



Test 2

passage 1

Alexander Henderson (1831-1913)

Born in Scotland, Henderson emigrated to Canada in 1855 and became a well-known landscape photographer

Henderson 出生在苏格兰，1855 年移民到了加拿大，并成为了一位著名的风景摄影师。

Alexander Henderson was born in Scotland in 1831 and was the son of a successful merchant. His grandfather, also called Alexander, had founded the family business, and later became the first chairman of the National Bank of Scotland. The family had extensive landholdings in Scotland. Besides its residence in Edinburgh, it owned Press Estate, 650 acres of farmland about 35 miles southeast of the city. The family often stayed at Press Castle, the large mansion on the northern edge of the property, and Alexander spent much of his childhood in the area, playing on the beach near Eyemouth or fishing in the streams nearby.

Alexander Henderson 1831 年出生在苏格兰，是一位成功商人的儿子。他的祖父，也叫 Alexander，开创了家族企业，后来成为了苏格兰国家银行的第一位主席。这个家族在苏格兰拥有大量广阔的土地。除了在爱丁堡的住所外，还坐拥 Press 产业，一块距离爱丁堡市东南 35 英里、占地面积 650 英亩的农田。一家人经常来到位于这块田地北部边缘的大庄园即 Press 城堡小住，而 Alexander 童年的许多时光都在这里度过，要么在 Eyemouth 附近的海滩上玩耍，要么在附近的溪流边垂钓。

Even after he went to school at Murcheston Academy on the outskirts of Edinburgh, Henderson returned to Press at weekends. In 1849 he began a three-year apprenticeship to become an accountant. Although he never liked the prospect of a business career, he stayed with it to please his family. In October 1855, however, he emigrated to Canada with his wife Agnes Elder Robertson and they settled in



Montreal.

即使在去了爱丁堡市郊的 Murcheston 学院念书以后 ,Henderson 还是会在周末回到 Press。在 1849 年，他开始了为期三年的学徒期，成为一名准会计。尽管从未喜爱过这份商业性工作的前景，他还是坚持从事这份工作，为的是让他的家族开心。但是，在 1855 年 10 月，他与妻子 Agnes Elder Robertson 移民去了加拿大，他们定居在蒙特利尔。

Henderson learned photography in Montreal around the year 1857 and quickly took it up as a serious amateur. He became a personal friend and colleague of the Scottish-Canadian photographer William Notman. The two men made a photographic excursion to Niagara Falls in 1860 and they cooperated on experiments with magnesium flares as a source of artificial light in 1865. They belonged to the same societies and were among the founding members of the Art Association of Montreal. Henderson acted as chairman of the association's first meeting, which was held in Notman's studio on 11 January 1860.

Henderson 大约在 1857 年左右在蒙特利尔学习了摄影术，并很快就将这项业余爱好培养得像模像样。他成为了苏格兰裔加拿大摄影师 William Notman 的好友和同事。两人在 1860 年去往尼亚加拉大瀑布进行了一场摄影之旅，他们还在 1865 年合作进行了利用镁照明弹作为一种人造光源的试验。他们参加了相同的社团，是蒙特利尔艺术协会的共同创办成员。Henderson 作为主席主持了这个协会的第一次会议，它于 1860 年 1 月 11 日在 Notman 的工作室里举行。

In spite of their friendship, their styles of photography were quite different. While Notman's landscapes were noted for their bold realism, Henderson for the first 20 years of his career produced romantic images, showing the strong influence of the British landscape tradition. His artistic and technical progress was rapid and in 1865 he published his first major collection of landscape photographs. The publication had limited circulation (only seven copies have ever been found), and was called Canadian Views and Studies. The contents of each copy vary significantly and have



proved a useful source for evaluating Henderson's early work.

