



Are video calls the best we can do in the age of the metaverse? 在元宇宙时代,我们能做到的只有开视频会议吗?



We all have questions that keep us up at night. Here are two of mine. The first is: What makes us human? In a world where human beings and technology are increasingly converging and where with the power of virtual reality we can embody anything we want, what is it that continues to keep us human?

我们都有一些让自己彻夜难眠的问题。我的是这两个。第一个:我们为什么是人类呢?在这个世界上,人类和科技逐渐融合,通过虚拟现实,我们可以长成任何样子,那是什么让我们还是人类呢?

Now there's loads of different answers to this. But the social anthropologist in me hangs on to the human power of forethought. That's our ability to predict and prepare for what might happen. Of all the things that make us uniquely human, forethought has got to be one of the most interesting because it enables us to imagine and create our futures. It gives us the ability to be deeply creative.

答案众说纷纭,但是我内心的社会人类学家倾向于人类"深谋远虑"的能力。也就是我们预测、为各种可能性做好准备的能力。让我们成为人类这一独特物种的所有因素之中,深谋远虑绝对是最有趣的一个,因为它让我们可以畅想未来、创造未来。它让我们可以有天马行空的想象。



My next question is: Are we living in reality? I'm not channeling my inner Morpheus here. This is honestly something I think about a lot. I think about how we're moving towards, or perhaps have always been, living in multiple levels of existence. After all, simulations aside, reality is really just the stories we tell ourselves about what we think we see around us and may be influenced by other people's stories. And so every story that you have ever heard or ever will, including the one I'm about to tell you now, will influence your version of reality.

我的下一个问题是:我们生活在现实中吗?我不是在"妖言惑众",催眠各位。这 真的是我一直在想的问题。我在思考我们该如何向着,也有可能我们一直有多重的生存 形式。毕竟如果不谈仿真,"现实"真的只是我们自己告诉自己的故事,表达着我们周 围的所见所想,也许还会受到别人故事的影响。你曾听过,或者未来将要听到的每个故 事,包括我现在要告诉你的这一个,都会改变你心目中那一版"现实"。

When I was five years old, I was obsessed with Alice's Adventures in Wonderland by Lewis Carroll. I loved how impossible it was, and yet real at the same time. Back then, this was my virtual reality. And there's an exchange in the book between Alice and the White Queen, where the queen is saying that if you try hard enough, you can believe in anything, whether it's possible or not. So now, even though I consider myself a pretty pragmatic person, I too try to believe in six impossible things before breakfast. And with the power of virtual reality, VR, I can often make them a reality.

在我五岁时,我沉迷于刘易斯·卡罗尔的作品《爱丽丝梦游仙境》。我喜爱它的不可思议,但又让我身临其境。当时,它就是我的虚拟现实。书中有一段爱丽丝和白皇后的对话,白皇后说如果你足够努力,你就能相信任何事物,无论可能与否。所以如今,虽然我觉得自己是个相当务实的人,我也会在早餐前,试着去相信六件不可能的事。通过虚拟现实,即VR,我总能把它们变为现实。



But as you get older, your imagination takes a bit of a knock and you lose that childlike wonder. There's bills to pay and kids to keep alive and work to be done. And then there's the monotony of boardrooms and PowerPoint presentations and video calls. Hmm. Now, I've been lucky to work remotely for a lot of my career. And it is amazing for so many different reasons. Without all of the technology we have today, remote work would be impossible. But our overreliance on video calls is hurting our ability to be creative as a team. And this is a big problem because creativity isn't just for artists and musicians. It's what drives innovation in our workplaces. And without it, we can't solve the many problems we face as humanity.

但是随着你长大,你的想象力会受挫,会失去充满童真的奇思妙想。得付账单,得 养娃,得干活。枯燥乏味的开会、演示、视频会议。嗯……我有幸可以远程完成很多份 工作。有许多方面都让这种体验很不错。如果没有我们现在拥有的这些科技,我们是不 可能远程工作的。但是我们对视频会议的过度依赖正在破坏我们团队的创造力。这是个 大问题,因为创造力并不专属于艺术家和音乐家。创造力引领着我们工作中的创新。如 果没有创造力,我们就无法解决人类面临的诸多问题。

Now you may have been told to turn your camera on during video calls so that people can more easily connect with you. This makes a lot of sense on the surface level. Because nobody likes speaking to a blank screen. But research done by Carnegie Mellon University has found that turning our cameras on during video calls impacts our ability to do creative teamwork.



