贸易保护主义，认为他只是说说而已。他们认为，要从对商业友好的大机遇中获利，聪明的高管就得确保自己待在总统的“好人名单”上。

特朗普的手段仍然令人担忧。特朗普的干预可能会成为一种新常态。更糟糕的是，特朗普行事莫测的倾向且常有报复性的霸道行径，可能比大多数政客偏好的施恩更具腐蚀性。如果这成为特朗普任期内的基调，精明的企业将会把向总统献媚作为头等大事，并避免可能令其不悦的行为。

这一变化的代价最初可能不易察觉，会被经济刺激和监管改革带来的好处所掩盖。而作为世界最大经济体的总统，相比那些较小国家政客过去的所作所为，特朗普将能在更长时间里无所顾忌地欺凌企业。然而损害会逐渐积累：资本错配、竞争力下降，以及对美国体制的信

impunity than politicians in smaller places ever could. But over time the damage will accumulate: misallocated capital, lower competitiveness and reduced faith in America's institutions. Those who will suffer most are the very workers Mr. Trump is promising to help. That is why, if he really wants to make America great again, Mr. Trump should lay off the protectionism and steer clear of the bullying right now.

心削弱。受害最深的将正是那些特朗普许诺要帮助的工人。所以说，如果他真的想让美国再次伟大，现在就应抛弃保护主义，避免欺凌企业。

【词汇】

chief adj. 主要地

shareholder n. 股东

giddy adj. 头晕的

slash v. 削减

burdensome adj. 繁重的

boost v. 促进

infrastructure n. 基础设施

bully v. 欺凌

problematic adj. 有问题的

emerging adj. 新兴的

embrace n. 信奉

investment n. 投资

deregulatory adj. 解除管制的

agenda n. 事项

stem v. 源自

muddled adj. 混乱的

mercantilism n. 重商主义

flourish v. 繁荣

margin n. 边缘

supersede v. 取代

ad hoc 临时安排的

heed n. 注意

homage n. 尊敬

whim n. 突发的念头

grave adj. 严重的

offshore adv. 海外地

impose v. 施加

tariff n. 关税

disruptive adj. 破坏的

deter v. 阻止

wage n. 工资

discount v. 低估

protectionism n. 保护主义

mere adj. 仅仅

rhetoric n. 修辞

profit v. 获利

bonanza n. 财运

meddle v. 干预

penchant n. 倾向

vindictive adj. 怀恨的

corrosive adj. 腐蚀的

handout n. 施舍

tone n. 基调

prudent adj. 精明的

priority n. 首要任务

curry v. 奉承

irk v. 使烦恼

imperceptible adj. 不易察觉的

exceed v. 超过

boon n. 恩惠

stimulus n. 刺激

roughshod adv. 轻蔑地对待

impunity n. 不受惩罚

accumulate v. 积累

misallocated adj. 错误分配的

steer clear of 避开

【长难句分析】

1. Chief executives and their companies' shareholders are giddy at the president's promises to slash burdensome regulation, cut taxes and boost the economy with infrastructure spending.

「译文」首席执行官们及其公司股东被这位总统的承诺搞得头晕目眩——他说要大幅减少繁重的监管，要减税，还要通过增加基础设施支出促进经济。

「语法分析」该句看起来长，但其实就是一个简单句，主语是 chief executives and their companies' shareholders, is 是 be 动词，be giddy at 表示“对…感到晕眩的”，后面的动词不定式作定语修饰 promises, with infrastructure spending 是方式状语。

2. If, at the margin, that rules-based system is superseded by an ad hoc approach in which businessmen must take heed and pay homage to the whim of King Donald, the long-term damage to America's economy will be grave.

「译文」从边际角度来看，如果这个基于规则的体系被即兴的解决方式代替，商人必须小心听命于特朗普的突发奇想，那么对美国经济的长期损害将非常严重。

「语法分析」该句由 if 引导的条件状语从句 + 主句构成，从句中主语是 that rules-based system, 谓语是 is superseded by, 是被动语态，宾语是 an ad hoc approach, 后面跟一个 which 引导的限定性定语从句，先行词就是 an ad hoc approach, 固定搭配 in...approach, 介词 in 被放到 which 前面。主句主语是 the long-term damage, will be 是系动词，grave 是表语。if 引导的条件状语从句，一般情况下，从句用一般现在时，主句用一般将来时。

3. By preventing American firms from maximizing their efficiency using complex supply chains, they would reduce their competitiveness, deter new investment and, eventually, hurt workers' wages across the economy.

