

**"THE FUTURE
DEPENDS ON
WHAT WE DO IN
THE PRESENT."**

- Mahatma Gandhi

Social Change



The first resistance to social change is to say it's not necessary.

(Gloria Steinem)

Ideology

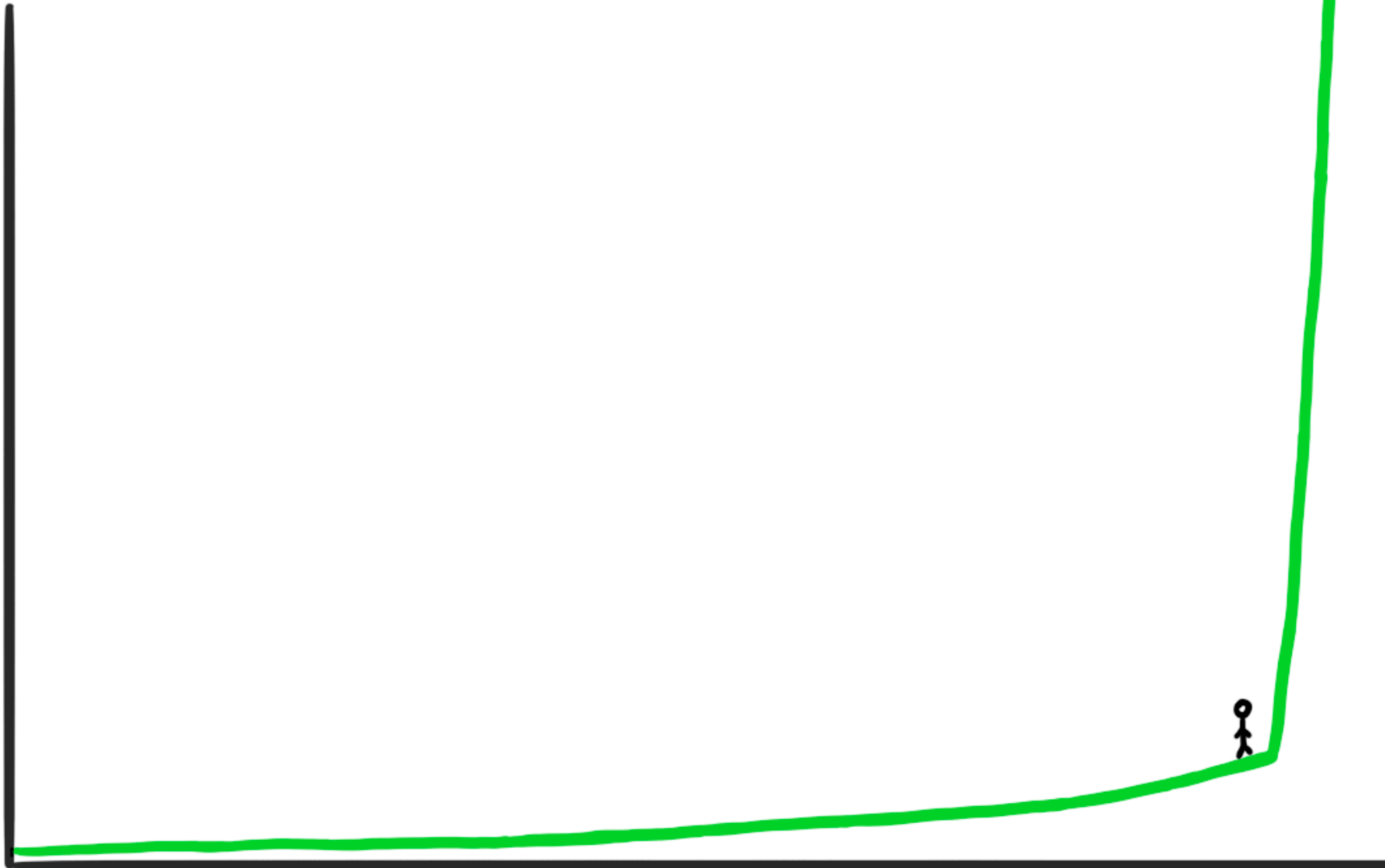
- System of beliefs or ideas that justifies the social, moral, religious, political, or economic interests held by a group or by society.
- Social Movement- long-term conscious effort to promote or prevent social change