虽然二人的友谊甚笃，他们的摄影风格却截然不同。Notman 的风景照因其大胆直白的现实主义而闻名，而 Henderson 在自己职业生涯的头 20 年里拍摄的却是浪漫主义画面，显示出他受到了英国风景画传统的浓厚影响。他在艺术性和技术性方面的进步极快，在 1865 年，他出版了自己的第一套风景照片大合集。这套册子的出版流通有限（目前只找到了七本），取名为《加拿大风景与研究》。每一本中的内容都与其他本迥然不同，成为了评估 Henderson 早期作品的一个有用来源。

In 1866, he gave up his business to open a photographic studio, advertising himself as a portrait and landscape photographer. From about 1870 he dropped portraiture to specialize in landscape photography and other views. His numerous photographs of city life revealed in street scenes, houses, and markets are alive with human activity, and although his favourite subject was landscape he usually composed his scenes around such human pursuits as farming the land, cutting ice on a river, or sailing down a woodland stream. There was sufficient demand for these types of scenes and others he took depicting the lumber trade, steamboats and waterfalls to enable him to make a living. There was little competing hobby or amateur photography before the late 1880s because of the time-consuming techniques involved and the weight of the equipment. People wanted to buy photographs as souvenirs of a trip or as gifts, and catering to this market, Henderson had stock photographs on display at his studio for mounting, framing, or inclusion in albums.

在 1866 年，他放弃了自己的原职，开设了一家摄影工作室，将自己宣传为一名人像与风景摄影师。从大约 1870 年开始，他彻底放弃了人像摄影，专注于拍摄风景照和其他景象照。他拍下了数不胜数的城市生活照片，这些街道景象、房屋和市场全都因为有了芸芸众生活动其中而显得充满生机，虽然他最喜爱的题材是风景照，但他通常会将画面构建在这样一些普通人的烟火生活上，例如耕种农田、河上取冰或沿林中溪流泛舟而下。对于他所拍摄的这类景象和其他描绘伐木活计、蒸汽船和瀑布的影像的需求量充足，从而令他可以赖此谋



生。在 19 世纪 80 年代末期之前，几乎没有其他爱好类或业余类摄影行当来与他竞争，因为拍摄照片要牵扯到费时颇久的技术和沉重的设备。人们想要购买相片作为一趟旅行的纪念品或是礼物，而为了迎合这一市场需求，Henderson 在自己的工作室里展出了大量储备照片，以供随时镶嵌、加框，或收录集结成册。

Henderson frequently exhibited his photographs in Montreal and abroad, in London, Edinburgh, Dublin, Paris, New York, and Philadelphia. He met with greater success in 1877 and 1878 in New York when he won first prizes in the exhibition held by E and H T Anthony and Company for landscapes using the Lambertype process. In 1878 his work won second prize at the world exhibition in Paris.

Henderson 时常将他的摄影作品展出在蒙特利尔和国外各地，曾去过伦敦、爱丁堡、都柏林、巴黎、纽约和费城。他于 1877 和 1878 年在纽约获得了更大的成功，因为使用漫反射处理手法拍摄风景而赢得了由 E and H T Anthony and Company 举办的摄影展头奖。同在 1878 年，他的作品在巴黎世界展览会上赢得了二等奖。

In the 1870s and 1880s Henderson travelled widely throughout Quebec and Ontario, in Canada, documenting the major cities of the two provinces and many of the villages in Quebec. He was especially fond of the wilderness and often travelled by canoe on the Blanche, du Lievre, and other noted eastern rivers. He went on several occasions to the Maritimes and in 1872 he sailed by yacht along the lower north shore of the St Lawrence River. That same year, while in the lower St Lawrence River region, he took some photographs of the construction of the Intercolonial Railway. This undertaking led in 1875 to a commission from the railway to record the principal structures along the almost-completed line connecting Montreal to Halifax. Commissions from other railways followed. In 1876 he photographed bridges on the Quebec, Montreal, Ottawa and Occidental Railway between Montreal and Ottawa. In 1885 he went west along the Canadian Pacific Railway (CPR) as far as Rogers Pass in British Columbia, where he took photographs of the



mountains and the progress of construction.

