

同源外刊讲义

李达

一、堕胎法案

If the Alabama legislature gets its way, abortion will soon become illegal there. A doctor convicted of performing an abortion could be sentenced to up to 99 years in prison, with no exemptions in cases of rape or incest. This would be the most restrictive such law in the country.

【词汇】

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| abortion | |
| illegal | |
| convict | |
| exemption | |
| rape | |
| incest | |
| restrictive | |
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【句间逻辑关系】

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But other states with Republican-controlled legislatures have passed “heartbeat” laws that are almost as absolute — they ban abortion from 6 weeks, at which point many women do not yet realize they are pregnant.

【词汇】

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| legislature | |
| absolute | |

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| pregnant | |
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In the abortion argument, both sides long ago drove each other to extremes. The pro-life, fundamentalist view behind the Alabama bill is that a fertilized egg is no different from a person, and thus should enjoy the same legal rights. Accept that, and what right does a woman have to take a morning-after pill, or to end a pregnancy after a rape? The pro-choice extreme is that any restriction on abortion is an unacceptable attempt by government to control women's bodies. With debate gridlocked, the focus is on the courts.

【词汇】

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| extreme | |
| fundamentalist | |
| fertilized | |
| Accept that | |
| gridlock | |
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【句间逻辑关系】

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The latest abortion bills are about two things: preventing women from making a choice that is properly theirs, and getting a challenge to Roe to the Supreme Court where, campaigners hope, they can smoke out the new conservative majority. Were Alabama's law to come into force, the price would be paid by women too poor or browbeaten to travel to where abortions are legal. Some of them will end up attempting to perform abortions themselves, with drink, drugs or worse.

【词汇】

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| properly | |
| campaigner | |
| smoke out | |
| browbeaten | |
| end up doing | |

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【句间逻辑关系】

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【篇章逻辑关系】

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【背景知识】

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【参考译文】

如果阿拉巴马州的立法机构如愿以偿的话，堕胎将在该州变成违法行为。因实施堕胎手术被判罪的医生可能被判处最高 99 年的监禁。由于该法对强奸或乱伦成孕的情况没有豁免，这将是美国此类法律中最严苛的堕胎禁令。

但是在其他几个州，由共和党控制的立法机构已经通过了几乎同样武断的“心跳法案”——从妊娠六周开始禁止堕胎，那个时候许多女性还没有意识到自己已经怀孕了。

在关于堕胎的争论中，正反双方在很久以前就把对方逼到了极端。阿拉巴马法案背后的反堕胎、原教旨主义观点是，受精卵与人没有什么不同，因此应该享有同样的法律权利。接受了这一立场，那女性还有什么权利去服用事后避孕药，或者在被强奸后终止妊娠？而支持堕胎的极端观点是，任何对堕胎的限制都是一种政府控制女性身体的不能容忍的企图。随着争辩陷入了僵局，人们把焦点集中在法院身上。

最新的堕胎法案涉及两个方面：阻止女性做出本该属于她们的选择，以及向最高法院提出对“罗诉韦德案”的质疑。活动家们希望，在最高法院，他们可以逼出大多数的保守派。

如果阿拉巴马州的堕胎法案生效，付出代价的将会是过于贫穷或被恐吓的女性，她们无法去堕胎合法的地方。她们中的一些人最终会试图通过喝酒、吸毒或更糟的方式来自行堕胎。

二、AI 造假

Today, the events captured in realistic-looking or-sounding video and audio recordings need never have happened. They can instead be generated automatically, by powerful computers and machine-learning software. The catch-all term for these computational productions is “deepfakes”.

【词汇】

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| catch-all term | |
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【句间逻辑关系】

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The term first appeared on Reddit, a messaging board, as the username for an account which was producing fake videos. An entire community sprung up around the creation of these videos, writing software tools that let anyone automatically paste one person’s face onto the body of another. Reddit shut the community down, but the technology was out there. Soon it was being applied to political figures and actors.

【词汇】

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| spring up | |
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【句间逻辑关系】

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1. What can we infer from the paragraph?
A deepfake is the name of a messaging board;
B many actors applied the technology;

- C some of the videos about politicians are not real;
- D this kind of software exists only in Reddit.

Tools for editing media manually have existed for decades—think Photoshop. The power and peril of deepfakes is that they make fakery cheaper than ever before. Before deepfakes, a powerful computer and a good chunk of a university degree were needed to produce a realistic fake video of someone. Now some photos and an Internet connection are all that is required.

【词汇】

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| peril | |
| fakery | |
| all | |
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【句间逻辑关系】

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2. What can we infer from the paragraph?

- A high education is a requirement for making these fake videos;
- B making fakery now costs less money;
- C photoshop is out of date nowadays;
- D basic conditions can be enough to make fakeries.

The consequences of cheap, widespread fakery are likely to be profound, albeit slow to unfold. Plenty worry about the possible impact that believable, fake footage of politicians might have on civil society—from a further loss of trust in media to the potential for electoral distortions. These technologies could also be deployed against softer targets: it might be used, for instance, to bully classmates by creating imagery of them in embarrassing situations. In a world that was already saturated with extreme imagery, deepfakes make it plausible to push that even further.

【词汇】

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| footage | |
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【句间逻辑关系】

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3、From the last paragraph we can see the attitude of the author to deepfake may be ____.