Technology

- Knowledge and tools people use to manipulate their environment.
- How has technology changed the world in the last 30 years?
 - 20 years?
 - Plasma TV- 1997
 - Tivo- 1999
 - iPod- 2001

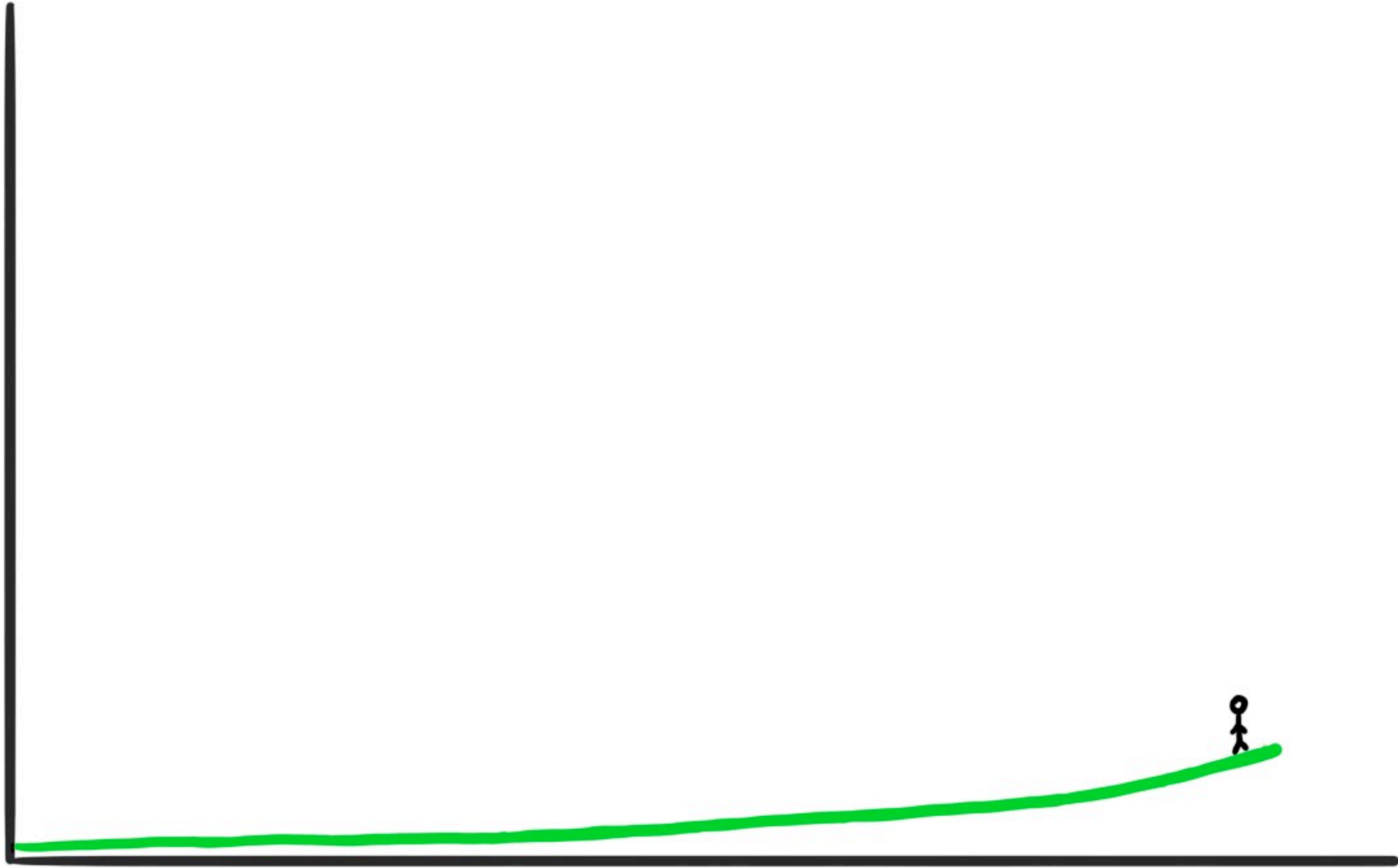


Human Progress



Time

Human Progress



Time

- Imagine taking a time machine back to 1750—world was in a permanent power outage, long-distance communication meant either yelling loudly or firing a cannon in the air, and all transportation ran on hay.
- Grab a dude, bring him to 2015, and then walk him around and watch him react to everything.
 - shiny capsules racing by on a highway
 - talk to people who had been on the other side of the ocean earlier in the day
 - watch sports that were being played 1,000 miles away
 - hear a musical performance that happened 50 years ago
 - play with my magical wizard rectangle that he could use to capture a real-life image or record a living moment
 - generate a map with a paranormal moving blue dot that shows him where he is
 - look at someone's face and chat with them even though they're on the other side of the country
 - This is all before you show him the internet or the International Space Station, or nuclear weapons.

This experience for him wouldn't be surprising or shocking or even mind-blowing—those words aren't big enough.

He might actually die.

- But here's the interesting thing—if HE then went back to 1750 and wanted to try the same thing, he'd take the time machine and go back the same distance, get someone from around the year 1500, bring him to 1750, and show him everything.
 - The 1500 guy would be shocked by a lot of things—but he wouldn't die.
- It would be *far* less of an insane experience for him, because while 1500 and 1750 were very different, they were *much less* different than 1750 to 2015.
- The 1500 guy would learn some mind-bending stuff → space and physics, and he'd have to do some major revisions of his world map. But watching everyday life go by in 1750—transportation, communication, etc.—definitely wouldn't make him die.
