



The Ethics of Memory Implants

Expanding the horizon of
the human potential

5 Steps to Human v.2.0

The ultimate prize: A non-biological brain

Short term:

- We already have implants for various regions of the brain; f.x.:

- MIT/Harvard: replacing the damaged retina-area with neuromorphics implants

- Long term: by "treating the circuitry" rather than adding chemicals to suppress neurotransmitters, we can have centers with implants that reverse effects of Parkinson, cerebral palsy, multiple sclerosis

5 Steps to Human v.2.0

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Long term

- Ultimately, we will place **sensors** in the brain that will be programmed to recognize brain patterns associated with certain activities and then stimulate the appropriate sequence of actions
- The result is . . .

5 Steps to Human v.2.0

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Long term:

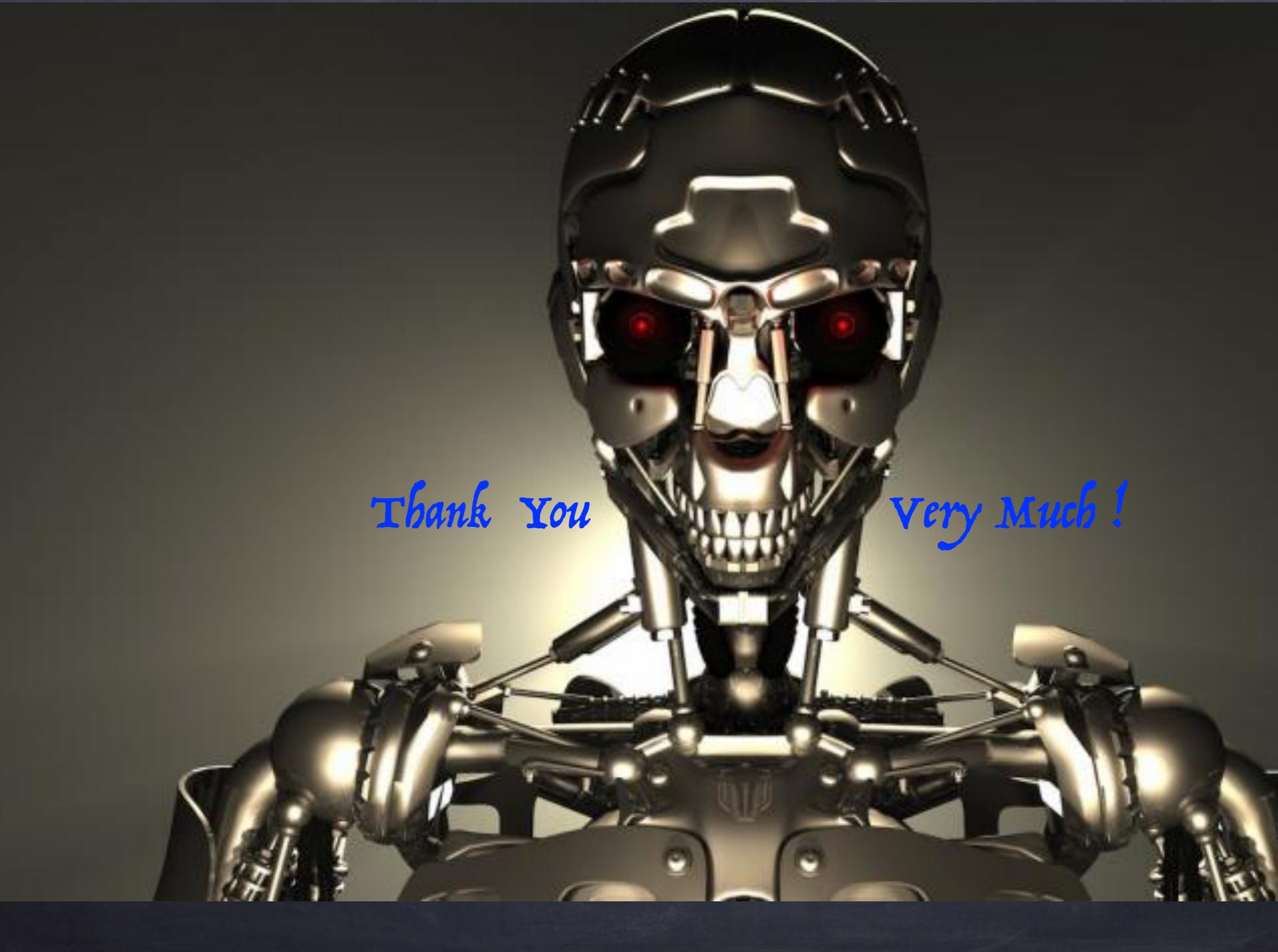
- E.g. :they can make paralyzed people walk again
- . . . and if the muscles don't work, we'll use nano-electro-mechanical systems (NEMS) that expand and contract the way muscles operate (designs already underway) based on real or synthetic nerves

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- **SUMMARY:**
- By **2025/2030**, Human v. 2.0 will be more non-biological than biological
- There will be many versions of Human v.2.0
- Technology for various organs and body parts will develop at **different pace**
- according to elimination of constraints

HUMANS v. 2.0

- Is H v.2.0 something we want?
- If not, can we avoid it?
- Who will decide on that?
- Will only the rich have access to H v 2
- or H v. 3?
- What will it all do to society?



Thank You

Very Much!