在 19 世纪 70 年代和 80 年代，Henderson 广泛游历了加拿大的魁北克和安大略地区，用影像记录下了这两个省份中的主要城市和魁北克的许多村庄。他尤其偏爱旷野景色，常常乘着独木舟漂流在 Blanche 河、du Lievre 河和其他许多条知名的北部河流上。他数次前往 Maritimes，在 1872 年，他乘坐帆船走遍了 St Lawrence 河的北部低地沿岸。同一年里，在 St Lawrence 河地区，他拍下了一些殖民地铁路的建筑照片。这一举动在 1875 年促成了那家铁路公司委托他拍摄记录当时快要竣工的、连接蒙特利尔和哈利法克斯铁路沿线的主要建筑。来自其他铁路公司的委托也随之接踵而至。在 1876 年，他拍下了魁北克线、蒙特利尔线、渥太华线以及蒙特利尔到渥太华之间的西洋铁路沿线上的各架桥梁。在 1885 年，他沿加拿大太平洋铁路(简称 CPR)一路向西，最远来到了不列颠哥伦比亚的 Rogers Pass，在那里拍摄了群山风景和正在进行中的建筑工程。

In 1892 Henderson accepted a full-time position with the CPR as manager of a photographic department which he was to set up and administer. His duties included spending four months in the field each year. That summer he made his second trip west, photographing extensively along the railway line as far as Victoria. He continued in this post until 1897, when he retired completely from photography. 在 1892 年，Henderson 接受了来自 CPR 的一份作为摄影部门经理的全职工作，他要为这家公司创立并领导这样一个部门。他的职责包括每年在野外待上四个月的时间。那年夏天他第二次出发向西而行，沿铁路一线广泛拍摄沿途风光，最远去到了维多利亚市。他在这个职位上一直工作到 1897 年，然后就此退休，再没有进行过摄影活动。

When Henderson died in 1913, his huge collection of glass negatives was stored in the basement of his house. Today collections of his work are held at the National Archives of Canada, Ottawa, and the McCord Museum of Canadian History, Montreal.

Henderson 于 1913 年去世，他的海量玻璃底片都储藏在他住所的地下室里。如今，他的作品展览分别位于渥太华的加拿大国家档案馆和蒙特利尔的麦考得加拿大历史博物馆中。



Passage 2

回到摩天大楼设计的未来

有关摩天大楼和大型公共建筑过度用电的问题，可以在 19 世纪和 20 世纪早期那些天才般的但被遗忘了的建筑设计中找到答案。

A *The Recovery of Natural Environments in Architecture* by Professor Alan Short is the culmination of 30 years of research and award-winning green building design by Short and colleagues in Architecture, Engineering, Applied Maths and Earth Sciences at the University of Cambridge.

‘The crisis in building design is already here,’ said Short. ‘Policy makers think you can solve energy and building problems with gadgets. You can’t. As global temperatures continue to rise, we are going to continue to squander more and more energy on keeping our buildings mechanically cool until we have run out of capacity.’

A Alan Short 教授所著的《自然环境在建筑中的复苏》是三十年研究的集大成之作，也是 Short 及其剑桥大学建筑学、工程学、应用数学和地球科学领域内的同事们共同完成的荣获大奖的环保建筑设计。“建筑设计中的危机已经显现，” Short 这样说。“政策制定者们以为用小零件小设备就能解决能源和建筑问题。其实并不能。随着全球温度持续上升，我们将继续用机械方法挥霍越来越多的能量，使建筑物内保持凉爽，直到我们再也无能为力为止。

B Short is calling for a sweeping reinvention of how skyscrapers and major public buildings are designed - to end the reliance on sealed buildings which exist solely via the life support’ system of vast air conditioning units.

Instead, he shows it is entirely possible to accommodate natural ventilation and cooling in large buildings by looking into the past, before the widespread introduction of air conditioning systems, which were ‘relentlessly and aggressively marketed’ by their inventors.

