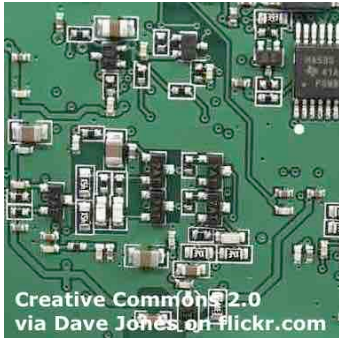


## Brain-hacking chip could give us superpowers

31st August, 2020



Technology trailblazer Elon Musk has unveiled a pig with a computer chip implanted in her brain that could pave the way to computer-to-brain interfaces in humans. Mr Musk has a near-unrivalled record in pioneering technology, from electric cars and

hyperloop travel to space tourism. Gertrude the pig showcases his latest ambition - to allow us to control computers with our brains. Conversely, computers could enhance our brainpower and abilities. The interface is part of a tech startup called Neuralink. Mr Musk announced that trials would soon begin on humans. He believes the technology represents a giant leap into the future and will considerably change our lives by giving us superhuman powers.

The results shown in Gertrude the pig were somewhat modest in comparison to the potential Mr Musk envisages the technology will one day deliver. He hopes Neuralink will help people with neurological conditions like strokes, dementia and headaches. It could also mean our brain is wired directly to the Internet. Just like in a science fiction movie, we could control phones, computers and household devices simply with the power of thought. The most mind-blowing aspect of the technology is what Musk calls "superhuman cognition". This is to counter artificial intelligence becoming powerful enough to destroy the human race. He added the technology will "achieve symbiosis with artificial intelligence".

Sources: [bbc.com](http://bbc.com) / [wired.com](http://wired.com) / [vox.com](http://vox.com)

## Writing

Everyone should have superhuman powers. Discuss.

## Chat

Talk about these words from the article.

technology / trailblazer / pig / computer chip / interface / ambition / humans / future / comparison / neurological / potential / dementia / mind-blowing / artificial intelligence

## True / False

- a) Elon Musk has trialed brain-hacking on a male pig. T / F
- b) The article says Elon Musk has no rivals as a technology pioneer. T / F
- c) The new technology could allow our thoughts to control computers. T / F
- d) Elon Musk believes the technology could give us superhuman powers. T / F
- e) Elon Musk said the pig used in the trials was very modest. T / F
- f) The new technology could help people with dementia. T / F
- g) The article says we could use our minds to blow things. T / F
- h) The technology could stop artificial intelligence from destroying us. T / F

## Synonym Match

(The words in **bold** are from the news article.)

- |                        |               |
|------------------------|---------------|
| 1. <b>unveiled</b>     | a. limited    |
| 2. <b>pave the way</b> | b. highlights |
| 3. <b>pioneering</b>   | c. greatly    |
| 4. <b>showcases</b>    | d. imagines   |
| 5. <b>considerably</b> | e. revealed   |
| 6. <b>modest</b>       | f. feature    |
| 7. <b>envisages</b>    | g. attain     |
| 8. <b>devices</b>      | h. prepare    |
| 9. <b>aspect</b>       | i. gadgets    |
| 10. <b>achieve</b>     | j. innovative |

## Discussion – Student A

- a) Who are your favourite technology trailblazers?
- b) What do you know about Elon Musk?
- c) Is technology moving too fast nowadays?
- d) What do you think of computer-to-brain interfaces?
- e) What do you think of electric cars?
- f) What do you think of space tourism?
- g) Would you like a computer chip connected to your brain?
- h) What superhuman powers would you like?

## Phrase Match

- |                                |                             |
|--------------------------------|-----------------------------|
| 1. a computer chip implanted   | a. like strokes             |
| 2. a near-unrivalled record in | b. powers                   |
| 3. trials would soon begin     | c. in comparison            |
| 4. a giant leap                | d. race                     |
| 5. giving us superhuman        | e. on humans                |
| 6. somewhat modest             | f. pioneering technology    |
| 7. neurological conditions     | g. in her brain             |
| 8. our brain is wired          | h. blowing aspect           |
| 9. The most mind-              | i. into the future          |
| 10. destroy the human          | j. directly to the Internet |

## Discussion – Student B

- What do you think about what you read?
- What technology will we be using in 100 years from now?
- What do you think of technology ending all disease?
- Would you have a chip implant to boost your intelligence and health?
- How is life today like science fiction?
- Would you like to use the Internet just by using thought?
- How dangerous is artificial intelligence?
- What questions would you like to ask Elon Musk?

## Spelling

- Elon Musk has vleinude a pig
- a computer chip pdelimtna in her brain
- neognieipr technology
- ncehnea our brainpower
- The antrcfeei is part of a tech startup
- cyeoidnasblr change our lives
- somewhat dsemto in comparison
- people with clneguoilora conditions
- strokes, eimdanet and headaches
- superhuman otnigiocn
- counter iitcrifala intelligence
- achieve issboimys with artificial intelligence

### Answers – Synonym Match

1. e	2. h	3. j	4. b	5. c
6. a	7. d	8. i	9. f	10. g

## Role Play

### Role A – Flight

You think flight is the best superhuman power. Tell the others three reasons why. Tell them what is wrong with their powers. Also, tell the others which is the least useful of these (and why): invisibility, telepathy or amazing strength.

### Role B – Invisibility

You think invisibility is the best superhuman power. Tell the others three reasons why. Tell them what is wrong with their powers. Also, tell the others which is the least useful of these (and why): flight, telepathy or amazing strength.

### Role C – Telepathy

You think telepathy is the best superhuman power. Tell the others three reasons why. Tell them what is wrong with their powers. Also, tell the others which is the least useful of these (and why): invisibility, flight or amazing strength.

### Role D – Amazing Strength

You think amazing strength is the best superhuman power. Tell the others three reasons why. Tell them what is wrong with their powers. Also, tell the others which is the least useful of these (and why): invisibility, telepathy or flight.

## Speaking – Superhuman

Rank these with your partner. Put the best superhuman powers at the top. Change partners often and share your rankings.

- |                    |                |
|--------------------|----------------|
| • Immortality      | • Flight       |
| • Magical powers   | • Invisibility |
| • Shape shifting   | • Telepathy    |
| • Amazing strength | • X-ray vision |

### Answers – True False

a	F	b	F	c	T	d	T	e	F	f	T	g	F	h	T
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Answers to Phrase Match and Spelling are in the text.