Now if you're anything like me on a video call, your attention is very divided. You're trying to look at people's facial expressions, usually, which you can't quite make out. You're trying to listen to what people are saying. But you're also looking at yourself and making sure you've got no food on your face. And it just doesn't feel like a very natural way to communicate. And it's not. For millennia, our human ancestors, who have evolved to be creative just in order to survive, have done so in 3D environments. That's just how our brains are wired. It's only been relatively recently that we've been distracted by these glowing 2D screens. And these screens are designed to display things. It's called display technology for a reason. We were never meant to communicate through them.

如果你在开视频会议的时候和我一样,你就得一心两用。你得看着别人的表情,但 通常你也看不太出来。你得听人家在说些什么,但是你还得看着你自己,不要让吃的粘在你的脸上。感觉不是一种很自然的交流方式。确实不是。千百年以来,我们的先祖 , 为了生存逐渐具备创意,这在3D的环境里也是一样的。我们的大脑就是这么设置的。 也只有到相对最近的时期,我们才被这些发亮的2D屏幕扰乱心神。这些屏幕就是用来显示东西的。称之为"显示技术"是有道理的。我们本不该通过它们来交流。

So if video calls are confusing and they hurt our creativity, then why are we still using them? And when I asked this question, the answer I get is usually the same. People say it's the best we have or it's the closest thing we can get to real life. So this got me thinking. Are video calls really the best we can do with all of the technology of today? And what's so good about real life anyway? What if, rather than trying to recreate reality, we aimed for something better?

既然视频会议让人稀里糊涂,还会影响我们的创造力,那我们为什么还在用它呢? 每当我问出这个问题,得到的答案总是一样的。人们说,它已经是最优选了,或者说它是最接近我们真实生活的东西。这引发了我的思考。如今各种科技摆在我们眼前,我们就只能开视频会议吗? 现实生活有什么好的? 如果我们不是要重建现实,而是要创建一些更好的东西呢?



Now there's already a multibillion-dollar industry devoted to just this, instantly transporting you somewhere else and enabling you to be present and creative with people from around the world. And that is the games industry. Many games are laying the foundation for the metaverse. And we've heard quite a lot about this metaverse recently. I like to think of it as an evolved 3D and experiential version of the internet. To give you an example. Brands currently have websites and social media pages. In the metaverse, these brands may also have experiential immersive spaces that you can visit and engage directly with whatever they're selling. So the metaverse is providing these new social creative spaces. So if you find yourself worrying that your child is playing too much Minecraft or Roblox or Fortnite, you can remind yourself that these are not just games. They're hanging out with their friends. They're practicing important life skills like empathy and teamwork. And they're often creating and innovating in these spaces, far more, dare I say, than you or I are on our fourth video call of the day.

现在已经有了一个几十亿美元规模的行业致力于这个目标,把你瞬间传去别处,让你可以与世界各地的人齐聚一堂,一起创作。这个行业就是游戏行业。很多游戏都在为元宇宙打基础,我们最近总是会听到元宇宙的消息。我会把它看作互联网的进化3D体验版。举个例子。现在的品牌都有官网和社交媒体网页。在元宇宙里,品牌也可以有沉浸式体验的空间,你可以直接访问或者体验它们正在出售的商品。元宇宙提供了新式社交创新空间。如果你在担心你的孩子玩了太久《我的世界》、《罗布乐思》或者《堡垒之夜》,你该提醒一下自己,这些都不仅仅是游戏。他们可以和朋友们出去玩。他们在锻炼重要的人生技能,比如同理心和团队合作。他们在这些空间里也时常创造、创新,我敢说比你我开了今天第四场视频会议创造的要多得多。

Virtual reality, whilst it's not synonymous with the metaverse, is one of the most powerful technologies we can use to access these spaces. And I believe with the power of VR, the metaverse will reignite workplace creativity and inspire us to achieve the impossible.