B Short 正在呼吁对摩天大楼和大型公共建筑的设计方式进行一场彻底的重塑——来结



束对封闭式建筑的依赖，它们的存在完全是依靠大型空调设备来提供“生命支持”的与之相反，他证明了：完全有可能在大型建筑中容纳天然的通风和冷却系统，办法就是回溯到过去那个还没有大规模引入空调系统的时代，这些空调系统就是其发明者所“毫不留情、大刀阔斧地”大肆进行宣传推广的。

C Short points out that to make most contemporary buildings habitable, they have to be sealed and air conditioned. The energy use and carbon emissions this generates is spectacular and largely unnecessary. Buildings in the West account for 40-50% of electricity usage, generating substantial carbon emissions, and the rest of the world is catching up at a frightening rate. Short regards glass, steel and air-conditioned skyscrapers as symbols of status, rather than practical ways of meeting our requirements.

C Short 指出：要让大多数当代建筑里可以住人，它们必须封闭起来、进行空气调控。这种做法所造成的能源消耗和碳排放是极为壮观的，在很大程度上并没有必要。西方建筑物要占用电量的 40-50%，产生了巨量的碳排放，而世界上的其他地方正以一种令人惊恐的速度追赶上来。Short 认为，由玻璃、钢铁和空调组成的摩天大楼是社会地位的象征，而不是满足我们需要的实用方式。

D Short's book highlights a developing and sophisticated art and science of ventilating buildings through the 19th and earlier-20th centuries, including the design of ingeniously ventilated hospitals. Of particular interest were those built to the designs of John Shaw Billings, including the first Johns Hopkins Hospital in the US city of Baltimore (1873-1889).

'We spent three years digitally modelling Billings' final designs,' says Short. 'We put pathogens* in the airstreams, modelled for someone with tuberculosis (TB) coughing in the wards and we found the ventilation systems in the room would have kept other patients safe from harm.'

D Short 的书重点阐述了在 19 世纪和 20 世纪初期这个阶段里，为建筑物通风的艺术与科



学一直在发展进步、日趋复杂完善，这其中包括通风系统设计精妙的医院。格外引人注目的是那些依照 John Shaw Billings 的设计搭建而成的建筑，包括位于美国巴尔的摩市的第一家约翰霍普金斯医院（1873-1889）。“我们花了三年的时间用数字化模拟修建了 Billings 最后的那些设计方案，” Short 这样说。“我们在气流中放入了病原体，以此模仿病房中正在咳嗽的肺结核病患，结果我们发现：房间里的通风系统能保护其他病人不受侵害。

E ‘We discovered that 19th-century hospital wards could generate up to 24 air changes an hour - that’s similar to the performance of a modern-day, computer-controlled operating theatre. We believe you could build wards based on these principles now.

Single rooms are not appropriate for all patients. Communal wards appropriate for certain patients - older people with dementia, for example - would work just as well in today’s hospitals, at a fraction of the energy cost.’

Professor Short contends the mindset and skill-sets behind these designs have been completely lost, lamenting the disappearance of expertly designed theatres, opera houses, and other buildings where up to half the volume of the building was given over to ensuring everyone got fresh air.

E “我们发现 19 世纪的医院病房在 1 小时内能够制造多达 24 次的空气交换——类似于一家现代化的、由电脑中控的剧院可达成的效果。我们相信你现在完全可以基于这些原理来建造病房。单人间并非适合于所有的病人。对某些病患比较合适的公共病房——例如患痴呆的较年长病人——在今天的医院里也同样适用，所消耗的能量却只有一丁点儿。

Short 教授感到这些设计背后的思维理念和精巧技艺已经完全丢失了，他痛惜那些消失了的、经由专家精心设计建造的剧院、歌剧院和其他同类建筑，这些建筑中多达一半的空间都用于确保每个人都能获得新鲜空气。

F Much of the ingenuity present in 19th-century hospital and building design was driven by a panicked public clamouring for buildings that could protect against what was thought to be the lethal threat of miasmas - toxic air that spread disease.



Miasmas were feared as the principal agents of disease and epidemics for centuries, and were used to explain the spread of infection from the Middle Ages right through to the cholera outbreaks in London and Paris during the 1850s. Foul air, rather than germs, was believed to be the main driver of 'hospital fever', leading to disease and frequent death. The prosperous steered clear of hospitals.