- A indifferent
- B certain
- C optimistic
- D apprehensive

【篇章逻辑关系】

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【背景知识】

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【参考译文】

如今，一些看起来或听起来非常真实的视频和音频中录制的事件根本不需要真正发生过。它们可以由功能强大的计算机和机器学习软件自动生成。这些计算机生成的作品有一个通用术语——“深度伪造”。

这个词最早出现在论坛网站 **Reddit** 上，是一个制作假视频的账号的用户名。之后出现了一整个社群来进行假视频的创作。他们编写软件工具，让任何人都可以将一个人的脸自动粘贴到另一个人的身上。虽然 **Reddit** 关闭了该社区，但是这个造假技术已经流传在外了。不久，该技术就被应用到了各种政治人物和演员的身上。

手动编辑媒体文件的工具早已存在了几十年，比如 **Photoshop**。深度伪造的威力和危险在于，它们使伪造这一行为变得前所未有的廉价。在各种伪造软件出现之前，人们需要一台功能强大的电脑和相当一部分大学学位（所需要的知识）才能针对某个人制作出逼真的伪造视频。而现在，仅仅需要一些照片以及网络连接就够了。

低成本、泛滥的造假行为可能会带来深远的后果，尽管这种后果的显现速度较慢。许多人担心

以假乱真的政客视频片段对公民社会造成的潜在影响——包括对媒体的进一步不信任，以及涉及到选举的一些事实歪曲。这些技术也可能被用来对付一些易受攻击的目标：例如，它可能被（学生）用来伪造同学的一些令人难堪的影像，以此来欺凌同学。在一个已经充斥着种种极端画面的世界里，深度伪造可能会进一步推动这一趋势。

三、“云”里雾里

Heads in the cloud: how worried should we be that so much of our data is in the hands of the few?

In a world where so many companies are struggling, cloud computing stands out as that rare thing: a fabulous growth business that shows no sign of slowing down soon. Measured by market value, three of the world's four biggest companies are now cloud providers: Microsoft, Amazon and Google.

【词汇】

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【句间逻辑关系】

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Put together, these three alone are worth more than \$2.8 trillion — and much of their value flows from the highly profitable businesses they have built storing and managing data on behalf of others on the public cloud.

【词汇】

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| trillion | |
| on behalf of | |
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【句间逻辑关系】

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1. What can we infer from the two paragraphs?

A the companies having the largest market values are all cloud-related ones.

B one of big four companies is struggling.

C most profitable companies now tend to store and manage their data on the cloud.

D a minority of companies show a promising prospect.

Last year, AWS—the world’s biggest technology infrastructure and cloud computing provider—raked in \$25.7bn, a 47pc jump on 2017. AWS rents out computing power by the hour and storage by the gigabyte, enabling customers to access it much like a utility.

【词汇】

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【句间逻辑关系】

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But Amazon is facing a curious dilemma. The success of its cloud division is becoming a liability. Retailers have long been wary of using AWS, given the huge clout its parent wields over that industry and fears that Amazon could abuse its access by peering at their data. But there are signs that governments are starting to feel the same way, fretting about the risk of having so much of the critical data on which our modern lives depend in the hands of a single company.

【词汇】

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| dilemma | |
| wary of | |
| wield over | |
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【句间逻辑关系】

2. What can we infer from the paragraph?

- A it is the responsibility of the cloud section to succeed.
- B Amazon is influential in cloud computing business.
- C the company could sell those important data to wrong hands.
- D the government is worrying that one company is not enough to handle so much data.

3. the author seems to feel about the cloud division?

- A bright
- B hopeless
- C wary
- D objective

【篇章逻辑关系】

【背景知识】

【参考译文】

“云”里雾里：数据集中在少数人手上是一件需要警惕的事吗？

在许多公司都在挣扎度日的背景下，唯独云计算的成功引人注目：这个行业的耀眼增长令人称奇，而且短期内没有放缓的势头。按市值计算，世界上最值钱的四家公司有三家都是云服务提供商，即微软、亚马逊和谷歌。

仅这三者目前的总市值就超过 2.8 万亿美元，其中很大一部分源自它们利润丰厚的云商业模式——帮助其他企业在公共云上存储和管理数据。

去年，AWS——全球最大的科技基础设施和云计算供应商——创收 257 亿美元，比 2017 年增长 47%。AWS 按小时出租算力，按 GB（千兆字节）出租存储空间，让顾客能够随取随用，就像用水电一样。

但亚马逊正面临一个不同寻常的困境：其云业务的成功却反过来成为了一种阻碍。面对亚马逊在零售业压倒性的话语权，也出于对其滥用权限、窥探数据的担忧，零售商长期以来都对 AWS 持谨慎态度。而目前有迹象表明，各国政府也开始有同样的隐忧：现代生活已对数据形成依赖，而当许多这样的重要数据集中在一家公司手上时，随之而来的风险便成了顾虑的焦点。

四、蒙娜丽莎

It's time to take down the Mona Lisa

The Musée du Louvre houses the greatest collection of art anywhere in Europe, within a palace that is a masterpiece in its own right. It is, by some distance, the most popular museum in the world.

【词汇】

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【句间逻辑关系】

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Yet the Louvre is being held hostage by the Kim Kardashian of 16th-century Italian portraiture. Some 80% of visitors, according to the Louvre's research, are here for the Mona Lisa—and most of them leave unhappy.

