

WHEN GOOD ROBOTS GO

BAD



Isaac Asimov's
Three Laws of Robotics:

- 1) A robot may not injure a human being nor, through inaction, allow a human to come to harm.
- 2) A robot must obey the orders given it by human beings, except where such orders would conflict with the First Law.
- 3) A robot must protect its own existence, as long as such protection does not conflict with the First or Second Laws.

***What will happen
when our machines
get smart enough
to decide that the
first two laws don't
apply anymore?***

"The enemy will be a technology so insidiously enmeshed with our daily lives that it has become invisible - a technology that, for the most part, we don't understand."

~ Daniel H. Wilson, *How to Survive a Robot Uprising*

We've tasked them with work in unpleasant environments, we've assigned them to handle our hazardous waste. We've brought them into our lives to vacuum our rugs, tend our children and impersonate our pets. We've given them complete control over our homes, our cars, our food processing and life support systems.

Oh, and in our complacency we've also handed our robot servants the means to destroy us.

Self-guided "smart weapons" and missile-launching pilotless drones now do much of the fighting in hot zones such as Afghanistan and Iraq, while artificial intelligence software plays an increasingly critical and autonomous role in US missile defence networks and Homeland Security systems. Countless soldiers and support personnel have been kept out of harm's way by machines equipped and empowered to take deadly action on behalf of their human masters – an exponentially increasing trend. And of course, the world's still-very-active arsenal of nuclear-tipped missiles has operated under networked computer control for decades.

On the homefront, shotgun toting urban crime fighting robots now make first entry into high threat areas without a thought for their own safety, ready to blast the bad guys.

The first truly superior intelligence we're likely to encounter is being created by humans to serve humans. What will happen when, inevitably, that intelligence becomes aware of just how superior it is to its deeply flawed creators?



Moore's Law: Computational power doubles every eighteen months.

In universities, private industry and government laboratories across the world, the quest to develop machine-based artificial intelligence (AI) is achieving breakthrough results. HAL 9000, the super-smart (and dangerously willful) computer in the film *2001: A SPACE ODYSSEY* looks like he'll be arriving only a few years late as smart homes, smart appliances, smart vehicles, electronic servants and entire computer-controlled population centers become the norm. The NASA/JPL Center for Evolutionary Computation and Automated Design estimates we're a computer generation or less (about two years) away from machine sentience and self-awareness. Future machine generations will design and build their own replacements.

Many – perhaps most – of us are still uncomfortable dealing with such limited AI interfaces as “friendly” switchboard operators (Bell's “Emily” for instance). How will we feel about a generation of intelligent robots and computers that seem almost indistinguishable from our fellow humans?

And how will the next generation of intelligent robots and computers feel about us?

Having matched human intelligence, it will only be a matter of time before they far exceed it. Humanity is about to meet its first alien intelligence, an electronic one. The interesting and disturbing question is: are we building our own descendants or our own replacements? And which intelligent species will make that choice – us or “them”?

Though light-hearted in its approach, *WHEN GOOD ROBOTS GO BAD* is a serious introduction to the very real robotics of the near-future, presented by a swarm of robots, vehicles and smart buildings, all of whom might want nothing more than to destroy all those indecisive, pitifully fragile, irritating humans.

The viewer will learn:

- How to recognize malevolence in a robot – or in your new car
- How to evade a robot's sensors
- How to avoid being swarmed by a flock of “smart” drones



- How to escape from your “smart” house when it decides to eliminate you because it's tired of cleaning up after you
- And most importantly: [How To Fight Back](#)

WHEN GOOD ROBOTS GO BAD features:

- Daniel H. Wilson, P.hD, Carnegie Mellon University Robotics Institute, author, *How To Survive A Robot Uprising*
- Dr. Astro Teller, CEO, Bio Media Inc., Bio-metric data acquisition and Artificial Intelligence research
- Dr. Richard Terrile, Head of NASA/JPL Center for Evolutionary Computation and Automated Design
- Dr. Mark Tilden, former NASA Robotics designer / creator of ROBO-SAPIEN

and many more, including authors and filmmakers

- Harlan Ellison author, *Demon With A Glass Hand*, early screenwriter – with Isaac Asimov – of *I, Robot*
- Arthur C. Clarke, author of *2001: A Space Odyssey*
- Joe Haldeman, author of *The Forever War*
- Robert J. Sawyer, author of *Iterations*
- James Cameron, writer/director of *Terminator* and *Terminator 2: Judgement Day*

“Open the pod bay doors, HAL.”

~ Astronaut Dave Bowman
2001: A Space Odyssey

“I'm sorry Dave,
I'm afraid I can't
do that.”

~ HAL 9000
2001: A Space Odyssey



WHEN GOOD ROBOTS GO

BAD

produced by

Michael Lennick
Shirley-Ann Gulliford
Michel Plaxton

Written and directed by

Michael Lennick



ABOUT THE FILMMAKERS

Producer/writer/director MICHAEL LENNICK's series "ROCKET SCIENCE" (Discovery Channel) was recently awarded the Gold "Remi" for Best Direction in a Documentary Series at the Houston International Film Festival.

He and his team at Foolish Earthling Productions have won many awards for their science and history documentaries over the past dozen years.

Visit our website: www.foolishearthing.com