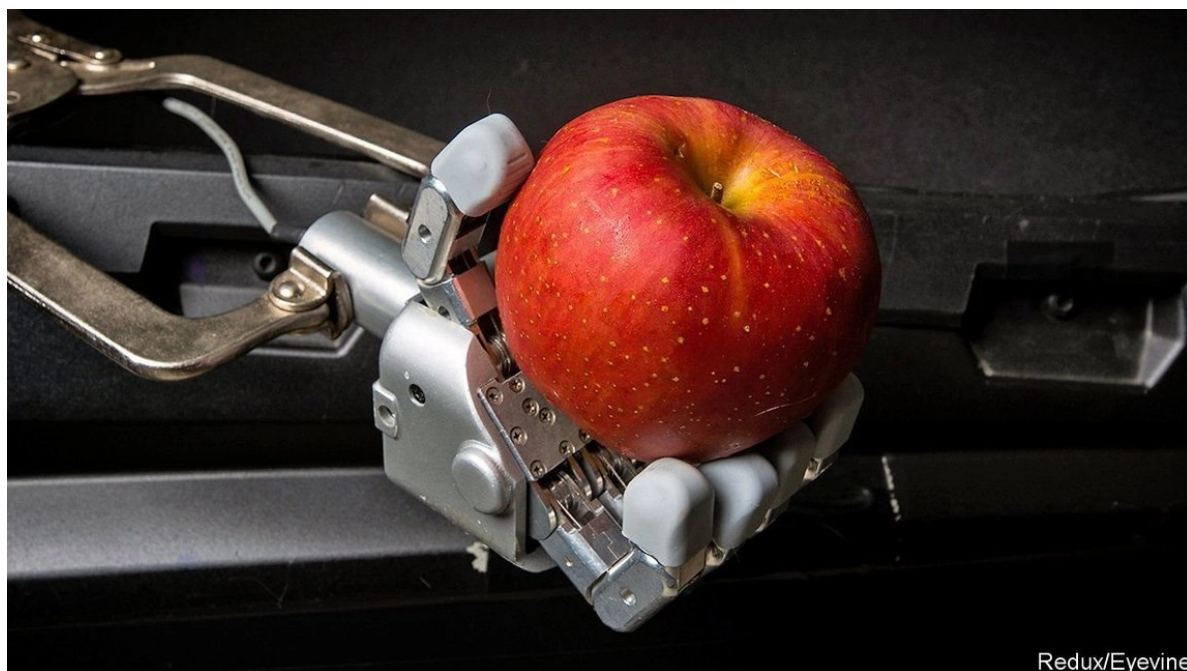


0405 | Covid has reset relations between people and robots

(Excerpts from the first five paragraphs of the article)

新冠疫情重塑了人与机器人之间的关系（节选文章前五段）



ROBOTS HAVE been around for six decades or so . **Originally** , they were simple devices which did as they were told , working on **assembly** lines in , well , a robotic manner . They were often kept in cages , like zoo animals , to stop people getting too close . And for similar reasons . They were dangerous . If a mere human being got in the way of a swinging robotic arm , so much the worse for the human .

机器人问世已有差不多60年了。最初，它们只是按指令行动的简单设备，在装配线上以“机器人般的风格”工作。它们常被关在笼子里——就像动物园里的动物——以免它们和人靠得太近。这么做的原因也跟动物园差不多：它们很危险。如果一个凡胎肉身挡住了一只挥舞的机械臂，那么更倒霉的还是人。

Since then , they have got vastly more **dexterous** , mobile and autonomous . They are also more collaborative . There are now *over 3m robots* working in factories across the planet , according to the International Federation of Robotics , a worldwide industry association . Millions more move goods around warehouses , clean homes , **mow lawns** and help **surgeons** conduct operations . Some have also begun delivering goods , both on land and by air .

后来，机器人变得灵巧、机动和自主多了。它们也变得更会合作。根据世界性行业协会国际机器人联合会（ International Federation of Robotics ）的数据，全球现在有超过300万台机器人在工厂工作。还有数百万台机器人在仓库搬运货物、打扫房屋、修剪草坪、协助外科医生做手术。有些机器人还开始运输货物，有陆运也有空运。

The pace of automation is likely to accelerate, for two reasons, **a panel of** robotics experts told the 2022 meeting of the American Association for the Advancement of Science (AAAS), held for the second year running in cyberspace, rather than in Philadelphia, as originally planned. The first reason is that covid -19 has created social changes which look likely to **endure**. The “ Great Resignation”, in which millions around the world have **quit their jobs**, may in part be a consequence of lockdowns creating new opportunities for home working. These so - called lifestyle choices about which jobs to do, together with **creaking supply chains** and a **boom in e - commerce**, have left warehouses and many other businesses struggling to **recruit** workers.