- For the 1750 guy to have as much fun he'd have to go all the way back to about 12,000 BC, before the First Agricultural Revolution gave rise to the first cities and to the concept of civilization. Someone from a purely hunter-gatherer world—from a time when humans were, more or less, just another animal species—saw the vast human empires of 1750 with their towering churches, their ocean-crossing ships, their concept of being “inside,” and their enormous mountain of collective, accumulated human knowledge and discovery—he'd likely die.
- *He* got jealous and wanted to do the same thing. If he went 12,000 years to 24,000 BC and got a guy and brought him to 12,000 BC, he'd show the guy everything and the guy would be like, “Okay what's your point who cares.” For the 12,000 BC guy to have the same fun, he'd have to go back over 100,000 years and get someone he could show fire and language to for the first time.

Die Progress Unit (DPU)

(This is a real term)

A person transported into the future and die from the level of shock they'd experience

100,000 B.C. → 12,000 B.C.

12,000 B.C. → 1750

1750 → ?

- This pattern—human progress moving quicker and quicker as time goes on—is what futurist Ray Kurzweil calls human history's Law of Accelerating Returns.
- This happens because more advanced societies have the ability to progress at a faster *rate* than less advanced societies—*because* they're more advanced.
- 19th century humanity knew more and had better technology than 15th century humanity, so it's no surprise that humanity made far more advances in the 19th century than in the 15th century—15th century humanity was no match for 19th century humanity

- *Back to the Future* came out in 1985, and “the past” took place in 1955.
 - 1955→ he was caught off-guard by the newness of TVs, the prices of soda, the lack of love for shrill electric guitar, and the variation in slang.
 - It was a different world, yes—but if the movie were made today **2016** and the past took place in 1985, the movie could have had *much* more fun with *much* bigger differences. The character would be in a time before personal computers, internet, or cell phones—today’s Marty McFly, a teenager born in the late 90s, would be much more out of place in 1985 than the movie’s Marty McFly was in 1955.

