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## Commencement address to Class of 2022 by Reed Hastings

The following is the prepared text of the address by Reed Hastings for delivery at Stanford's Commencement ceremony for 2022 graduates on June 12, 2022.

Thank you and welcome to the graduates, your friends and families, and all the faculty and staff who work so hard to help you flourish.

When you invited me to be your commencement speaker, my first thought was, "Why me?" And then it hit me: Netflix recommendations. You want to know what to watch tonight. Two tips. We've got a great new movie called *Hustle* about breaking into the NBA, and a series called *Heartstopper*, a British high-school romance. Most importantly, both are safe to watch with your parents this weekend.

Now that we've got the important business over with, I'd like to talk for a few minutes about societal change, and where it comes from.

The changes to the world since Stanford was founded are breathtaking. The change rate over the rest of your lives will be exponentially higher, creating opportunity – as well as risk – for you and humanity. As the world speeds up, will our wax wings melt? Or will we bend the arc of the moral universe toward justice? To find answers, let's look to the past.

It seems to me the two most powerful drivers of human progress have been inventions and stories.

Inventions – meaning broadly all of science and technology – are the most obvious way society moves forward. Think about the agricultural hoe, the wheel, the printing press, electricity, the discovery of DNA, or the Internet. Positive inventions large and small have improved our lives enormously. Of course, there are also negative and dangerous inventions, like chemical weapons, but for the most part, inventions give us more light.

I've always been drawn to inventions - although in my case, the results have been ... mixed.

When I was a grad student here 35 years ago, everyone used desktop computers. Laptops hadn't been invented yet. The problem was that, on a desktop, your hand had to go back and forth between the keyboard and mouse, which was really inefficient. Luckily, the solution was clear, at least to me: the foot mouse.

With the foot mouse, you could type and point at the same time – like playing the piano. I liked the idea so much that I almost dropped out of Stanford to build The Foot Mouse Company. Luckily, the early prototypes saved me. First, it turns out your leg cramps after 20 or 30 minutes using a foot mouse. And second, floors are pretty dirty, and the mouse gets quite gross after a few days.

So, like you, I decided to stay and graduate. I didn't give up on new ideas, and 10 years after discarding the foot mouse, we created Netflix. At first we had to mail a lot of DVDs, but eventually streaming improved to the point where we could deliver movies in seconds instead of days – and our business really took off, allowing us to expand into making our own content like *Stranger Things* and *Squid Game*.

I know many of you will invent all kinds of things – from personal drones to whisk you about, to robots with a sense of humor, to cures for hangovers. But I really hope many of you focus on an area that urgently needs your attention: climate change.

A lot of the conversation around climate change is around reducing emissions in the rich world, which we need to do to slow down the rate of change and buy us time. But ultimately, using less of everything only delays disaster, it doesn't prevent disaster.

Moreover, people in poverty around the world want and deserve more energy and steel and concrete to improve their lives, all of which today generates large amounts of CO<sub>2</sub>. The looming crisis can feel overwhelming, but I'm confident your generation will invent our way out of the greenhouse.

We need better electricity storage and transmission for intermittent solar and wind. And safe, cost-effective nuclear energy. And green cement and steel. And carbon capture technology. And other solutions no one has dreamed of yet. Green solutions need to be better solutions than their carbon-intensive predecessors – just like electric cars are now better than gasoline cars. There are thousands of inventors in this University, and the world needs you all.

Two hundred years ago Malthus predicted mass starvation as our population grew. However, we invented mechanized farming, hybrid seeds, fertilizers and more. While our current world has many problems with 10 times more people than in Malthus' day, food production is not one of those problems. When faced with a galvanizing crisis like mass starvation 200 years ago, or climate change today, we humans invent our way out of the crisis.

Being in Silicon Valley you are already very aware of the power of invention. The power of story, however, may be less obvious.

You all know the many stories that have changed the way people see the world – from *Silent Spring* to *Animal Farm* to perhaps *Don't Look Up*. But today I'm talking about the broader notion of a story: creative ideas that we mostly accept as fact, and that have helped us cooperate at great scale to move humanity forward.

When eye-for-an-eye in the Old Testament gave way to turn-the-other-cheek in the New Testament, it was a moral advance – and a path to reduced violence.

An old story was that government leaders derived their legitimacy by being descended from the prior king. Over time, the story became that the government derived its legitimacy from the consent of the governed. That story shift gave rise to the American, French, and countless other revolutions against monarchy. And the story has continued to evolve. For example, the civil rights movement expanded the idea that all members of society deserve to have their voices heard.

As historian Yuval Harari points out, money, corporations, countries, law, and many other aspects of modern life are actually just widely accepted stories. This dollar bill is not very useful as a piece of paper for eating or burning. Yet we accept it as having value, so it does. Humans are very adept at turning useful stories into accepted facts.

Think about human rights. The more people believe that humans have rights, the more rights humans have. We are working to expand the universe of human rights that are widely accepted as fact.