在美国科学促进会（ AAAS ）2022年年会（原计划在费城举行，后改为线上会议，是该协会第二次线上年会）上，一个机器人专家小组表示，自动化的步伐可能会加快，有两点原因。首先是新冠疫情造成的社会变化看来会持续下去。全球掀起了成百上千万人辞掉原工作的“大辞职潮”，一定程度上可能是因为疫情封锁措施创造了新的居家工作机会。这种和干什么工作有关的所谓生活方式选择，加上供应链崩裂和电子商务繁荣，让仓库和许多其他企业都很难招到员工。

Universal robots

The second reason is that the bots are getting better. Instead of just moving goods in warehouses to human “ pickers ”, who then *put items into bags* for home delivery, they are learning to do the picking and packing for themselves. In factories, they are stepping out of their cages and, equipped with advanced **sensors** and machine learning, a form of **artificial intelligence** (AI), are going to *work alongside people*. Such robots will increasingly *help out* in other places too, including hospitals, and in roles, such as caring for an ageing society — which, **post - covid**, has got used to a more techno future for health care, with “ telemedicine ” via remote doctors and health - monitoring mobile - phone apps.

万能机器人

第二个原因是机器人越来越优秀了。以前它们只会把仓库里的货物交给人类“分拣工”，再由分拣工把货物打包以便送货上门，现在它们学会自己分拣并打包。在工厂里，它们正在走出笼子，配备上先进的传感器和机器学习（一种人工智能），要与人一同作业。这样的机器人也将在医院等其他场所帮上更多忙，在某些角色上发挥日益重要的作用，比如照顾一个老龄化的社会——这样的社会在疫情后已经接受了一个更科技化的医疗未来，通过网上问诊和手机中的健康监测应用实现“远程医疗”。

There is, though, a long way to go. In the field of **manufacturing**, **car plants** lead automation. But, as Henrik Christensen, director of the Contextual Robotics Institute at the University of California, San Diego, told the meeting, even the most advanced of them, those in South Korea, average only around one robot per ten workers. So - called “ *lights - out* ” car manufacturing, with no human beings on the factory floor, *remains a distant dream*. ■

不过，前路依然漫长。在制造业领域，引领自动化的是汽车工厂。但是，加州大学圣地亚哥分校情境机器人技术研究所（ Contextual Robotics Institute ）所长亨里克·克里斯滕森(Henrik Christensen)在年会上表示，即使是最先进的韩国的汽车工厂，大概也就是平均每十个工人配备一个机器人。那种车间里再没有工人身影的所谓“熄灯式”汽车制造仍然是个遥远的梦想。■

(注：翻译来源：官网)

Notes

- **originally** /ə'ɹɪdʒɪn(ə)li/

adv. 起初;原来

习惯用语:

originally looked 原来的样子

divide originally 最初划分

- **assembly** /ə'sembli/

n. 装配; 集会, 集合

近义词:

[n.] machine, construction, building, facility, installation, gathering, assemblage

反义词:

[n.] dismantling, dismantlement, disassembly

近义辨析:

conference: 正式用词, 一般指大型会议, 如政府工作会议、国际学术交流会议、各国之间的协商、会谈等。

congress: 指国会、议会、代表大会等机构, 尤指经选举产生的国家立法机构的大会或由这些机构召开的大会, 也可指专业人员代表大会。

assembly: 多指一个通常有许多人参加、计划好的, 为某一特殊目的而召集的会议。

meeting: 普通用词, 词义广泛。指一般性的会议, 可用于任何场合。

rally: 指大规模的群众性政治集会。

council: 在国际上多指由各国代表参加的政治会议, 或常设的政治机构。在国内、地方上, 此词多指常设的政务领导机构, 如市政委员会等。

session: 一般指议会等召开的正式会议。

convention: 侧重指某一政党或团体为某一特殊目的而召开的会议; 也可指学术团体的年会。

gathering: 指两人以上的聚会或集会, 强调非正式性。

习惯用语:

assembly line 装配线; 流水作业线

general assembly 联合国大会

assembly language n. 汇编语言

assembly plant 装配厂, 装配工场

assembly technology 装配工艺

The assembly voted to reconsider the bill.

议会投票决定复议该案。

- **dexterous** /'dekst(ə)rəs/

adj. (身手)灵巧的,敏捷的

副 词: dexterously

名 词: dexterousness

习惯用语:

dexterous in 灵敏于...

Anne was dexterous and found the tasks easy.

