

敢于不同意，去怀疑的勇气

In Oxford in the 1950s, there was a fantastic doctor, who was very unusual, named Alice Stewart. And Alice was unusual partly because, of course, she was a woman, which was pretty rare in the 1950s. And she was brilliant, she was one of the, at the time, the youngest Fellow to be elected to the Royal College of Physicians. She was unusual too because she continued to work after she got married, after she had kids, and even after she got **divorced** and was a single parent, she continued her medical work.

divorce

v. 离婚

在20世纪50年代的牛津，有一位很优秀、不寻常的医生，她叫Alice Stewart。Alice很不寻常，因为她是个女的医生，这对于在20世纪50年代很罕见了。她非常厉害，是当时最年轻的“皇家医师学院”最年轻的学员之一。她很不寻常还因为在她结婚生子后，她还继续工作，甚至在她离婚成为单亲妈妈之后，她继续着她的医学工作。

And she was unusual because she was really interested in a new science, the emerging field of **epidemiology**, the study of patterns in disease. But like every scientist, she appreciated that to make her mark, what she needed to do was find a hard problem and solve it. The hard problem that Alice chose was the rising **incidence** of childhood cancers. Most disease is correlated with poverty, but in the case of childhood cancers, the children who were dying seemed mostly to come from **affluent** families. So, what, she wanted to know, could explain this **anomaly**?

epidemiology

n. 流行病学

incidence

n. 发生率

affluent

adj. 富裕的

anomaly

n. 反常现象

她很不寻常还因为她对一门新的科学感兴趣，当时新出现的流行病学，对于疾病规律的研究。但跟每个科学家一样，她知道为了让她出众，她需要寻找到难题，然后解决它。Alice当时选择的难题是童年癌症发生率的上升。大多数疾病都是跟贫穷有关的，不过在童年癌症的问题上，这些垂死的孩子似乎大多数都从富裕家庭中而来。所以她想知道，怎样才能解释这样一种特殊现象呢？

Now, Alice had trouble getting funding for her research. In the end, she got just 1,000 pounds from the Lady Tata Memorial prize. And that meant she knew she only had one shot at collecting her data. Now, she had no idea what to look for. This really was a needle in a haystack sort of search, so she asked everything she could think of. Had the children eaten boiled sweets? Had they consumed colored drinks? Did they eat fish and chips? Did they have indoor or outdoor plumbing? What time of life had they started school?

当时,Alice很难为她的研究筹备到资金。最后,她只从Lady Tata纪念奖得到了1000英镑。这意味着她知道她对于收集数据只有一次机会。她完全不知道应当寻找什么。这对于需要大量数据的研究来说是一个沉重打击,因此她问了所有她能想到的东西。这些孩子有没有吃煮沸的甜食?他们有没有喝花里胡哨的饮料?他们是不是吃油炸鱼和薯片了?他们是不是使用过户内或者户外的铅制品?他们什么时候开始上学的?

And when her carbon copied questionnaire started to come back, one thing and one thing only jumped out with the statistical clarity of a kind that most scientists can only dream of. By a rate of two to one, the children who had died had had mothers who had been X-rayed when pregnant. Now that finding flew in the face of conventional wisdom. Conventional wisdom held that everything was safe up to a point, a threshold. It flew in the face of conventional wisdom, which was huge enthusiasm for the cool new technology of that age, which was the X-ray machine. And it flew in the face of doctors' idea of themselves, which was as people who helped patients, they didn't harm them.