【词汇】

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| being held hostage | |
| portraiture | |
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【句间逻辑关系】

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1. “Kim Kardashian” refers to _____
 A a famous person’s name in 16th century
 B the palace of Louvre
 C a hostage holder
 D Mona Lisa

This past summer, amid 100-degree-plus (38C) heat, the Louvre undertook a renovation of the Mona Lisa’s gallery. Relocated to the Richelieu painting wing, the Mona Lisa reduced the museum’s Flemish collection into wallpaper for a cattle pen, where guards shooed along irritated, sweaty selfie-snappers who’d endured a half-hour line.

【词汇】

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| 100-degree-plus | |
| reduce...into... | |
| shoo | |
| selfie-snapper | |
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【句间逻辑关系】

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2. We can infer from the paragraph that
 A the scale of Flemish collection was reduced for the arrival of Mona Lisa;
 B Flemish collection was used to decorate cattle pen walls;
 C Richelieu painting wing has always been the place to house Mona Lisa
 D the visitors were upset because of their suffering.

The Louvre does not have an overcrowding problem per se. It has a Mona Lisa problem. No other

iconic painting—not Botticelli’s “Birth of Venus” at the Uffizi in Florence, not Klimt’s “Kiss” at the Belvedere in Vienna, not “Starry Night” at the Museum of Modern Art in New York — comes anywhere close to monopolizing its institution like she does. And if tourist numbers continue to rise, if last year’s 10 million visitors become next year’s 11 or 12, the place is going to crack.

【词汇】

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| per se | |
| Birth of Venus | |
| Starry Night | |
| institution | |
| crack | |
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【句间逻辑关系】

It is time for the Mona Lisa to go. She needs her own space. Build a pavilion for her that is optimized for the crowds.

【词汇】

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| pavilion | |
| optimize | |
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【句间逻辑关系】

No work of art should make people miserable. Let Paris’ millions of future visitors enjoy the art, the shopping and the selfies at the Mona Lisa Pavilion. Then let them rediscover the Louvre as a museum.

【词汇】

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【句间逻辑关系】

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3. the author seems to suggest that _____
- A other iconic paintings also deserve appreciation;
 - B Mona Lisa always fail tourists;
 - C The iconic painting in Louvre should be moved away;
 - D Louvre museum needs an upgrade urgently.

【篇章逻辑关系】

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【背景知识】

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【参考译文】

是时候请走《蒙娜丽莎》了

卢浮宫展有的艺术藏品是欧洲一绝，而这座宫殿本身就是一件杰作。卢浮宫显然是全世界最受欢迎的博物馆。

但是，卢浮宫正在被十六世纪意大利肖像画版的金·卡戴珊所劫持。据卢浮宫的调查显示，约80%的游客都是冲着《蒙娜丽莎》来的，但其中的大多数都失望而归。

刚刚过去的这个夏天，在一百多华氏度的高温下，卢浮宫对展有《蒙娜丽莎》的陈列厅进行了翻新。被移到黎塞留馆的绘画展厅之后，《蒙娜丽莎》使馆中的弗拉芒画作沦为了牛栏边上贴着的

壁纸。牛栏中，安保驱赶着那些艳然不悦又大汗淋漓的自拍摄影师们，而后者已经在队伍中熬了半个小时。

卢浮宫本身并没有过度拥挤这一问题，它的问题在于《蒙娜丽莎》。不论是陈列于佛罗伦萨乌菲齐美术馆的波提切利的《维纳斯的诞生》，还是维也纳贝尔维第宫中的克里姆特的《吻》，抑或是藏于纽约现代艺术博物馆的《星月夜》，绝没有哪幅名画可以像《蒙娜丽莎》一样垄断一座展馆。如果游客数量持续增长，如果去年的 1000 万游客变成明年的 1100 万人或者是 1200 万人，卢浮宫将会不堪重负。

是时候让《蒙娜丽莎》离开了。她需要自己的空间。给她建一座游客专供的展馆吧。

没有哪件艺术品应该让人们感到痛苦。就让以后来巴黎的数百万游客，在“蒙娜丽莎展馆”享受艺术、购物和自拍吧。然后让他们重新意识到，卢浮宫还真是一座博物馆。

五、素食文化

China perfected fake meat centuries before the Impossible Burger

In the past few years, demand for fake meat products has surged in the Western world, as people seek environmentally sustainable and healthier alternatives to red meat.

【词汇】

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| fake meat | |
| red meat | |
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【句间逻辑关系】

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Two of the biggest US plant-based food companies, "Impossible Foods" and "Beyond Meat," have made millions from a growing appetite for meat-free burgers.

【词汇】

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【句间逻辑关系】

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But long before the first plant-based patties hit the grill in the West, China had been sculpting and flavoring traditional meat-based dishes out of mushrooms, nuts and vegetables. Some records of monks eating tofu-based "vegetarian meat" date back as early as the Song Dynasty in the 10th century. It was known as "fanghun cai" or literally "imitation meat dish."

【词汇】

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| flavor | |
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【句间逻辑关系】

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1. What can we learn from the paragraph?

- A the ancient Chinese excluded vegetables from their dishes;
- B the ancient Chinese had not had tofu until Song dynasty;
- C tofu was regarded as a kind of meat in some historic period of China;
- D people in China tried to substitute meat long ago.