安妮很手巧，做这些事挺麻利。

- *over 3m robots = over 3 million robots*

- **mow** /məʊ/

n. 草堆; 皱眉; 谷堆 vt. 割草; 收割庄稼 vi. 割草; 收割庄稼

时 态: mowed, mowed, mown mowing, mows

名 词: mower

习惯用语:

mow down 割倒; 摧毁; 残杀; 大量射杀

mow lawn 刈草坪

Mowed Tillers 锄草机

mowed height 修剪高度

The enemy were mowed down with machine-gun fire.

敌人被机枪的火力扫倒。

- **surgeon** /'sɜ:dʒ(ə)n/

n. 外科医生

近义词:

[n.] doctor, physician, MD, Dr.

近义辨析:

doctor: 普通用词, 泛指各科医生, 即一切有行医资格的人。

physician: 指医院的内科医生。

surgeon: 指专修外科或专修人体某个部分的外科专科医生, 这种医生一般需对患者进行手术治疗。

dentist: 指专门从事治牙的医生。

习惯用语:

plastic surgeon 整形外科医生

surgeon general 卫生局局长; 军医处处长

orthopedic surgeon 整形外科医生; 骨科医师

veterinary surgeon 兽医

• **panel** /'pæn(ə)l/

n. 仪表板; 嵌板; 座谈小组, 全体陪审员 vt. 嵌镶板

习惯用语:

control panel [计]控制面板

solar panel 太阳电池板

instrument panel 仪表板; 仪表操纵板

touch panel 触控面板; 触感控制板

panel of experts 专家小组

panel discussion 专题讨论会

This panel has a crack on it.

这块镶板有裂痕了。

A panel of experts gave its opinion on ways to solve the traffic problem.

专家小组就如何解决交通问题发表了意见。

• **endure** /ɪn'djʊə/

vt. 忍耐; 容忍 vi. 忍耐; 持续

近义词:

[v.] permit, allow, let, countenance, defy, withstand, hold

习惯用语:

endure hardship 忍受艰苦; 忍受苦难;

endure to the end (坚持) 到底; 忍耐

endure contempt 忍辱

I can't endure talking to those scoundrels.

"与那些无赖们交谈,我真受不了。"

• **quit** /kwɪt/

vt. & vi. 从(某处)离开; 离去 vt. 停止

近义词:

[v.] leave, depart, abandon, give up

近义辨析:

depart: 较正式用词, 指经过周密考虑或郑重地离开, 强调离开的起点。

leave: 侧重出发地而不是目的地。

go: 一般用词, 指从所在地到其它地方去, 着重目的地而非出发地。

start: 可与leave换用, 强调目的地, 但不及leave普通。

quit: 侧重指离开令人烦恼的地方, 或摆脱使人不快的人或事。

set out: 书面用词。

习惯用语：

quit smoking 戒烟

I want to be quit of him.

我想摆脱他。

The air-conditioning quit on us in mid-July.

空调居然在七月中旬撒下我们。

- **creak** /kri:k/

n. 嘎吱嘎吱声 vi. 发出咯吱咯吱声；勉强运转 vt. 使咯吱咯吱响

习惯用语：

cold creak 冷裂

creak line 折裂线

creak supply chains 供应链崩裂

creak about 咯吱一下

creak along 移动时吱吱嘎嘎地作响

The door creaked as she opened it.

当她开门的时候，门嘎吱作响。

- **boom** /bu:m/

vt. 发隆隆声；使兴旺 vi. 发隆隆声；急速发展 n. 繁荣；隆隆声；吊杆

近义词：

[n.] noise, prosperity, pole

[v.] sound, go, hit, grow

习惯用语：

economic boom 经济繁荣，经济腾飞

baby boom 婴儿潮；生育高峰

business boom 商业繁荣，生意兴隆

boom and bust 繁荣与萧条

placing boom 灌筑吊杆

The new aircraft creates a sonic boom.

那种新飞机会产生声震。

The economic boom tapered off in the 1970s.

经济繁荣在七十年代慢慢消失了。

- **commerce** /'kɒmɜ:s/

n. 商业, 贸易

近义词:

[n.] transaction, dealing

近义辨析:

business: 指包括售货、购货、换货在内的综合商业活动, 方式可以是批发或零售。

commerce: 多指大规模的买卖或易货关系。

trade: 普通用词, 含义广。既可指某种具体的商业又可指广泛的贸易。

bargain: 多指买卖双方通过谈判、协商就商品质量、数量、价格等项达成协议所成的生意。

deal: 口语用词, 指买卖双方经过交涉达成协议成交。

习惯用语:

industry and commerce 工商业

electronic commerce 电子商务

commerce department (美国) 商务部

collaborative commerce 协同商务

foreign commerce 对外贸易

commerce clause 商业条款, 贸易条款

They drew up plans aimed at expanding commerce.