While miasma theory has been long since disproved, Short has for the last 30 years advocated a return to some of the building design principles produced in its wake.

F 存在于 19 世纪的医院和其他建筑中的那种精巧设计在很大程度上是被恐慌的公众所催生的，这些人大声疾呼，要求建筑物能给他们提供保护，使自己不受当时被认为是致命威胁的瘴气——会传播疾病的有毒气体——所侵袭。几个世纪以来，瘴气一直被看作疾病和传染病的主要致病源而深受畏惧，从中世纪以来直到 19 世纪 50 年代爆发在伦敦和巴黎的大霍乱，人们都用瘴气来解释感染的传播原因。污秽的空气，而非病菌，被认为是“医院热病”的主要元凶，引发了疾病与频繁的死亡。富人都对医院避之唯恐不及。

虽然瘴气理论很久以前就被证明了是错的，但 Short 在过去三十年间一直在支持重拾一些建筑设计原理，而这些原理正是在这一错误理论的催生下才发展起来的。

G Today, huge amounts of a building's space and construction cost are given over to air conditioning. 'But I have designed and built a series of buildings over the past three decades which have tried to reinvent some of these ideas and then measure what happens.

'To go forward into our new low-energy, low-carbon future, we would be well advised to look back at design before our high-energy, high-carbon present appeared. What is surprising is what a rich legacy we have abandoned.'

G 今天，一栋建筑的大量空间和建造费用都奉献给了空调系统。“但是我在过去三十年间设计和主持建成了一系列楼宇，尝试重新用上我所说的这些理念，然后测试了接下来的效果。”

“要向前去到我们全新的低能源、低碳排的未来，一个非常明智的做法就是回首过去，向我们高能源、高碳排的当下出现之前的那个时代去学习。令人惊异的是我们抛弃了一份多么丰厚的遗产。”



H Successful examples of Short' s approach include the Queen' s Building at De Montfort University in Leicester. Containing as many as 2,000 staff and students, the entire building is naturally ventilated, passively cooled and naturally lit, including the two largest auditoria, each seating more than 150 people. The award-winning building uses a fraction of the electricity of comparable buildings in the UK.

Short contends that glass skyscrapers in London and around the world will become a liability over the next 20 or 30 years if climate modelling predictions and energy price rises come to pass as expected.

H Short 所倡导的方法的成功案例之一是位于莱斯特的德蒙特福德大学的女王大楼 (Queen' s Building)。楼内能容纳 2,000 名员工和学生，整栋建筑都依靠自然通风、非人工手段制冷和天然照明，其中两座分别能坐下 150 多人的最大的礼堂也不例外。这座曾经获奖的建筑所使用的电量与英国其他同类建筑的用电量相比只是九牛一毛。

Short 认为，如果气候模型预测的情况和能源价格上涨真的如人们所预期的那样到来的话，那么在接下来的二十或三十年间，伦敦乃至全球的玻璃摩天高楼都将会成为沉重的累赘。

I He is convinced that sufficiently cooled skyscrapers using the natural environment can be produced in almost any climate. He and his team have worked on hybrid buildings in the harsh climates of Beijing and Chicago - built with natural ventilation assisted by back-up air conditioning - which, surprisingly perhaps, can be switched off more than half the time on milder days and during the spring and autumn.

Short looks at how we might reimagine the cities, offices and homes of the future. Maybe it' s time we changed our outlook.

I 他坚信：利用自然环境而进行充足制冷的高楼大厦在几乎任何气候里都是可以建成并运转的。他和他的团队在北京和芝加哥的严酷气候里在各种各样的建筑上都进行过试验—这些建筑里设立了天然通风系统，同时辅以备用的空调设备——也许会令人大吃一惊的是，在比



较温和的日子里以及在春秋季节，这些空调有一半以上的时间都可以关闭不用。

Short 所着眼的是我们也许可以重新谁未来的城市、办公室和家庭。也许是时候改变我们的看法了。

Passage 3

公司为什么应该欢迎混乱无序状态

A Organisation is big business. Whether it is of our lives - all those inboxes and calendars - or how companies are structured, a multi-billion dollar industry helps to meet this need.