A central tenet of Buddhism is respect for all living creatures, and vegetarianism is common among its followers. Food writer Fuschia Dunlop said that while China's monasteries provided a strict vegetarian diet, they would often have to accommodate for the dietary choices of visiting pilgrims or patrons.

【词汇】

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| tenet | |
| monastery | |
| pilgrim | |
| patron | |
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【句间逻辑关系】

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Chinese Buddhist vegetarian food became "extraordinarily sophisticated" in the centuries after the Han Dynasty, according to Dunlop." In the larger monasteries...people could dine on grand dishes of 'shark's fin' , 'abalone' and other delicacies cunningly fashioned from vegetable ingredients."

【词汇】

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| cunningly | |
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【句间逻辑关系】

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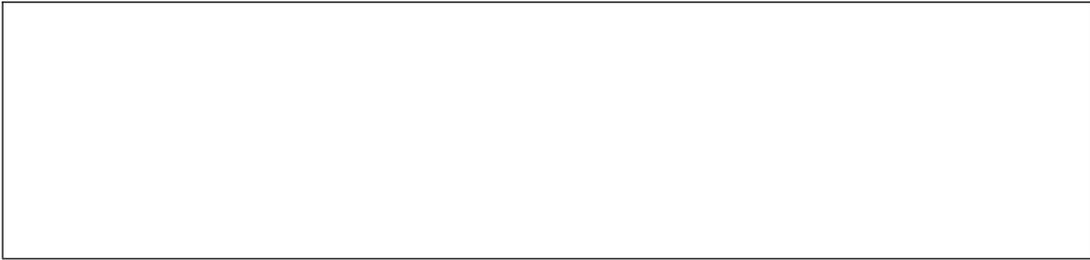
2、 what is the attitude of the author towards the meet-free food in China

- A positive
- B negative
- C pitiful
- D objective

【篇章逻辑关系】

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【背景知识】



【参考译文】

“不可能汉堡”问世几百年前，中国人的“素肉”已臻完美

近几年，随着人们追求对环境友好且更有益健康的红肉替代品，西方世界对于“素肉”的需求已是水涨船高。

美国规模较大的两家植物性食品公司 Impossible Foods 和 Beyond Meat，已经从越来越多垂涎无肉汉堡的饕客身上赚取了上百万美元的利润。

但在第一批素食“肉饼”被放上西方人的烤架之前，中国人早已用菇类、坚果和蔬菜等原料精雕细琢出了香味俱佳的传统荤菜仿制品。早在 10 世纪的宋朝，就有僧人食用豆腐制作的“素肉”的记载，当时称之为“仿荤菜”。

敬重生命是佛教的根本信条之一，其信徒广泛践行素食主义。美食作家扶霞·邓洛普说，虽然中国的佛教寺庙一律提供素餐，但也常要照顾来访香客和施主的饮食偏好（并提供“素肉”食品）。

邓洛普认为，在汉代以后的中国，佛教素餐逐渐变得“精致无比”。“在大型寺庙里……人们已经能享用像‘鱼翅’、‘鲍鱼’等用蔬菜原料精心制作的素食佳肴了。”

六、3D 打印技术

Giant 3D printers for making boats, bridges, buildings and rockets

Boat building is a long-winded and tedious business, even when what is going down the slipway is a small craft made from modern materials such as fibreglass, rather than something nailed together out of planks of wood. Construct a mold. Build up layers of resin and glass fibre inside that mold. Extract the completed structure and finish it. All told, it can take months.

【词汇】

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| long-winded | |
| slipway | |
| plank | |
| resin | |
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【句间逻辑关系】

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1. What does the word “long-winded” probably mean in the passage?

- A luxurious
- B complicated
- C time-consuming
- D problematic

That, though, may soon change. For researchers at the University of Maine are now in the process of testing an 8-metre (25-foot) patrol boat that took just 72 hours to make from scratch. Their trick was to build the vessel using a giant 3D printer.

【词汇】

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| scratch | |
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【句间逻辑关系】

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Broadly speaking, the biggest object that can be turned out by a 3D printer is determined by the size of the printer itself — and most printers are not much larger than a large domestic refrigerator.

【词汇】

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The University of Maine’s printer overcomes the problem of scale by suspending the printer’s business end—the nozzle that extrudes the ink—from a gantry. The ink is molten thermoplastic resin containing carbon fibres.

【词汇】

| | |
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| business end | |
| nozzle | |
| gantry | |
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| | |

【句间逻辑关系】

2. What can we learn from paragraph 2-4?

- A 3D print can only make small things;
- B it is time-consuming to use 3D print to build a boat;
- C 3D print machine is made out of molten thermoplastic resin;
- D 3D print machine can be big with certain methods.

Under the control of a computer the nozzle moves horizontally to build (as is true of any 3D-printing process) the desired object up layer by layer. After each layer is complete, the nozzle is raised slightly to deposit another on top of it until the object is finished.

【词汇】

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| horizontally | |
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【句间逻辑关系】

3. The author seems to believe that

- A the process of making 3D products should be vertical to horizontal.
- B carbon fibre is a good kind of material to build big things.
- C the suspension of nozzle hinders the ejection of ink.
- D 3D print technology makes building things way faster.