他们拟定了发展商业的计划。

The marketplace was where commerce was traditionally carried on.

这个集市是传统的贸易场所。

Commerce binds the two countries together.

贸易把这两国结合在一起。

Banks are the nerves of commerce.

银行是商业的中心。

• **recruit** /rɪ'kru:t/

n. 新兵; (机构中的)新成员 vt. 招聘; 吸引(新成员); 吸收某人为新成员 vt. & vi. 招募, 征募(新兵); 恢复健康, 恢复体力

名 词: recruiter n. 招聘人员; 征兵人员

名 词: recruitment n. 征募新兵; 补充

名 词: recruiting n. 招聘; 招募; v. 招募; 聘请

习惯用语:

recruit depot 新兵训练营

campus recruiting 校园招聘

raw recruit 新手

online recruit 网上招聘; 网战新兵;

The government began to recruit new battalions.

政府开始征集新的部队。

Most of the workers will be recruited locally.

大多数工人都会在本地产招募。

A corps of doctors arrived to inoculate the recruits.

一队医生来给新兵打防疫针。

- **sensor** /'sensə/

n. 传感器, 感应器; 感测器 (sensor的复数)

习惯用语:

temperature sensor 温度传感器

pressure sensor 压力传感器; 位置传感器

displacement sensor 位移传感器

There were more than 2000 sensors here.

这里装有两千多个灵敏元件。

- **artificial** /ɑ:trɪfɪ(ə)/

adj. 人造的, 人工的, 假的; 虚假的, 不真挚的, 矫揉造作的; 人为的

名 词: artificiality

近义辨析:

artificial: 指模仿天然材料由人工制造的东西, 侧重真伪对比。

false: 指因缺失而补上的替代物, 有时也指伪装的。

synthetic: 与artificial近义, 但前者强调通过化学作用或化学处理把几种物质复制成与原材料截然不同的新产品。

man-made: 指完全用人工制造, 不含仿造和真伪对比的意味。

习惯用语:

artificial intelligence 人工智能

artificial leather 人造革

artificial insemination 人工受精

artificial person [经]法人

artificial respiration 人工呼吸; 人工呼吸急救法

artificial satellite 人造卫星

Their cheerfulness seemed rather strained and artificial.

他们的快乐表情看上去很勉强而做作。

She owes her beauty to artificial assistance.

她的美全靠打扮。

Artificial sweeteners are used in soft drinks.

软饮料中使用人造甜味剂。

- **manufacturing** /,mænjʊ'rektʃərɪŋ/

n. 制造业, 工业 adj. 制造业的; 制造的

习惯用语:

manufacturing plant 生产厂; 制造工厂

manufacturing technique 生产工艺; 生产技术

manufacturing capacity 制造能力

manufacturing operation 制作过程

manufacturing production 工业生产; 制造业生产

Manufacturing industry was worst affected by the fuel shortage.

燃料短缺制造业最受到影响。

- **plant** /plɑ:nt/

n. 植物; 工厂 (plant的复数形式) v. 栽种; 安置 (plant的单三形式)

- 长难句分析1:

The pace of automation is likely to accelerate, for two reasons, a panel of robotics experts told the 2022 meeting of the American Association for the Advancement of Science (AAAS), held for the second year running in cyberspace, rather than in Philadelphia, as originally planned.

本句中The pace of automation is likely to accelerate为前置宾语, 而 a panel of robotics experts told the 2022 meeting of the American Association for the Advancement of Science (AAAS) ... as originally planned 是主谓间接宾语成分, 宾语部分包含后置定语。

正常语序: A panel of robotics experts told the 2022 meeting of the American Association for the Advancement of Science (AAAS), (which was) held for the second year running in cyberspace, rather than in Philadelphia, as originally planned, (that) the pace of automation is likely to accelerate, for two reasons.

翻译: 在美国科学促进会 (AAAS) 2022年年会 (原计划在费城举行, 后改为线上会议, 是该协会第二次线上年会) 上, 一个机器人专家小组表示, 自动化的步伐可能会加快, 有两点原因。

- 长难句分析2:

The " Great Resignation ", in which millions around the world have quit their jobs, may in part be a consequence of lockdowns creating new opportunities for home working.

本句中主句结构为The " Great Resignation " may in part be a consequence of lockdowns creating new opportunities for home working, 而 in which millions around the world have quit their jobs 是修饰 the " Great Resignation " 的定语从句。resignation意为“辞呈”、“辞职信”, 此处 the " Great Resignation " 译为“大辞职潮”; in part意为“部分地”、“在某种程度上”; consequence为“结果”。

翻译: 全球掀起了成百上千万人辞掉原工作的“大辞职潮”, 一定程度上可能是因为疫情封锁措施创造了新的居家工作机会。