「译文」高关税让美国公司无法利用复杂的供应链使效率最大化，从而降低了它们的竞争力，抑制了新的投资，并且最终伤及整个经济领域中工人的工资。

「语法分析」该句由方式状语 + 主句构成，by 引导方式状语，prevent...from doing 表示“阻止……做某事”，using 是现在分词作状语，主句主语是 they, 谓语是并列的三个动词 reduce, deter, hurt, 用 and 连接。

4.To profit from a business-friendly bonanza, the logic goes, clever executives simply have to make sure they stay in the president's good books.

「译文」他们认为，要从对商业友好的大机遇中获利，聪明的高管就得确保自己待在总统的“好人名单”上。

「语法分析」该句主语是 the logic，谓语是 goes，clever executives……good books 是 goes 引导的宾语从句，they stay……books 是 make sure 的宾语从句，句首的动词不定式表示目的。

5.Worse, his penchant for unpredictable and often vindictive bullying is likely to be more corrosive than the handouts most politicians favour.

「译文」更糟糕的是，特朗普行事莫测的倾向且常有报复性的霸道行径，可能比大多数政客偏好的施恩更具腐蚀性。

「语法分析」该句主语是 his penchant for unpredictable and often vindictive bullying，is 是 be 动词，likely 是表语，后面跟了比较级，most politicians favour 是省略引导词 that 的定语从句，先行词是 the handouts。

6.If this is the tone of the Trump presidency, prudent businesses will make it their priority to curry favour with the president and avoid actions that might irk him.

「译文」如果这成为特朗普任期内的基调，精明的企业将会把向总统献媚作为头等大事，并避免可能令其不悦的行为。

「语法分析」该句是由 if 引导的条件状语从句和主句构成，从句用一般现在时，主句用一般将来时。主句主语是 prudent businesses，谓语是 will make，it 是形式宾语，真正宾语是后面的动词不定式 to curry favour with “讨好；奉承”，最后的 that might irk him 是定语从句，先行词是 actions。

7.The costs from this shift may be imperceptible at first, exceeded by the boon from economic stimulus and regulatory reform.

「译文」这一变化的代价最初可能不易察觉，会被经济刺激和监管改革带来的好处所掩盖。

「语法分析」该句主语是 the costs，may be 是系动词，imperceptible 是表语，exceeded 是过去分词表示被动，作伴随状语。

8. Those who will suffer most are the very workers Mr. Trump is promising to help.

「译文」 受害最深的将正是那些特朗普许诺要帮助的工人。

「语法分析」 该句由一个简单句和两个定语从句一起构成，句子主干是 those are the very workers，第一个定语从句是 who 引导的，先行词是 those，第二个定语从句是 Mr. Trump is promising to help，省略了引导词 that，先行词是 the very workers。

【篇章结构】

第一段：特朗普冲击波的内容

第二段：特朗普新政的问题

第三段：高关税引发的问题

第四段：商界人士的看法

第五段：特朗普干预的后果

第六段：对特朗普新政的建议

Passage 6

AI in society — the unexamined mind 人工智能走向社会——无法检验的思维

April, 2018

The Economist

阅读难度：☆☆☆☆

【文章导读】

随着科技的发展，人工智能已经悄无声息地渗透到人们生活中的方方面面。人们对于人工智能取代人们进行枯燥危险的工作充满信心，但同时又对人工智能的失控对人类社会造成的威胁充满恐惧。造成恐惧的主要原因是人工智能无法解释自己的行为，而设计者也无法了解其行事方式。

Science fiction is littered with examples of intelligent computers, from HAL 9000 in "2001: A Space Odyssey" to Eddie in "The Hitchhiker's Guide to the Galaxy". One thing such fictional machines have in common is a tendency to go wrong, to the detriment of the characters in the story. HAL murders most of the crew of a mission to Jupiter. Eddie obsesses about trivia, and thus puts the spacecraft he is in charge of in danger of destruction. In both cases, an attempt to build something useful and helpful has created a monster.

Successful science fiction necessarily plays on real hopes and fears. In the 1960s and 1970s, when HAL and Eddie were dreamed up, attempts to create artificial intelligence (AI) were floundering, so both hope and fear were hypothetical. But that has changed. The invention of deep learning, a technique which uses special computer programs called neural networks to churn through large volumes of data looking for and remembering patterns, means that

从《2001 太空漫游》中的哈尔到《银河系漫游指南》中的艾迪，科幻小说中一直不乏智能计算机的戏份。这类虚构机器的一个共同特点是容易出问题，给故事中的人物造成损害。在一次飞往木星的任务中，哈尔杀害了大部分宇航员。艾迪则执着于细枝末节，险些导致它控制的太空船解体。这两个故事中，人们试图打造得力的机器助手，不料却创造出了怪物。