【篇章逻辑关系】

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【背景知识】

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【参考译文】

大型 3D 打印机可制造船舶、桥梁、楼房和火箭

造船是一个漫长而枯燥的过程，即使最终从造船台上滑下来的只是一艘用玻璃纤维等现代材料制造的小船，而非用木板钉成的传统船只。你得先造出模子，然后将树脂和玻璃纤维逐层注入模具，再把成型的船体抽出来，做最后加工。满打满算，整个过程要花数月时间。

不过，现状可能马上会发生改变。缅因大学的研究者正在测试一条 8 米长的巡逻艇，它的建造过程只花了 72 小时。他们的秘密武器，是一台大型的 3D 打印机。

一般来说，一台 3D 打印机的最大打印尺寸，由打印机自身的大小决定，而大多数机型只有大号的家用冰箱一般大。

缅因大学的这台打印机突破了尺寸限制，办法是将打印机的“使用端”（挤出“墨水”的喷嘴）吊在龙门架上。“墨水”是熔化的热塑性树脂，其中加入了碳纤维。

在计算机的控制下，喷嘴水平移动，逐层将打印物建造出来，这和其他 3D 打印的过程是一样的。每一层建造完成后，喷嘴稍稍抬起，在原基础上再造新的一层，直至打印完成。

七、垃圾食品与失眠

There's a scientific reason you crave junk food when you don't get enough sleep

It's 3 a.m. You get up and stumble to the kitchen for some warm milk mom swears will put you to sleep. So why are you eating a bowl of ice cream with a side of cookies?

【词汇】

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| stumble | |
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【句间逻辑关系】

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You may have heard about two hormones that control our urge to eat: leptin and ghrelin. "The 'l' in leptin stands for lose:It suppresses appetite and therefore contributes to weight loss,"said sleep specialist Dr. Raj Dasgupta." The 'g' in ghrelin stands for gain:This fast-acting hormone increases hunger and leads to weight gain."

【词汇】

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【句间逻辑关系】

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1. We can learn from the first two paragraphs that _____
- A people like to have milk with ice cream;
 - B leptin can decrease the desire to eat of both humans and animals;
 - C ghrelin took a shorter period to produce the desired result than leptin;
 - D certain chemicals can to some extent control our weight.

When you're sleep deprived, research shows, ghrelin levels spike while leptin takes a nose dive. The result is an increase in hunger. But food is food, so that doesn't explain why we crave candy instead of carrots. To answer that, you have to look at another system of the body: The endocannabinoid system.

【词汇】

| | |
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| spike | |
| nose dive | |
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【句间逻辑关系】

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In a study published in 2016, behavioral neuroscientist Erin Hanlon compared the circulating levels of 2-AG, one of the most abundant endocannabinoids, in people who got four nights of normal sleep (more than eight hours) to people who only got 4.5 hours. People who were sleep-deprived reported greater increases in hunger and appetite and had higher afternoon concentrations of 2-AG than those who slept well. They also had a rough time controlling their urges for high-carb, high-calorie snacks.

【词汇】

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【句间逻辑关系】

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2. We can infer from the paragraph that

- A people who are lack of sleep tend to prefer not-so-healthy food;
- B people who sleep well can have a better appetite than those who are sleep-deprived;
- C the time of sleep and the degree of health are positively correlated;
- D 2-AG is a kind of chemical that can suppress the appetite.

All of this research is so new that science doesn't yet know how it all fits together or what can be done about it. There's not gonna be a pill any time soon for the sleep-deprived junk-food junkies that we are. Instead, you'll have to do what the doctor says to reduce your illicit cravings in the middle of the night: Get more sleep.

【词汇】

| | |
|---------|--|
| junky | |
| illicit | |
| crave | |

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【句间逻辑关系】

3. Which of the following substance may NOT be from our own bodies?

- A 2-AG
- B ghrelin
- C calorie
- D leptin

【篇章逻辑关系】

【背景知识】

【参考译文】

科学解释为什么当你睡眠不足时，你会想吃垃圾食品

现在是凌晨 3 点，你从床上爬起来，恍恍惚惚地走到厨房拿些热牛奶，你妈妈曾经发誓，喝了热牛奶，你就能睡着。

那么，为什么你正捧着一碗冰淇淋，旁边还放着些饼干呢？

你可能听说过两种控制我们进食欲望的激素：瘦素和胃饥饿素。

睡眠专家拉吉·达斯古普塔博士说：“瘦素中的‘l’代表瘦：它抑制食欲，因此有助于减重；胃饥饿素中的‘g’代表增重，这种快速见效的激素会增加饥饿感，从而导致体重增加。”

研究表明，当你缺乏睡眠的时候，胃饥饿素的水平会上升，而瘦素会急剧下降，其结果就是你会变得越来越饿。

但是这只能说明，为什么我们会渴望食物，而并不能解释为什么我们更想吃糖，而不是胡萝卜。要回答这个问题，你必须留心一下人体的另一个系统：内源性大麻素系统。

在 2016 年的一项研究中，行为神经科学家艾琳·汉仑比较了两组人群体内的 2-AG 循环水平（2-AG 是人体内含量最丰富的内源性大麻素之一）。在这两组人群当中，一组人群有 4 个晚上的正常睡眠（每晚睡眠时间超过 8 小时），另外一组人群每晚的睡眠时间只有 4.5 小时。