These are good stories, constructive stories. But like with inventions, the wrong stories can be incredibly destructive.

For several centuries, it was very profitable for white society to evangelize the story that Black people were subhuman and therefore could be enslaved. Nazism and the idea of the innate superiority of the Aryan people is a more recent falsehood which also led to untold human suffering. Recovering from these evil stories is a multigenerational effort.

That's why any story we hear – especially when widely accepted – should trigger something else: doubt. Take time every day to examine different beliefs, and stay skeptical. Doubt is an essential counterbalance to story, and one we should keep developing as we struggle to become more independent thinkers and better human beings.

My heartbreak is two stories in particular that my generation failed to fully develop, which is why I'm passing the baton to all of you. They're about equality and interdependence.

When Karl Marx rejected the exploitative factories of the 1800s, his story was about replacing the bosses with a dictatorship of the proletariat, power to the people! Unfortunately, we came to learn that dictatorships of any flavor stifle human flourishing. We need a new story around equality, something beyond Margaret Thatcher and Karl Marx, that bonds together the very lucky and less lucky.

By very lucky, I mean those born beautiful, healthy, athletic, intelligent, empathetic; those born in peaceful countries to caring parents and those who got bedtime stories read to them every night. Many of you, like me, have won several of these lotteries, and also have worked hard to build on that luck. So what is the duty of the more lucky to the less lucky? In the natural world, it is zero. The lion feels no obligation towards the lamb. And the human world isn't much different. In the United States, we tell ourselves a story about rugged individualism, which encourages people to work hard and to keep what they produce, without the obligation to share much with others around the world. My generation did not find a new story that provides the moral backbone to an era of common prosperity for both the very lucky and less lucky. I hope you find such a story, which changes human behavior toward each other.

Another story my generation had only partial success in is interdependence for preventing war.

For almost a thousand years, major European countries fought each other virtually nonstop. Then, after World War II, European leaders said never again. They worked to tie countries like Germany and France together economically – the basic idea behind the European Union. And it worked. Today, the EU isn't perfect, but it has succeeded in avoiding war in the core of Europe for the first time in history. The story of European identity is a huge success. France and Britain may squabble in football, but it's not the 100 Years War of the 1400s.

Now, on a global scale, this story fell flat. Leaders in my generation have been working to economically knit the whole world together through trade, so that war between any two countries would be unthinkable. We were this close [pinch fingers] to giving you a peaceful interdependent world, but as we've seen with Russia's invasion of Ukraine, we failed, and now the world is decoupling into hostile blocks.

Our story – about how globalization inhibits war – wasn't good enough. That's why it's up to your generation to come up with a better story about the connection between countries – one that is more powerful, and more heartfelt, than globalization – a story that ends war.

Inventions and stories. One is about harnessing the natural world; the other is about harnessing the human spirit. One is about generating more power and prosperity; the other is about generating large scale human cooperation. Both are avenues for progress.

Now, at this point some of you are probably thinking, "This is all well and good, but I need some downtime. I've just spent four years working my butt off. Can't I get a little time to Netflix and chill before I have to go out and save the world?"

The answer, of course, is yes - which brings me to my final point.

We all know the story about the tortoise and the hare. Some of you will leave here today and be hares – getting your first jobs at Bain and Google and Goldman, curing your first disease or making your first billion by the time you're 30. I hope you stay grounded with all that early success.

Others of you will be tortoises and start out slow. Maybe your path won't be clear, or you'll keep starting over in different areas. Maybe you'll fail at some things. You'll read the class notes five years in, and wonder about yourself for not doing as well as your classmates, and then you'll chastise yourself for thinking that way. Please, if you're a tortoise, embrace it. Collect experiences and wisdom that will serve you later on. Applaud your hare friends and their successes, but don't let it bother you. When you are older, you will love each other more if you accept each others unique paths now.

I was more tortoise than hare. I didn't have my first romance until I was 20. After undergrad, I taught high school math for a few years in the kingdom of Eswatini. And when I eventually made it to grad school at Stanford, I was far behind my classmates and I wondered why I had spent so much time in Africa. In hindsight, the challenges I faced as a teacher gave me the resilience and empathy to be a better CEO.

I didn't start Netflix until I was 37.

I didn't figure out the value of real honesty until marriage counseling made me realize that I often said one thing but did another. Fortunately, I learned, and Patty and I are celebrating our 31st anniversary this summer.

My point is that if you're a tortoise – emotionally, economically, intellectually, artistically, or otherwise – don't despair. You have the rest of your life to create the inventions and the stories that the world needs.

Michelangelo talked about releasing a statue from a block of marble, as if the statue had its own destiny and he was simply its handmaid. I think of ideas in the same way – they have their own destiny, and our job as handmaids is to help these ideas burst out of their marble block.

Graduates, carve your own marble until you release the invention or story that is yearning to breathe. I know you can do it, because you grew up on the Farm.

Thank you, Class of 2022!