成功的科幻作品必然会利用真实的希望和恐惧。20 世纪六七十年代哈尔和艾迪被创作出来时，创造人工智能（以下简称 AI）的尝试陷入了困境，因此希望和恐惧都是假想出来的。但这一点已经改变。随着深度学习技术的诞生（使用名为“神经网络”的专用电脑程序处理大量数据以寻找并记住其中的模式），给人“聪慧”印象的科技正在快速传播。从语音转录文字到检测早期失明征兆，各种智能应用应有尽有。如今 AI 已被用于控制工厂的质检程序和数据中心的冷却系统。政府希望运用 AI 识别恐怖

technology which gives a good impression of being intelligent is spreading rapidly. Applications range from speech-to-text transcription to detecting early signs of blindness. AI now runs quality control in factories and cooling systems in data centres. Governments hope to employ it to recognise terrorist propaganda sites and remove them from the web. And it is central to attempts to develop self-driving vehicles. Of the ten most valuable quoted companies in the world, seven say they have plans to put deep learning-based AI at the heart of their operations.

Real AI is nowhere near as advanced as its usual portrayal in fiction. It certainly lacks the apparently conscious motivation of the sci-fi stuff. But it does turn both hope and fear into matters for the present day, rather than an indeterminate future. And many worry that even today's "AI-lite" has the capacity to morph into a monster. The fear is not so much of devices that stop obeying instructions and instead follow their own agenda, but rather of something that does what it is told (or, at least, attempts to do so), but does it in a way that is incomprehensible.

The reason for this fear is that deep-learning programs do their learning by rearranging their digital innards in response to patterns they spot in the data they are digesting. Specifically, they emulate the way neuroscientists think that real brains learn things, by changing within themselves the strengths of the connections between bits of computer code that are designed to behave like neurons. This means that even the designer of a neural network cannot know, once that network has been trained, exactly how it is doing what it does. Permitting such agents to run critical infrastructure or to

分子的宣传网站并将之从网络上删除。另外，AI 也是自动驾驶汽车研发的核心所在。在全球市值最高的十大上市公司中，有七家表示已计划将基于深度学习的 AI 技术作为核心事务。

真正的 AI 远不如虚构作品中惯常描写的那般先进。它肯定没有科幻小说中那种明显有意识的动机。但它确实把希望和恐惧都变成了当前的现实，而不是模糊不定的未来。许多人甚至担心现在的“轻度 AI”工具也足以演变为怪物。最令人害怕的还不是 AI 设备不服从指令、遵从自身程序，而是它虽然听从指令（或至少尝试服从指令），却是以人们无法理解的方式执行。

造成这种恐惧的原因是，深度学习程序会在处理的数据中发现模式，并据此重组自身的数字结构，从而完成学习过程。具体来说，这些程序是在模拟神经科学家所认为的人脑学习机制 -- 程序内的计算机代码就如同大脑的神经元，程序就是通过改变这些代码的连接强度来学习的。这意味着一套神经网络受训后，连它的设计者也无法了解其行事方式。因此，如果允许这些智能代理来管理关键基础设施或做出医疗决策，就相当于把人命托付给了没人真正了解其运作方式的设备。

make medical decisions therefore means trusting people's lives to pieces of equipment whose operation no one truly understands.

If, however, AI agents could somehow explain why they did what they did, trust would increase and those agents would become more useful. And if things were to go wrong, an agent's own explanation of its actions would make the subsequent inquiry far easier. Even as they acted up, both HAL and Eddie were able to explain their actions. Indeed, this was a crucial part of the plots of the stories they featured in. At a simpler level, such powers of self-explanation are something software engineers would like to emulate in real AI.

但如果 AI 代理能以某种方式解释自己运作的原因或动机，不但会增进人们对它们的信任，它们本身也会变得更有用。而且万一出现问题，它们对自身行动的解释对后续调查也会大有帮助。就连胡作非为的哈尔和艾迪也能解释自己的行为。事实上，这在它们存在的故事中还是情节的关键部分。在更简单的层面，这种自我解释的能力是软件工程师希望在现实 AI 中效仿的。

【词汇】

be littered with 散落着…

fictional adj. 小说的，虚构的

tendency n. 趋势

detriment n. 损害

murder v. 谋杀

crew n. 全体船员

obsess v. 使痴迷

trivia n. 细枝末节

artificial adj. 人造的

flounder v. 困难重重

hypothetical adj. 假设的

neural adj. 神经的

churn v. 搅拌

volume n. 量

impression n. 印象

transcription n. 转录

detect v. 探测，发现

propaganda n. 宣传

portrayal n. 描写

apparently adv. 明显地

conscious adj. 有意识的

indeterminate adj. 不确定的

capacity n. 能力

morph v. 变为

emulate v. 模仿

subsequent adj. 随后的

inquiry n. 调查

crucial adj. 重要的

【长难句分析】

1. One thing such fictional machines have in common is a tendency to go wrong, to the detriment of the characters in the story.