结果显示，缺乏睡眠的人和睡眠时间更长的人群比起来，Ta 们饿得快，食欲也更大，另外，到了下午，他们体内的 2-AG 浓度也更高。同时，缺乏睡眠的人还很难控制自己对高碳水、高热量零食的渴望。

所有这些研究都非常前沿，以至于科学界还不知道这些研究能如何被结合起来，也不知道这样的实验结果能被拿来做些什么。短期内是不会有有什么药片能来医治我们这些睡眠不足的垃圾食品“瘾君子”的。因此，你必须听医生的话，多睡点觉，来减少自己半夜变身“垃圾食品狂魔”的欲望。

八、

Aging and robots are more closely related than you might think. Young countries with many children have few robots. Aging nations have lots. The countries with the largest number of robots per industrial worker include South Korea, Singapore, Germany and Japan, which have some of the oldest workforces in the world.

【词汇】

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【句间逻辑关系】

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The connection does not merely reflect the fact that young countries tend to be poor and cannot afford fancy machines, which they do not need anyway. It holds good within rich countries, too. Those with relatively few robots compared with the size of their workforce include Britain and France, both of which (by rich-country standards) are aging slowly.

【词汇】

| | |
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| reflect | |
| fancy | |

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| hold good | |
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【句间逻辑关系】

1. From the first two paragraphs, we know

A only poor countries comply with the rule of robots and aging people.

B France have fewer robots than Britain.

C Britain have fewer robots than Singapore.

D Singapore has a high robots and workforce ratio.

Two recent studies quantify the connection. Daron Acemoglu of the Massachusetts Institute of Technology (MIT) and Pascual Restrepo of Boston University show that, between 1993 and 2014, the countries that invested the most in robotics were those that were aging the fastest measured as a rise in the ratio of people over 56 compared with those aged 26-55. The authors posit a rule of thumb: a ten-point rise in their aging ratio is associated with 0.9 extra robots per thousand workers.

【词汇】

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| quantify | |
| invest | |
| ratio | |
| posit | |
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【句间逻辑关系】

A study from Germany used different measures but reached the same conclusion. Ana Abeliansky of the University of Göttingen and Klaus Prettner of the University of Hohenheim found that the growth in

the number of robots per thousand workers rises twice as fast as the fall in the growth rate of the population (ie, if population growth falls by 1%, the growth in robot density rises by 2%).Population growth is closely related to age structure.

【词汇】

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【句间逻辑关系】

2.From the two paragraphs we learn that

- A the two surveys reveal opposing facts.
- B the two surveys used different ways to support their views.
- C the first survey emphasized the population growth of a nation.
- D the second survey took aging ratio into consideration.

3.which of the following is true?

- A the increase of population growth can lead to a rise in the ratio of old compared with younger.
- B the decrease of the ratio of old compared with younger can lead to more robots.
- C the decrease of population growth can lead to fewer robots.
- D the decrease of population growth can lead to a rise in the ratio of old compared with younger.

These findings should not be surprising. Robots typically substitute for labour. That is why many people fear that they will destroy jobs.Countries with plenty of young workers do not need labour substitutes. Wages there also tend to be low,making automation unprofitable.But ageing creates demand for automation in two ways. First, to prevent output falling as more people retire,machines are necessary to substitute for those who have left the workforce or to enable ageing workers to continue to do physical labour.Second,once people have retired they create markets for new kinds of automation,including robots that help with the medical and other requirements of caring for people who can no longer look after themselves.

【词汇】

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| substitute | |
| unprofitable | |
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【句间逻辑关系】

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4. From the paragraph, we know that

A robots can not replace labor in countries with a large number of young people.

B the cost of robots is higher than that of human beings.

C the output will fall with robot substitutes.

D robots may serve in other ways other than industrial labor.

As a result, the connection between robots and aging is a powerful one. Mr Acemoglu reckons that aging is the biggest single influence upon how many robots a country has. He estimates it explains close to 40% of the variation in the numbers of robots countries introduce.

【词汇】

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| reckon | |
| estimate | |
| variation | |
| | |
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【句间逻辑关系】

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The influence will grow. This year, there will be more people over 65 than under five for the first time in human history. By 2060, the number of Americans over 65 will double, to 98m, while in Japan, 40% of the population will be 65 or older. There will not be enough younger people to look after so many, unless robots help (and probably an influx of migrants is permitted, too).

【词汇】

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| influx | |
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【句间逻辑关系】

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5. The best TITLE of the passage would be

- A Aging Society: All but Certain
- B Rich Countries: Robots Paradise
- C World Getting Older
- D Link between Robots and Aging

【篇章逻辑关系】

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【背景知识】

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【参考译文】

老龄化和机器人之间的关系比我们以为的更密切。出生率高的年轻国家机器人数量少，老龄化国家则很多。每个产业工人对应的机器人数量最多的国家包括韩国、新加坡、德国和日本，这些国家的劳动力是全球最高龄的。

老龄化与机器人之间的这种关联性不只反映了年轻国家往往因贫穷而买不起精密的机器这一事实（它们本来也不需要这些机器）。在富裕国家同样也成立。与劳动力规模相比机器人数量较少的国家有英国和法国，这两个国家按富国标准老龄化的速度都较慢。