虚拟现实虽然无法等同于元宇宙,但是它会是我们进入这些空间最有用的技术之一。我相信通过VR,元宇宙可以重燃工作上的创造力,激励我们达成不可能的目标。



But let's take a step back here. The three key features of virtual reality can be said to be immersion, interaction and imagination. I like to call them the three magic I's. And the cool thing about the three magic I's is that they're also three key drivers, I believe, of creative collaboration as well. So let's look at these in a bit more detail.

但是退后一步。虚拟现实的三个重要特色是沉浸、交互和想象。我称之为"神奇三 I"。神奇三I的神奇之处在于它们也是三个关键驱动力,我相信它们驱动着创意合作。 我们来仔细看一看。

The first is immersion. Immersion by this definition is when your senses are isolated from your physical environment and put into an entirely different virtual environment. And technology is coming on so much that we won't just be able to see, hear and feel things in VR. But we'll be able to taste and smell them too. The internet of senses is here. And it's completely revolutionizing how we interact with each other in virtual environments. Immersion gives us copresence. That's that feeling of really being there with others. And our brains don't know the difference between virtual reality and reality reality when it comes to copresence. So we can be together psychologically, even when we're apart. And this enables social creativity to thrive.

第一,沉浸。此语境下的"沉浸"意味着你的感官与物理环境分隔开来,投入一个截然不同的虚拟环境。科技进步飞快,我们不仅能在VR中看到、听到、感受到,还能尝到、闻到。"互联感官"已经到来,彻底革新了我们在虚拟环境里与他人互动的方式。沉浸带来了"共现"。这是种真实与他人共处一室的感觉。一旦"共现"了,我们的大脑便无法分辨虚拟现实和真实现实的区别,所以即使物理上我们天各一方,我们仍能在心理上紧密相连。这就能让社交创造力蓬勃生长。



The second magic I is interaction. And interaction is where you can manipulate things within your environment that isn't really there. So when we design physical products, we imagine them in 3D. We produce them in 3D. And yet traditionally, we've visualized them on 2D screens. By using VR instead, we can do this in real time in 3D whilst being able to cocreate, discuss and manipulate these designs with our teams. The third magic I is imagination. And this is a biggie for me. VR gives us the ability to do anything and be anywhere, regardless of whether it exists in reality or not. Maybe you want to speak to someone in a different language and have that instantly translated above the avatar's head. Perhaps you want to take your brainstorm on top of Kilimanjaro or write your notes in dust on the Moon. And yet, with all of the amazing possibilities afforded to us by VR, lots of our virtual environments still mirror our physical environments. And there's a psychological reason for this. A concept called structured imagination means that we tend to rely on existing paradigms when we create things.

第二个神奇I是交互。交互指的是你可以操控环境里在现实中不存在的物件。在设计实体物件的时候,我们会想象它们3D的样子,会把它们制造成3D的实体。但是我们通常会把它们展现在2D屏幕上。如果我们用了VR,就能实时进行3D操作,与此同时还能与团队共同创作、讨论、调整这些设计。第三个神奇I是想象,对我来说很重要。VR让我们能够为所欲为、上天入地,无论在真实世界中是否存在。也许你想和一个说着外语的人交谈,虚拟形象的头顶会即刻显示翻译。也许你想在乞力马扎罗山顶进行头脑风暴,或者在月球表面用月尘记笔记。但是,即使VR为我们提供了如此多神奇的可能性,很多虚拟环境依旧映射着我们的物理环境。这是有心理原因的。这个概念称为"结构化想象",意思是在创造新事物的时候,我们很容易会基于已有的规则。



In fact, let's try something quickly. I want you right now to imagine an animal that doesn't exist and be as creative as you can be. Got something? So even though I told you to be as creative as you can be, structured imagination tells me that, most people will have imagined an animal with eyes of some form and legs of some form, perhaps not dissimilar to Leggy McEyeface over here. Maybe that's just me. But we do the same things when we think about our workplaces. We think of an office as a building with a roof and chairs and desks. But we don't need a roof in the metaverse because there's no precipitation. We don't need chairs with legs because the floor isn't really there. In fact, we don't need chairs at all. Do you think that's air you're breathing right now? And the problem with recreating things like traditional boardrooms is that we know that stark corporate spaces aren't conducive to creative collaboration.