We have more strategies for time management, project management and self-organisation than at any other time in human history. We are told that we ought to organise our company, our home life, our week, our day and even our sleep, all as a means to becoming more productive. Every week, countless seminars and workshops take place around the world to tell a paying public that they ought to structure their lives in order to achieve this.

This rhetoric has also crept into the thinking of business leaders and entrepreneurs, much to the delight of self-proclaimed perfectionists with the need to get everything right. The number of business schools and graduates has massively increased over the past 50 years, essentially teaching people how to organise well.

A 规划归序是桩大生意。无论是在我们的生活中——所有那些信箱与日历——还是公司如何进行组织构建，都有一项数以十亿美元计的产业可以帮忙来满足这一需求。我们有着比人类历史上以往任何时候都更多的策略来进行时间管理、项目管理和自我组织管理。我们被告知自己应当安排好我们的公司、我们的家庭生活、我们的每周、我们的每天，甚至于我们的睡眠，所有这些做法都是用以变得更加高产的手段。每个星期，全球的各个角落里都有数不清的研讨会和工作坊在告诉付费而来的公众：他们应该对自己的生活进行组织规划以达成这个目标。这种雄辩高论也渗透进了商业领袖和企业家们的思维之中，这令那些需要让每件事都井井有条的自封的完美主义者们相当愉悦。与此有关的商业学校和毕业生在过去 50 年间



数量激增，本质上都是在教人们如何很好地安排组织各项事务。

B Ironically, however, the number of businesses that fail has also steadily increased. Work-related stress has increased. A large proportion of workers from all demographics claim to be dissatisfied with the way their work is structured and the way they are managed.

This begs the question: what has gone wrong? Why is it that on paper the drive for organisation seems a sure shot for increasing productivity, but in reality falls well short of what is expected?

B 然而，讽刺的是，失败企业的数量也一直在稳定上升。与工作相关的压力一路看涨。在所有人口统计数据中都有很大一部分员工称自己对工作的组织安排方式和被领导管理的方式感到不满。这就提出了一个问题：到底哪里出错了？为什么在纸面上看来，推动条理有序似乎是铁定能够提升生产力的，然而在现实之中，却远远达不到所预期的效果呢？

C This has been a problem for a while now. Frederick Taylor was one of the forefathers of scientific management. Writing in the first half of the 20th century, he designed a number of principles to improve the efficiency of the work process, which have since become widespread in modern companies. So the approach has been around for a while.

C 这个问题已经存在一段时间了。Frederick Taylor 是科学组织管理方法的创始人之一。他在 20 世纪的上半叶里就开始著书立说，设计出了一系列原则来提到工作流程的效率，后来在现代公司中流传甚广。所以这个方法已经存在了不少时日。

D New research suggests that this obsession with efficiency is misguided. The problem is not necessarily the management theories or strategies we use to organise our work; it's the basic assumptions we hold in approaching how we work. Here it's the assumption that order is a necessary condition for productivity. This assumption has also fostered the idea that disorder must be detrimental to



organisational productivity. The result is that businesses and people spend time and money organising themselves for the sake of organising, rather than actually looking at the end goal and usefulness of such an effort.

D 新的研究显示：这种对效率的痴迷是有误导性的。问题倒不一定出在我们用以组织安排自己工作的管理理论或策略上，真正的问题在于我们在着手进行工作时所持有的一个基本假设。这个假设就是：秩序是获得高生产力的一个必要条件。这种假设也进而加强了这样一个理念：混乱无序对于组织的生产力一定是有害的。于是结果就变成了：无论公司还是个人都在花费时间和金钱为了有序而努力去有序，而不是去关注进行这种努力尝试的最终目标和有用性。

E What's more, recent studies show that order actually has diminishing returns. Order does increase productivity to a certain extent, but eventually the usefulness of the process of organisation, and the benefit it yields, reduce until the point where any further increase in order reduces productivity. Some argue that in a business, if the cost of formally structuring something outweighs the benefit of doing it, then that thing ought not to be formally structured. Instead, the resources involved can be better used elsewhere.