最近的两项研究量化了这种关系。麻省理工学院的达龙·阿西莫格鲁（Daron Acemoglu）和波士顿大学的帕斯卡尔·雷斯特朗(Pascual Restrepo)表示，在1993年至2014年期间，对机器人投资最多的国家是老龄化进程最快的国家（按56岁以上人口与26至55岁人口之比的增幅计算）。作者提出了一个经验法则：这些国家的老龄化速率每提高10个百分点，每千名工人对应的机器人数量

就增加 0.9 个。

德国的一项研究使用了不同的衡量方法，但得出了相同的结论。哥廷根大学的安娜·阿比兰斯基 (Ana Abeliansky) 和霍恩海姆大学的克劳斯·普雷特纳 (Klaus Prettner) 发现，每千名工人对应机器人数量的增速是人口增速下降速度的两倍（即人口增长率每下降 1%，机器人密度增长 2%）。人口增速与年龄结构密切相关。

这些发现应该不足为奇。机器人通常会替代劳动力，所以才有许多人担心它们会破坏工作岗位。拥有大量年轻工人的国家不需要替代劳动力。那里的工资水平往往很低，自动化无利可图。但老龄化以两种方式创造了对自动化的需求。首先，随着越来越多的人退休，为了防止产出下降，必须用机器替代减少了的劳动力或辅助老龄工人继续从事体力劳动。其次，一旦人们退休，就会为新型自动化创造市场，包括满足无法自理人士的医疗及其他护理要求。

因此，机器人与老龄化之间有强关联性。阿西莫格鲁认为，老龄化是对一国机器人数量影响最大的单一因素。他估计各国机器人数量差异中接近 40% 是由该因素决定的。

这一影响将不断增强。今年，65 岁以上的人口数量将在人类历史上首次超过五岁以下人口。到 2060 年，65 岁以上的美国人口将翻一番，达到 9800 万人；而在日本，40% 的人口将在 65 岁及以上。除非有机器人的帮助（而且可能还要接受大量移民），否则将没有足够的年轻人去照顾这么多老年人。

九、商业中的人工智能

Artificial intelligence in business

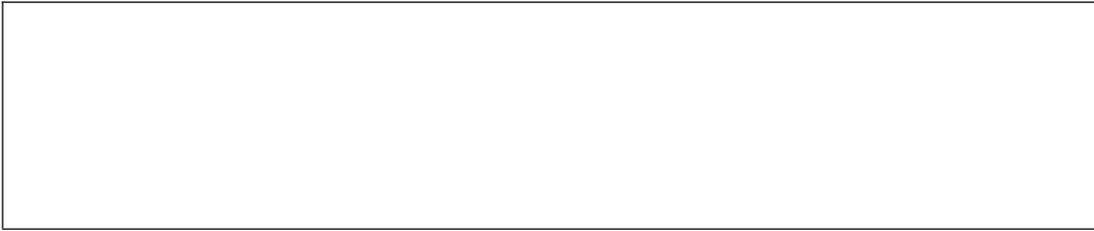
Artificial intelligence is spreading beyond the technology sector, with big consequences for companies, workers and consumers, says Alexandra Suich Bass.

LIE DETECTORS ARE not widely used in business, but Ping An, a Chinese insurance company, thinks it can spot dishonesty. The company lets customers apply for loans through its app. Prospective borrowers answer questions about their income and plans for repayment by video, which monitors around 50 tiny facial expressions to determine whether they are telling the truth. The program, enabled by artificial intelligence (AI), helps pinpoint customers who require further scrutiny.

【词汇】

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| spot | |
| prospective | |
| pinpoint | |
| scrutiny | |
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【句间逻辑关系】



1.The word “pinpoint” probably means

- A exclude
- B record
- C explain
- D spot

AI will change more than borrowers’ bank balances.Johnson & Johnson,a consumer-goods firm,and Accenture,a consultancy,use AI to sort through job applications and pick the best candidates.AI helps Caesars,a casino and hotel group, guess customers’ likely spending and offer personalized promotions to draw them in.Bloomberg,a media and financial-information firm,uses AI to scan companies’ earnings releases and automatically generate news articles.Vodafone,a mobile operator, can predict problems with its network and with users’ devices before they arise.Companies in every industry use AI to monitor cyber-security threats and other risks,such as disgruntled employees.

【词汇】

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|--------------|--|
| bank balance | |
| casino | |
| promotion | |
| release | |
| cyber | |
| disgruntled | |
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【句间逻辑关系】



2.We can learn from the from the first 3 paragraphs that

- A some job applicants use AI to sort out companies suit for them;
- B AI can be used to form companies’ earnings releases;
- C casino and hotel companies only promote to those potential customers;

D some risks and dissatisfactions can be detected by AI.

Instead of relying on gut instinct and rough estimates,cleverer and speedier AI-powered predictions promise to make businesses much more efficient.At Leroy Merlin,a French home-improvement retailer, managers used to order new stock on Fridays,but defaulted to the same items as the week before so they could start their weekend sooner.The firm now uses algorithms to take in past sales data and other information that could affect sales,such as weather forecasts, in order to stock shelves more effectively. That has helped it reduce its inventory by 8% even as sales have risen by 2%,says Manuel Davy of Vekia, the AI startup that engineered the program.