我们来快速试一下。我想请你们现在想象一个不存在的动物,尽可能大开脑洞。想到了吗?就算我让你们尽可能大开脑洞,结构化想象告诉我,很多人会想象出一种动物,有着某种形态的眼睛,某种形态的腿,也许和图上这个多腿大眼怪相差无几。也有可能只有我是这样。但是想一想我们的工作,也会出现同样的情况。想到办公室,我们会默认是一栋楼,有屋顶,有桌椅。但是在元宇宙里,我们不需要屋顶,因为根本不会下雨。我们不需要有腿的椅子,因为根本没有地面。其实我们连椅子都不需要。你觉得你现在呼吸的是空气吗?再现某些东西,比如传统的会议室,会导致一个问题,我们都知道冰冷的办公空间不会促进创意合作。

So what else do we know about creative collaboration? Thankfully, we know quite a lot. We know that retreats, breaking away from the day-to-day, can help induce creative thinking. We know that some time alone for reflection can help the team be more creative when they come back together. We can speak to color psychologists who will tell you that gray is not a great color, if you're trying to encourage creativity. We know that nature, the unexpected and even messiness can help induce divergent thinking. So as we build our metaverse workplaces, we can be inspired by our imaginations but guided by all of this fantastic research that's been done before.



关于创意合作,我们还了解一些什么呢?还好,我们了解很多。我们知道休息一下,打破枯燥日常,可以促进创造性思维。我们知道独自一人自省一会儿,会让团队集结在一起时更有创意。和色彩心理学家聊一聊,他们会告诉你,如果你想刺激创造力,灰色可不是一个好选择。我们知道自然界、意料之外的事,甚至是邋里邋遢,都有助于促进发散思维。在我们打造元宇宙职场时,我们可以受到想象力的启发,但是由曾经各种优秀的研究成果引导。

Lots of people ask me how far we are away from a true metaverse. And I don't really have an answer for that. Or I do, but we'd be here all day. But I will say two things. The first thing is that using immersive technology is not the future of workplace communication. It's the present.

Organizations, large and small, are already providing VR headsets to their employees the same way that they would traditionally just provide a laptop, to help their teams feel closer together, to encourage trust and to grow relationships. Secondly, and importantly, the impact that the metaverse will have on various areas of our lives will be profound. And as with anything created by humans, there's a potential for it to be incredibly positive or devastatingly negative. Just as social media, in the previous iteration of the internet, gave a voice to the voiceless and created jobs that didn't exist before, it also laid the foundation for dangerous monopolies and for misinformation campaigns that have destabilized entire democracies. So... We have an incredible opportunity in front of us, an opportunity to completely reimagine work and how we collaborate. But we must use our human power of forethought to create the kind of future we want to see. We must become conscious and deliberate creators of our own destinies.



很多人问我,我们离真正的元宇宙还有多远,但是我真的无法回答。我可以回答,但是我们得说上一整天。但我在这里只说两点。第一,使用沉浸式技术不会是工作交流的未来。而是工作交流的现在。大大小小的机构组织,已经在为员工提供VR头显,就如同传统的提供工作电脑,让团队感觉更紧密,培养信任,增进感情。第二,也是很重要的一点,元宇宙为我们生活的方方面面带来的影响会很深远。人类创造的任何事物,可以大有裨益,也可以毁天灭地。就比如社交媒体,上一代互联网,给予无法发声的人发声的权利,创造以前没有的岗位,与此同时,为危险的垄断现象埋下了祸根,为误导大众的活动埋下了祸根,让整个民主体制动荡不安。因此……我们眼前有一个千载难逢的机会,一个完全重构工作和合作方式的机会。但是我们必须利用我们作为人类深谋远虑的能力,打造我们想看到的未来。我们必须成为自己命运的头脑清醒、深思熟虑的创造者。

Alice in Wonderland symbolized curiosity, imagination and experiencing the impossible. VR allows us to do the same. So here's my ask of every leader today. Let's put on our VR headsets and follow that white rabbit. Let's chase our curiosity to impossible places in the metaverse where anything can happen, and where we can solve humanity's biggest problems together.

《爱丽丝梦游仙境》代表着好奇心、想象力、亲历不可能之事。VR让我们也可以做到这些事。我想号召现在的各位领导。戴上VR头显,跟着白兔先生吧。随着好奇心,前往元宇宙里的不可思议之境,一切皆有可能,在那里,我们可以一起解决人类面临的大问题。

Thank you.

谢谢。