而当她的抄写的调查问卷回来的时候,只有一个明显的数据显示了出来,这是大多数科学家都无法想象的。三分之二的这些由于癌症而死的孩子,他们的母亲在怀孕的时候都做过X光检查。这个发现对于传统观念是一大冲击。传统观念认为任何事情在一种程度上都是安全的,像一个门槛。这对于这一观念是很大的冲击,尤其是对于当时新科技,X光机器的巨大热情。而且对于医生对自己的看法也是巨大的冲击,因为他们都是帮助病人的,而不是害他们的。

a needle in a haystack

几乎不可能找到的东西

plumbing

n. 铅管品制造

enthusiasm

n. 热情; 热心

Nevertheless, Alice Stewart rushed to publish her preliminary findings in The Lancet in 1956. People got very excited, there was talk of the Nobel Prize, and Alice really was in a big hurry to try to study all the cases of childhood cancer she could find before they disappeared. In fact, she need not have hurried. It was fully 25 years before the British and medical -- British and American medical establishments abandoned the practice of X-raying pregnant women. The data was out there, it was open, it was freely available, but nobody wanted to know. A child a week was dying, but nothing changed. Openness alone can't drive change. 不过呢, Alice Stewart还是很快的将她最初的发现在1956年的The Lancet杂志中发表了。人们都很兴奋,有人还提到诺贝尔奖的可能, Alice也很着急,她想去学习她能找到所有的儿童癌症的资料, 在他们消失之前。事实上,她并不需要那么急。过了25年之后,英国的医学建树-- 英国和美国医学建树,也禁止了给怀孕女人的X光测验。数据都是开放的,很容易获得,但是没人想知道这一点。每周都有一个小孩在垂死挣扎,但就跟啥都没发生一样。开放性无法带来改变。

So for 25 years Alice Stewart had a very big fight on her hands. So, how did she know that she was right? Well, she had a fantastic model for thinking. She worked with a statistician named George Kneale, and George was pretty much everything that Alice wasn't. So, Alice was very outgoing and sociable, and George was a recluse. Alice was very warm, very empathetic with her patients. George frankly preferred numbers to people. But he said this fantastic thing about their working relationship. He said, "My job is to prove Dr. Stewart wrong."

25年来Alice Stewart在做很大的斗争。所以说,她怎么知道她当时是对的? 她有一个极佳的思考模型。她当时与一位名叫George Kneale的统计学家合作, 而George刚好与Alice正互补。Alice非常外向和社交化, 而George是个隐居者。Alice很热情,与她的病人有很多互动, 而George相比之下更喜欢数字,而不是人。不过他提到过他们工作关系的极大好处, 他说:"我的工作就是证明Stewart博士是错的。"

preliminary

adj.初步的

available

adj.可获得的

empathetic

adj.感同身受的

frankly

adv.坦率的

He actively sought disconfirmation. Different ways of looking at her models, at her statistics, different ways of **crunching** the data in order to disprove her. He saw his job as creating conflict around her theories. Because it was only by not being able to prove that she was wrong, that George could give Alice the confidence she needed to know that she was right.

他积极地寻找错误的证明。以不同方式研究她的模型，她的数据，以及不同方式去利用数据，来证明她是错的。把他自己的工作当作为Alice的理论创造矛盾。因为只有他无法证明Alice是错的时候，George就可以带来Alice所需要的自信，让她相信她是正确的。

It's a fantastic model of **collaboration** -- thinking partners who aren't **echo chambers**. I wonder how many of us have, or dare to have, such collaborators. Alice and George were very good at conflict. They saw it as thinking.

这是完美的合作的模型，由伙伴之前相互补充。我想知道有多少人有过，或者敢有过这样的合作者。Alice和George对于矛盾很擅长。他们认为这就是思考。So what does that kind of constructive conflict require? Well, first of all, it requires that we find people who are very different from ourselves. That means we have to resist the neurobiological drive, which means that we really prefer people mostly like ourselves, and it means we have to seek out people with different backgrounds, different **disciplines**, different ways of thinking and different experience, and find ways to engage with them. That requires a lot of patience and a lot of energy.

那么这种建设性的矛盾要求什么呢？首先呢，它需要我们去找到十分不同的人。这意味着我们必须抗拒精神上的推动，那就是我们更喜欢像我们的人，这也意味着我们必须寻找有不同背景，不同训练，不同方法去思考以及不同经验的人们，而且还要去想办法与他们交流。这需要很多热情和能量。And the more I've thought about this, the more I think, really, that that's a kind of love. Because you simply won't commit that kind of energy and time if you don't really care. And it also means that we have to be prepared to change our minds.