Law of Accelerating Returns

- The average rate of advancement between 1985 and 2015 was higher than the rate between 1955 and 1985—because the former was a more advanced world—so much more change happened in the most recent 30 years than in the prior 30.
- Kurzweil suggests that the progress of the ENTIRE 20th century would have been achieved in only 20 years at the rate of advancement in the year 2000
 - 2000-2014→ 19th Century worth of progress
 - 2014-2021→ Another century
 - 2030 → 20th century every few months
 - 2050→ Multiple times a month
 - 21st Century (2000-2099)→ **1,000 times** the progress of the 20th Century

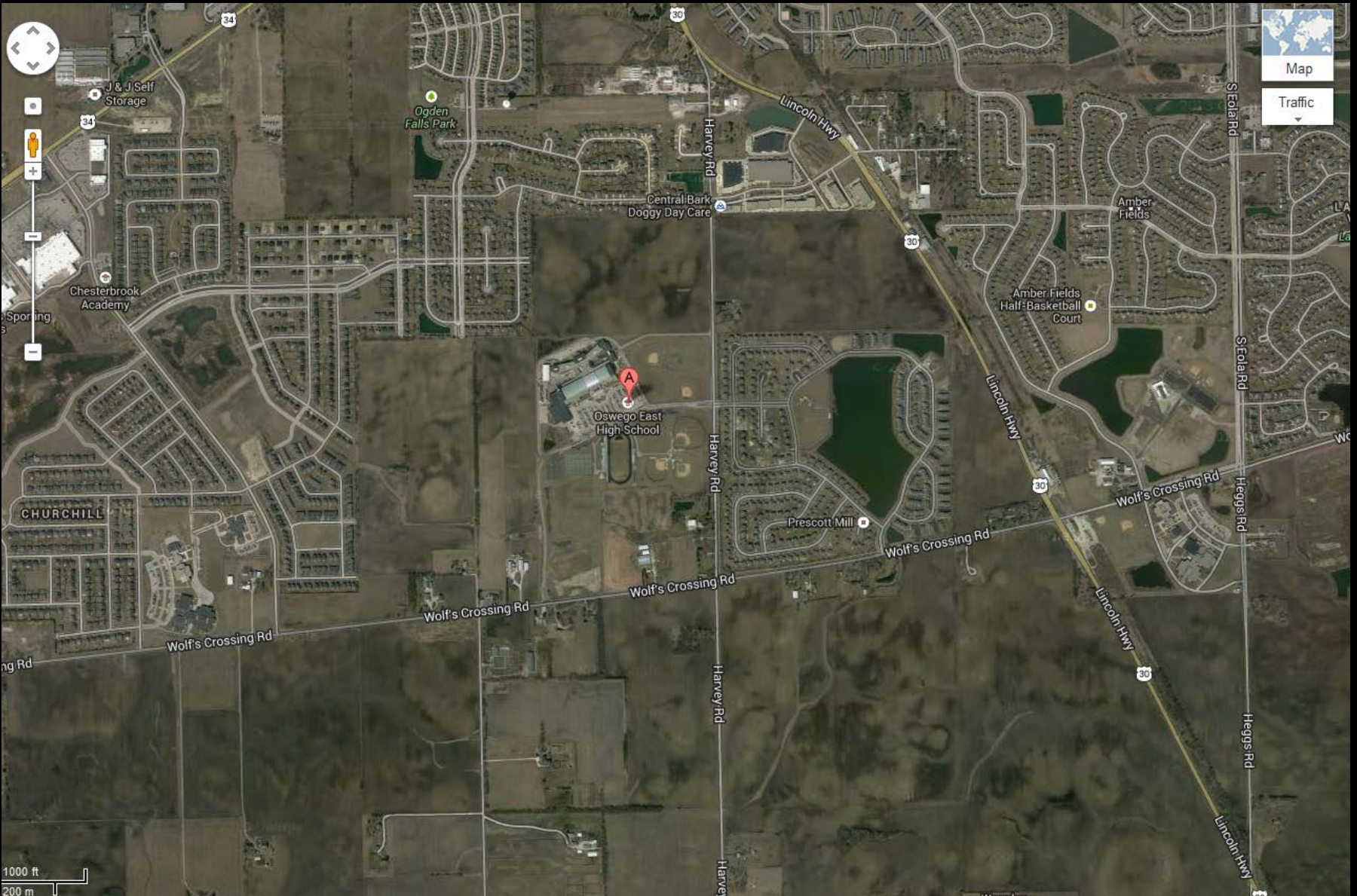
- If they are right, then we in **2016** may be as blown away by **2030** as the 1750 guy was in 2015.
 - The next DPU might only take a couple decades—and the world in 2050 might be so vastly different than today's world that we would barely recognize it.