「译文」这类虚构机器的一个共同特点是容易出问题，给故事中的人物造成损害。

「语法分析」该句主干为 One thing is a tendency. such fictional machines have in common 为省略了 that 的定语从句，修饰 one thing。不定式 to go wrong 作后置定语修饰 tendency。to the detriment of the characters in the story 做状语修饰主句，表示伴随而来的后果。

2. In the 1960s and 1970s, when HAL and Eddie were dreamed up, attempts to create artificial intelligence (AI) were floundering, so both hope and fear were hypothetical.

「译文」20 世纪六七十年代哈尔和艾迪被创作出来时，创造人工智能（以下简称 AI）的尝试陷入了困境，因此希望和恐惧都是假想出来的。

「语法分析」该句主干为 attempts were floundering。不定式 to create artificial intelligence (AI) 作为后置定语修饰 attempts。when HAL and Eddie were dreamed up 作为 the 1960s and 1970s 的同位语，补充解释说明。so 引导结果状语从句，说明主句动作发生的结果。

3. The invention of deep learning, a technique which uses special computer programs called neural networks to churn through large volumes of data looking for and remembering patterns, means that technology which gives a good impression of being intelligent is spreading rapidly.

「译文」随着深度学习技术的诞生（使用名为“神经网络”的专用电脑程序处理大量数据以寻找并记住其中的模式），给人“聪慧”印象的科技正在快速传播。

「语法分析」该句主干为 The invention means. that 引导宾语从句 technology is spreading rapidly。which gives a good impression of being intelligent 是定语从句修饰 technology。of deep learning 用于解释说明 invention 的内容。a technique 是 invention 的同位语，之后 which 又引导定语从句修饰 technique，其实也就是修饰 deep learning。该从句中不定式 to churn 表目的，looking 和 remembering 为伴随结构，修饰前面的动作 churn。

4. Of the ten most valuable quoted companies in the world, seven say they have plans to put deep learning-based AI at the heart of their operations.

「译文」在全球市值最高的十大上市公司中，有七家表示已计划将基于深度学习的 AI 技术作为核心事务。

「语法分析」句子主干部分是 seven say，之后的部分 they have plans to put deep learning-based AI at the heart of their operations 是省略了关系词 that 的宾语从句。该从句中主语为 they，谓语为 have，宾语为 plans，不定式 to put deep learning-based AI at the heart of their operations 解释说明 plans 的内容。Of the ten most valuable quoted companies in the world 作状语修饰 seven。该句存在倒装结构，将顺序调整之后为 seven of the ten most valuable quoted companies in the world say they have plans to put deep learning-based AI at the heart of their operations.

5. The fear is not so much of devices that stop obeying instructions and instead follow their own agenda, but rather of something that does what it is told (or, at least, attempts to do so), but does it in a way that is incomprehensible.

「译文」最令人害怕的还不是 AI 设备不服从指令、遵从自身程序，而是它虽然听从指令（或至少尝试服从指令），却是以人们无法理解的方式执行。

「语法分析」该句主干为 The fear is not so much of devices but rather of something. so much 表示程度。devices 后的 that 引导定语从句修饰 devices。something 后的 that 引导的也是定语从句，修饰 something。该从句中，does what it is told (or, at least, attempts to do so) 和 but does it in a way 为并列结构，都修饰 something。way 后的 that 也引导定语从句，修饰 way。

6. Permitting such agents to run critical infrastructure or to make medical decisions therefore means trusting people's lives to pieces of equipment whose operation no one truly understands.

「译文」因此，如果允许这些智能代理来管理关键基础设施或做出医疗决策，就相当于把人命付托给了没人真正了解其运作方式的设备。

「语法分析」该句主干为 Permitting means trusting. such agents 解释说明 permitting 的对象。people's lives to pieces of equipment 解释说明 trusting 的对象。不定式 to run... or to make medical decisions 作为后置定语修饰 agents。To run 和 or to make 构成选择结构。whose 引导定语从句修饰 equipment。

【篇章结构】

第一段：由科幻小说引入对人工智能的安全性的讨论

第二段：人工智能已经被用于关键岗位

第三段：人们对人工智能的恐惧

第四段：造成恐惧的原因

第五段：可能的解决方法

跟谁学考研

跟谁学考研