【词汇】

| | |
|---------------------------|--|
| gut | |
| instinct | |
| rough | |
| efficient | |
| home-improvement retailer | |
| stock | |
| algorithm | |
| shelve | |
| inventory | |
| startup | |
| | |

【句间逻辑关系】

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- 3.Manuel Davy of Vekia’s remark was mentioned to
- A illustrate his importance in the field of AI prediction.
 - B deny the traditional way that the managers use to order new stock
 - C show the accuracy and efficiency of AI predictions
 - D prove that he is right about the future application of AI

AI and machine learning (terms that are often used interchangeably) involve computers crunching vast quantities of data to find patterns and make predictions without being explicitly programmed to do so. Larger quantities of data,more sophisticated algorithms and sheer computing power have given AI greater force and capability.The outcomes are often similar to what an army of statisticians with

unlimited time and resources might have come up with, but they are achieved far more quickly,cheaply and efficiently.

【词汇】

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【句间逻辑关系】

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One of AI's main effects will be a dramatic drop in the cost of making predictions,says Ajay Agrawal of the University of Toronto and co-author of a new book,“Prediction Machines”.Just as electricity made lighting much more affordable—a given level of lighting now costs around 400 times less than it did in 1800—so AI will make forecasting more affordable, reliable and widely available.

【词汇】

| | |
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| forecast | |
| available | |
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【句间逻辑关系】

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Computers have been able to read text and numbers for decades,but have only recently learned to see, hear and speak.AI is an omnibus term for a “salad bowl”of different segments and disciplines,says Fei-Fei Li,director of Stanford’s AI Lab and an executive at Google’s cloud-computing unit.Subsections of AI include robotics,which is changing factories and assembly lines,and computer vision,used in applications from identifying something or someone in a photo to self-driving-car technology.Computer vision is AI’s “killer app”,says Ms Li, because it can be used in so many settings,but AI has also become more adept at recognizing speech. It underlies voice assistants on phones and home speakers and allows

algorithms to listen to calls and take in the speaker's tone and content.

【词汇】

| | |
|------------|--|
| omnibus | |
| segment | |
| discipline | |
| subsection | |
| killer app | |
| tone | |

【句间逻辑关系】

【篇章逻辑关系】

【背景知识】

【参考译文】

商业中的人工智能

人工智能的传播已超越技术领域，给企业、员工及消费者带来重大影响，亚历山德拉·苏伊希·巴斯认为。

测谎仪并未在企业中广泛应用，但中国平安保险公司相信自己能探测谎言。这家公司让客户通过它的一款应用程序来申请贷款。未来的贷款人在视频中回答有关收入和还款计划的问题。视频

会监测他们的大概 50 个细微面部表情，判断他们是否在说真话。这套人工智能（AI）驱动的程序帮助筛查出需要进一步审核的客户。

AI 将改变的不仅仅是贷款人的账户余额。消费品公司强生和咨询公司埃森哲（Accenture）用 AI 查看应聘资料，筛选出最佳人选。AI 帮助赌场和酒店集团凯撒娱乐（Caesars）估测客人的消费水平，提供个性化促销来吸引他们。媒体和金融信息公司彭博用 AI 扫描企业财报，自动生成新闻报道。移动运营商沃达丰（Vodafone）用 AI 监测其网络和用户设备，提前预警故障。各行各业的公司都在使用 AI 监控网络安全威胁和其他风险，比如心怀不满的员工。

相比依赖直觉和粗略的估算，更聪明也更快速的 AI 预测将帮助企业大幅提高效率。法国家居装饰零售商乐华梅兰（Leroy Merlin）的管理层以前每周五下新订单，默认的设置是重复前一周的订单，这样大家可以早点下班过周末。现在，公司用算法来斟酌历史销售数据和天气预报等其他可能影响销售的信息，以更有效地安排库存。据创建该算法的 AI 创业公司 Vekia 的曼纽尔·戴维（Manuel Davy）说，这帮助该公司将库存减少了 8%，同时销售额却增长了 2%。

AI 和机器学习（这两个术语常被混用）用计算机处理查看海量数据，从中找出模式并做出预测，而不需要编程来作出明确的指示。更多数据、更复杂的算法和更高的计算能力已经赋予了 AI 更强大的能力。它得出的结果往往和一大批拥有无限时间和资源的统计师所得的差不多，但它远为快速、便宜和高效。

AI 的主要成果之一将是令做预测的成本大幅下降，新书《预测机器》（Prediction Machines）的合著者、多伦多大学的阿杰伊·阿格拉沃尔（Ajay Agrawal）表示。就像电力让照明变得便宜了许多——如今的照明成本比 1800 年时低 400 倍左右——AI 会让做预测更便宜、更可靠、更普及。

计算机能阅读文本和数字已经有几十年了，但直到最近才学会了看、听、说。AI 是一个综合性术语，就像是涵盖了不同领域和学科的“一碗色拉”，斯坦福大学人工智能实验室主管、谷歌云计算部门负责人李飞飞说。它的下属分支包括正在改变工厂和组装线的机器人技术，以及部署在各种应用程序中的计算机视觉——从识别照片中的人或物到无人驾驶汽车技术等。李飞飞说，计算机视觉是 AI 的“杀手级应用”，因为运用场合是如此之多，但 AI 在语音识别方面也已变得更加娴熟。它是配备在手机和家用音箱上的语音助理的技术基础，还让算法能够监听来电并识别说话者的语调和内容。