This isn't science fiction. It's what many scientists smarter and more knowledgeable than you or I firmly believe—and if you look at history, it's what we should logically predict.



10 years?

- Wi-Fi- 2003
- Google Maps- 2005
- iPhone- 2007



Map

Traffic



1000 ft
200 m



Oswego East High School

100 ft
50 m

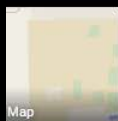
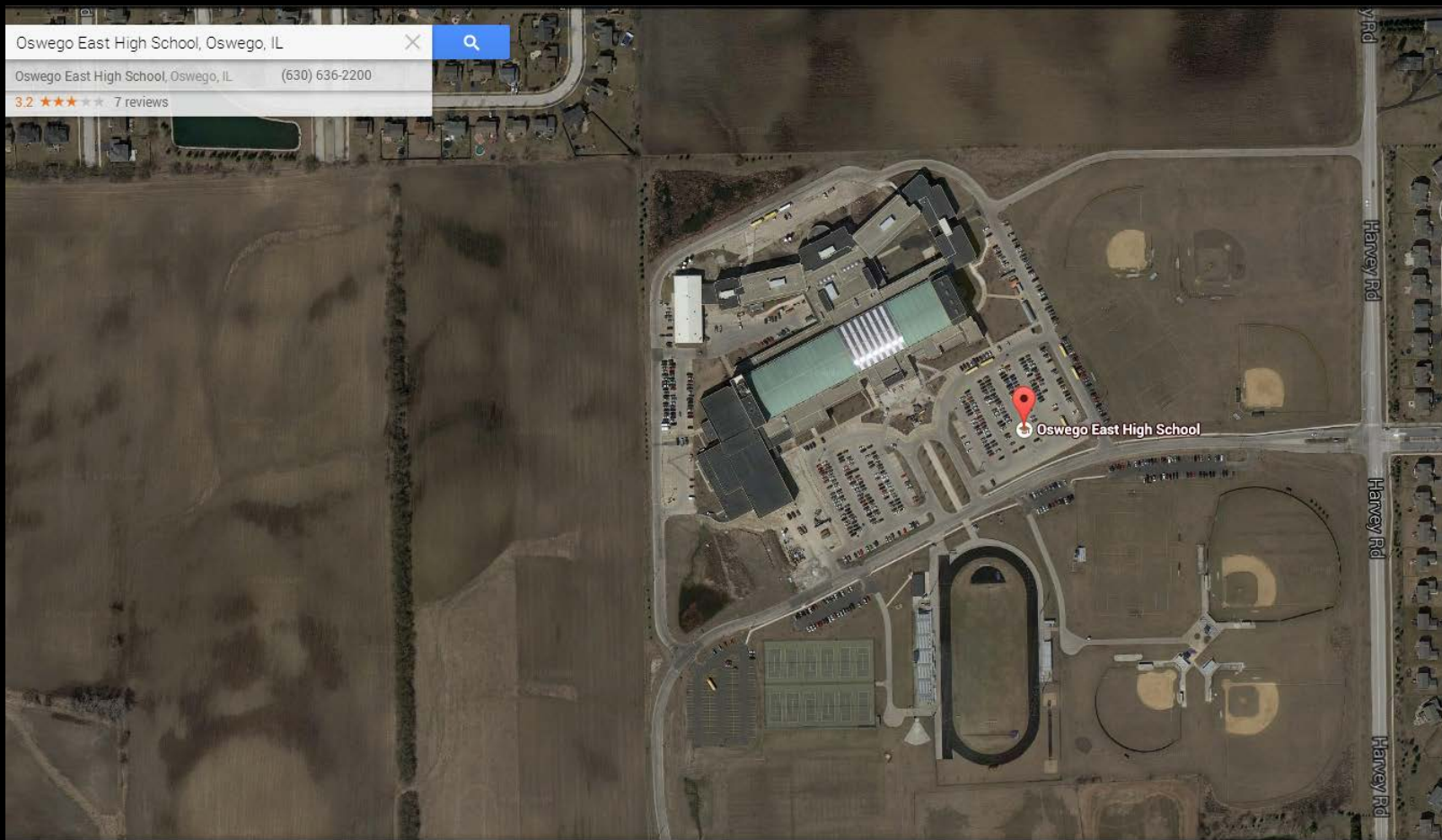