E 更有甚者，近期有研究表明：有序性的效用实际上是边际递减的。秩序确实能在一定程度上提升生产力，但是最终这种让一切井井有条的过程的有用性，以及这样做所带来的好处，会逐步减弱到某个临界点，过了这个点以后再去增加秩序性就只会降低生产力。有些人认为在一家公司里，如果正式去组织整理某事的成本比这样做能得到的好处还要高，则那件事本身就不应当被正式地组织整理。反之，这其中所牵扯的资源可以更好地用在其他地方。

F In fact, research shows that, when innovating, the best approach is to create an environment devoid of structure and hierarchy and enable everyone involved to engage as one organic group. These environments can lead to new solutions that, under conventionally structured environments (filled with bottlenecks in terms of information flow, power structures, rules, and routines) would never be reached.



F 实际上, 研究显示, 在进行创新时, 最好的方法就是创造出一个没有任何组织结构和上下级别的环境, 让置身其中的每个人都充分参与进来, 形成一个有机的群体。这样的环境可以催生出一些全新的解决办法, 而在传统的一切井然有序的环境下(在信息交流、权力结构、各项规则和常规操作这些方面充满着各种瓶颈), 永不可能出现这些思路。

G In recent times companies have slowly started to embrace this disorganisation. Many of them embrace it in terms of perception (embracing the idea of disorder, as opposed to fearing it) and in terms of process (putting mechanisms in place to reduce structure).

For example, Oticon, a large Danish manufacturer of hearing aids, used what it called a 'spaghetti' structure in order to reduce the organisation's rigid hierarchies. This involved scrapping formal job titles and giving staff huge amounts of ownership over their own time and projects. This approach proved to be highly successful initially, with clear improvements in worker productivity in all facets of the business.

In similar fashion, the former chairman of General Electric embraced disorganisation, putting forward the idea of the 'boundaryless' organisation. Again, it involves breaking down the barriers between different parts of a company and encouraging virtual collaboration and flexible working. Google and a number of other tech companies have embraced (at least in part) these kinds of flexible structures, facilitated by technology and strong company values which glue people together.

G 近些年来, 各家公司已慢慢开始接纳这样的“无组织无纪律性”。很多公司从理念上(接纳无序性这种观念, 而不是惧怕它) 和从流程上(引入并设立一些机制来削弱结构固化) 都接受了它。举例来说, Oticon 是丹麦一家生产助听设备的大型公司, 运用了一种被它称为“意大利面”的结构来减少组织内部严格的上下级别关系。做法就是去掉所有的正式工作头衔、给员工大量的自主权来规划安排自己的时间和项目。这个办法在推行之初大获成功, 在公司业务的所有领域内都明显提升了员工生产力。



通用电气 (General Electric) 的前任主席也以类似的方式接纳了混乱无序性，推行了“无边界”组织管理的理念。这种做法也涉及打破公司中不同部门间的壁垒，鼓励实质意义上的合作和灵活的工作方式。谷歌和一系列其他的技术公司也都 (至少是部分上) 采用了这类灵活的组织结构，由技术和能把人们团结在一起的强大的企业价值观来推动。

H A word of warning to others thinking of jumping on this bandwagon: the evidence so far suggests disorder, much like order, also seems to have diminishing utility, and can also have detrimental effects on performance if overused. Like order, disorder should be embraced only so far as it is useful. But we should not fear it - nor venerate one over the other. This research also shows that we should continually question whether or not our existing assumptions work.

H 送给那些正在考虑马上随大流这么干的公司和个人一句警告：到目前为止的证据显示，无序跟有序非常类似，其有用性貌似也是会边际递减的，如果过度使用也会对各方面表现产生有害影响。与有序性一样，无序性只有在能发挥作用的时候才值得采纳。但是我们不必惧怕它——也不必非把二者分个优劣高下出来。这份研究还表明，我们应当持续去检验自己已有的各种理念是否真的管用。