我想这一点想的越多，真的，我就越觉得这是一种爱。因为如果你不在乎的话，你不可能付出那么多能量的。这还意味着我们必须准备好去改变我们的想法。

crunch

v.处理信息

collaboration

n.合作

echo chamber

回音室

discipline

n.纪律；
行为准则

Alice's daughter told me that every time Alice went head-to-head with a fellow scientist, they made her think and think and think again. "My mother," she said, "My mother didn't enjoy a fight, but she was really good at them."

Alice的女儿告诉我，每次Alice去和一个科学家同事会面，他们都让她一遍一遍的思考。"我的母亲"，她说，"我的母亲不喜欢争吵，但是她却很擅长。"

So it's one thing to do that in a one-to-one relationship. But it strikes me that the biggest problems we face, many of the biggest disasters that we've experienced, mostly haven't come from individuals, they've come from organizations, some of them bigger than countries, many of them capable of affecting hundreds, thousands, even millions of lives. So how do organizations think? Well, for the most part, they don't. And that isn't because they don't want to, it's really because they can't. And they can't because the people inside of them are too afraid of conflict.

因此这在一对一的关系中是一个方面。但这使我想到了那些我们面对过的最大难题，经历过的最严重的灾难，大多都不是由个人引起的，而是从组织而来的，有些比国家还大，大多数都有影响上百人的能力，甚至上千人，上百万人。那么这些组织是怎么想的呢？其实大多数情况下，他们是不思考的。这不是因为他们不想，而是因为他们无法。因为在组织里面的人对于矛盾有一种恐惧心理。

In surveys of European and American executives, fully 85 percent of them acknowledged that they had issues or concerns at work that they were afraid to raise. Afraid of the conflict that that would provoke, afraid to get embroiled in arguments that they did not know how to manage, and felt that they were bound to lose.

在对欧洲和美国行政人员的调查中，有85%都承认他们有一些他们自己不敢说出的话题和意见。对可能产生的矛盾有恐惧心理，不想被缠绕在他们不知道怎么处理的争论中，而且感到他们肯定会输。

individuals

n. 个人

provoke

v. 激起；引发

embroil

v. 使卷入

Eighty-five percent is a really big number. It means that organizations mostly can't do what George and Alice so triumphantly did. They can't think together. And it means that people like many of us, who have run organizations, and gone out of our way to try to find the very best people we can, mostly fail to get the best out of them.

triumphantly
adv.成功地

85%可是很大的数字。这意味着大多数组织没法做 George和Alice成功做到的事情。他们不能心往一处想。而这意味着跟我们一样的许多带领组织的人，都在尽可能找到他们能找到最好的人，不过大多数都失败了。

So how do we develop the skills that we need? Because it does take skill and practice, too. If we aren't going to be afraid of conflict, we have to see it as thinking, and then we have to get really good at it. So, recently, I worked with an executive named Joe, and Joe worked for a medical device company. And Joe was very worried about the device that he was working on. He thought that it was too complicated and he thought that its complexity created margins of error that could really hurt people. He was afraid of doing damage to the patients he was trying to help. But when he looked around his organization, nobody else seemed to be at all worried. So, he didn't really want to say anything. After all, maybe they knew something he didn't. Maybe he'd look stupid. But he kept worrying about it, and he worried about it so much that he got to the point where he thought the only thing he could do was leave a job he loved.

complicated
adj.复杂的

margin
n.边缘；利润

那么我们怎样培养我们需要的技巧呢？因为这的确需要一些技巧和练习。如果我们不惧怕矛盾的话，我们必须把它当作思考，然后我们必须变得很擅长。最近，我在和一个叫Joe的行政人员工作，Joe为一家医疗设备公司工作。他很担心他正在工作的这台医疗设备实在太复杂了，以至于这台机器可能会产生一些错误去伤害人们。他很害怕去伤害那些他想帮助的人们。不过他看了看周围的人，似乎没人有这种担心。因此，他不想把自己的想法说出来。毕竟，其他人可能知道他有不知道的东西，这样他会看起来很愚蠢。但是他始终非常担心，以至于他到达一种程度。他觉得唯一可以做的事情，就是辞掉他热爱的工作。

In the end, Joe and I found a way for him to raise his concerns. And what happened then is what almost always happens in this situation. It turned out everybody had exactly the same questions and doubts. So now Joe had allies. They could think together. And yes, there was a lot of conflict and debate and argument, but that allowed everyone around the table to be creative, to solve the problem, and to change the device.