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5 years?

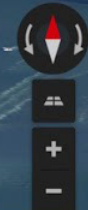


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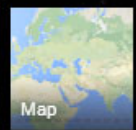
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Google



Climbing Mt. Everest

by Murphy Cooper

1953 - Sir Edmund Hillary
Tenzing Norgay
First Ascent

1975 - Junko Tabei
First Female Ascent

1980 - Leszek Cichy
Krzysztof Wielicki
First Winter Ascent

2001 - Erik Weihenmayer
First Blind Ascent

2004 - Pemba Dorje
Fastest Ascent

2013 - Yuichiro Miura
Oldest Person to Summit

29,092 ft

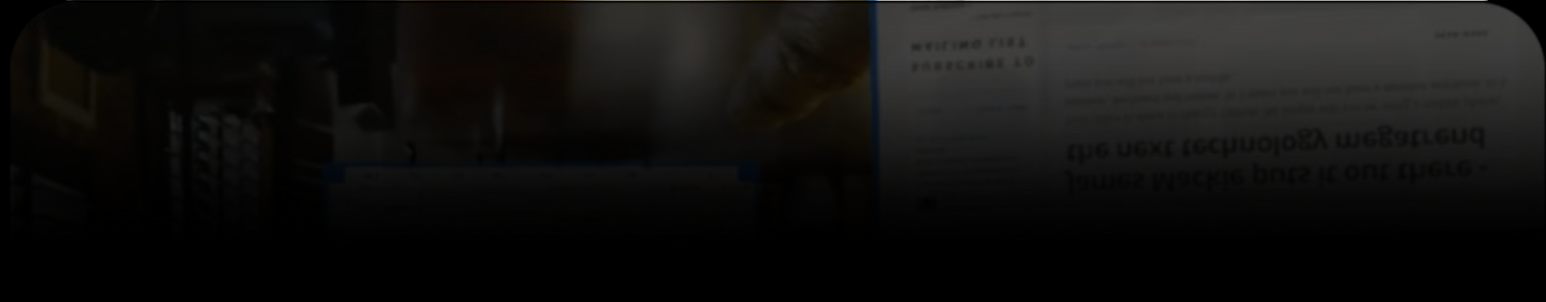
16,000 ft





Maui

W9ni





What about the future?



HANDHELD DISPLAY GLASS

Thin & Lightweight, Damage Resistant, 3D-Projection Ready

Thin & Lightweight, Damage Resistant, 3D-Projection Ready
HANDHELD DISPLAY GLASS



CORNING



HANDHELD DISPLAY GLASS

Thin & Lightweight, Damage Resistant, 3D-Projection Ready



HANDHELD DISPLAY GLASS



In what ways do you think technology will affect your lives?

- Good ways?

- Bad ways?

- Tonight, I want you to find a current article that discusses inventions or technology that will be introduced in the near future and its potential impact on the world/our society.
- Sources that will work:
 - Science website or science Magazines: Popular Science, Science magazine, Gizmag, Wired, etc.
 - College website
 - Newspaper article
- Tomorrow you will share with the class what you found and what you think its potential impact on the world may be.

Social Change

