

Caleb Wagner

### Valedictorian Speech

Good evening ladies and gentlemen, family, friends, faculty, and most of all, the illustrious class of 2016. I am truly honored to stand here before you and give to you one of the last lessons that you will receive at Trinity High School. I must confess, I am a little nervous to give a speech in front of so many people, and I can say you all seem so much bigger than I imagined. And no that wasn't a short joke. Size is something that I have dealt with my whole life, but the size that I wish to talk about tonight is much more intriguing than my own physical height; it is the size of the universe. Now I'm going to throw some numbers at you but I promise that there is a point to all of this. You are one person out of roughly seven billion, on a planet in a solar system of seven other planets plus Pluto. In the Milky Way there are over 500 other solar systems, that include at least 100 billion stars. The Hubble Telescope has revealed that our galaxy, the Milky Way, is but one of over a 100 billion other galaxies, and that the size of the universe is 91 billion lightyears across, a number that continues to increase. To put this in perspective, if you were to place a penny down in front of you and pretend that it is the sun, the nearest star, Alpha Centauri, would be 350 miles away. So where do we find meaning in this? How does anything that we do matter? I mean in the grand scheme of the universe, we are practically nothing right?

The answer to this question is much simpler than you may think because it is sitting in front of me right now. Think about this. In the 91 billion lightyears that is the universe, there is only one you. You are one of the greatest occurrences in all the universe. The probability that you should even exist is almost impossible to comprehend. If you were to assume that only one percent of all Earth-like planets in the universe were to develop life similar to ours, it would mean there would be roughly 10 quadrillion intelligent civilizations in the observable universe. But that's not how it happened. As far as we know, only one planet has life on it, with 7 billion

organisms comprising a, for the most part, intelligent civilization. Even better, you would think that of all the humans that have ever existed, there are bound to be some identical copies. And yet again, there are not. Every human being is so special and so different. Just looking out at my classmates you can see how amazing and unique we all are.

We really are alone in the universe. As far as we know, there is no one else coming to save us. When we destroy our world in nuclear fire and a hailstorm of bullets, it will barely have an effect on the universe. And yet, this is our only home. We have to start ourselves on a new path, one that leads us towards a future of love. I am not saying that we should forget the struggles of the past, for without the darkness there would be no stars. But I am saying that it is our duty to make change. If you want the world to change, then you have to be the change. Let our message that changes the world be the one thing that unites us all; we are all human beings.

I tell you this to remind you of the most astonishing tale of beating the odds, and how the size of the universe is important in our own lives. The universe began from the size of a subatomic particle that after almost 14 billion years has expanded to the grand size that it is today. The lesson to be learned from this is that change happens in small ways. Who would have thought that a universe stretching 91 billion lightyears across could have been made by something the size of a proton. And just as one small particle can change all of existence, we know on earth that it takes one small idea to change the world.

Science tells us that it takes two people to affect change. The first person is the one who initiates change. The second is the one who makes it ok to participate in the change. Every movement in human history started this way, from deciding to settle down and farm to the American Revolution to the Civil Rights Movement. All of these things started with only two people. One person alone cannot change the world, but with others they can. Perhaps why we feel most at home with Trinity is because we are a community, one that supports its members. If

one person wishes to make a change, there is always someone else behind them supporting the person in their cause. I encourage you to not be afraid to be one of these two people. Never forget how one small idea can change the world. Maybe you decide to talk to someone you have never met before, or open your mind to new ideas. Whatever it is, if the universe serves as an example, these small changes have the potential to become something greater. Just look at how far humanity has changed in a relatively short span of time. We started out as hunter-gatherers, picking berries from bushes and wallowing in the mud and the slime to bring home food for dinner. And yet we aspired to be more, such that we now plan on sending humans to Mars in the next few years. You are a part of this amazing tale. Remember that the sky is not the limit. There is plenty of room in the universe to dream big.

And we may never know where one small change will lead. Change often happens in unexpected ways. Take for example Johannes Gutenberg's invention of the printing press, which revolutionized the world by spreading new thoughts and new ideas. Yet one unexpected effect of the printing press was the need for eyeglasses to help people read. The mass demand for glasses inspired people to begin experimenting with lenses, which in turn led to the invention of the microscope, which in turn led to the discovery of the microscopic cells that comprise our bodies, a facet that ultimately led to the creation of modern medicine.

Change happens in many ways, and it is the privilege of humans to be a part of it. As you move forward in your lives, carry this message with you. Think about the probability of life the next time you insult someone for being different, or become angry when someone does not agree with you. Should you ever forget this message, all you have to do is look up at the stars, remember your place in the universe, and know that life is just too precious to waste it. I wish you the best of luck in college and in all the years to come, and just know that all of you here have made a lifelong friend in me. In times of trouble or joy, you can always come to me for advice, for quirky facts, or just a shoulder to cry on. Together, we have the potential to bring

about peace and love, together we can inspire galaxies of greatness, together we can pioneer a new age of harmony. Although our movement may be small at first, trust that it only takes something small to change the world. Thank you and Godspeed.