最后Joe和我找到一个提出他的担忧的方法。结果，总是发生的事情果然再一次发生了。所有人其实都有着同样的问题和怀疑。所以现在Joe和他的伙伴，他们可以往一处去思考。当然，这其中有很多的矛盾和辩论，不过这使得所有人都变得有创造力，都能去解决问题，去改变这台设备。

Joe was what a lot of people might think of as a whistle-blower, except that like almost all whistle-blowers, he wasn't a **crank** at all, he was passionately devoted to the organization and the higher purposes that that organization served. But he had been so afraid of conflict, until finally he became more afraid of the silence. And when he dared to speak, he discovered much more inside himself and much more give in the system than he had ever imagined. And his colleagues don't think of him as a crank. They think of him as a leader.

Joe有点像是大多数认为的揭发者，只不过像所有揭发者一样，他不是在想异想天开，他有激情地为组织付出，以及为组织的目标所努力。不过他对于矛盾太过于惧怕，直到最后沉默对他来说更为可怕。而当他敢于说出口的时候，他发现了更多的自己，以及他从未想象过的对于系统的贡献。而且他的同事没觉得他的想法是天方夜谭，他们认为他是个领导者。

So, how do we have these conversations more easily and more often? Well, the University of Delft requires that its PhD students have to **submit** five statements that they're prepared to defend. It doesn't really matter what the statements are about, what matters is that the candidates are willing and able to **stand up to authority**.

所以说，我们怎么样才能更简单，更经常地来发起这些对话呢？嗯，Delft 大学要求，它所有的博士学生必须提交他们已经准备好可以进行辩护的5个陈述。这些陈述是什么都无所谓，重要的是这些选手们愿意而且有能力对权威提出挑战。

crank

n.古怪的人

submit

v.提交；屈服

stand up

经得起

authority

n.权威；权利

I think it's a fantastic system, but I think leaving it to PhD candidates is far too few people, and way too late in life. I think we need to be teaching these skills to kids and adults at every stage of their development, if we want to have thinking organizations and a thinking society.

我认为这是一个极棒的系统，不过我觉得把这些留给博士生太少了，而且太晚了。我认为我们应该向所以小孩和夫人都来教授这些技巧，如果我们想要能够思考的组织和社会。

The fact is that most of the biggest catastrophes that we've witnessed rarely come from information that is secret or hidden. It comes from information that is freely available and out there, but that we are willfully blind to, because we can't handle, don't want to handle, the conflict that it provokes. But when we dare to break that silence, or when we dare to see, and we create conflict, we enable ourselves and the people around us to do our very best thinking.

事实上，那些我们曾经见证过的最大的灾难，很少是由于一些隐藏的或者秘密的信息而产生。都是由那些公开的信息而造成的，不过我们只不是完全忽略了而已，因为我们不想去处理引起的各种麻烦和矛盾。但是当我们愿意去打破这种沉默，或者我们敢于看到，并且制造矛盾，我们使得我们以及周围的人进行最有效的思考。

Open information is fantastic, open networks are essential. But the truth won't set us free until we develop the skills and the habit and the talent and the moral courage to use it. Openness isn't the end. It's the beginning.

公开信息是很棒的，公开的网络很关键。但是事实不会让我们自由，除非我们拥有技能，习惯，天赋，以及道德上的勇气去利用它。公开并不是一个结束，它只是一个开始。

carastrophe
n.灾难

willfully
adv.故意的

set free
释放；使获得自由