The Singularity, the MiniMaxularity, and Human Development

Selmer Bringsjord & Alexander Bringsjord

Are Humans Rational?

10/13/15

Selmer.Bringjsjord@gmail.com
The Singularity Approaches ...

\[ A: \]

**Premise 1**  There will be AI (created by HI and such that AI = HI).

**Premise 2**  If there is AI, there will be AI\(^+\) (created by AI).

**Premise 3**  If there is AI\(^+\), there will be AI\(^{++}\) (created by AI\(^+\)).

\[ \therefore S \]

There will be AI\(^{++}\) (= S will occur).
The Singularity Approaches ...

A:
Premise 1  There will be AI (created by HI and such that AI = HI).
Premise 2  If there is AI, there will be AI+ (created by AI).
Premise 3  If there is AI+, there will be AI++ (created by AI+).

∴ S  There will be AI++ (= S will occur).

(Good-Chalmers Argument)

(Kurzweil is an “extrapolationist.”)
A Realistic Timeline

past
Deep Blue

Watson

AI

MiniMax

Al<HI

Al=HI

Al>HI

present

foreseeable

future

seen

claimed

Sing

claimed

seen

foreseeable

future

AI

MiniMax

Watson

Deep Blue
Logicist Agent-based Economics: Foci …

- Formal Science of Science: Economics
- Hypercomputation: Economics/Innovation
- Mixed Rationality in Stylized “Tests”: Irrationality and Rationality in Deviant Bi-Pay Auctions
- Deliberative Multi-agent Strategy:
  - Corporate: Chain Store Paradox
  - Military: Nuclear Strategy (e.g., Iran)
- Detection: Fraud: Ponzi Scheming
- Microfinance: Roscas/Group Lending
- Effects of Future Robust AI on Human Employment
Logicist Agent-based Economics: Foci …

- Formal Science of Science:Economics
- Hypercomputation:Economics/Innovation
- Mixed Rationality in Stylized “Tests”: Irrationality and Rationality in Deviant Bi-Pay Auctions
- Deliberative Multi-agent Strategy:
  - Corporate:Chain Store Paradox
  - Military:Nuclear Strategy (e.g., Iran)
- Detection:Fraud:Ponzi Scheming
- Microfinance:Roscas/Group Lending
- Effects of Future Robust AI on Human Employment
Logicist Agent-based Economics: Foci ...

- Formal Science of Science: Economics
- Hypercomputation: Economics/Innovation
- Mixed Rationality in Stylized “Tests”: Irrationality and Rationality in Deviant Bi-Pay Auctions
- Deliberative Multi-agent Strategy:
  - Corporate: Chain Store Paradox
  - Military: Nuclear Strategy (e.g., Iran)
- Detection: Fraud: Ponzi Scheming
- Microfinance: Roscas/Group Lending
- Effects of Future Robust AI on Human Employment

Required (Quick) Reading

- http://kryten.mm.rpi.edu/SBringsjord_ABringsjord_SingularityBiz_0915151500.pdf
Who Else Has Seriously Thought About the AI-Employment Question?
Who Else Has Seriously Thought About the AI-Employment Question?

- Kelseo & Adler
Who Else Has Seriously Thought About the AI-Employment Question?

- Kelseo & Adler
- Herbert Simon
Who Else Has Seriously Thought About the AI-Employment Question?

- Kelseo & Adler
- Herbert Simon
- Jim Albus
Who Else Has Seriously Thought About the AI-Employment Question?

- Kelseo & Adler
- Herbert Simon
- Jim Albus
- Leontief & Duchin (automation)
Who Else Has Seriously Thought About the AI-Employment Question?

- Kelseo & Adler
- Herbert Simon
- Jim Albus
- Leontief & Duchin (automation)
- Nils Nilsson
Who Else Has Seriously Thought About the AI-Employment Question?

- Kelseo & Adler
- Herbert Simon
- Jim Albus
- Leontief & Duchin (automation)
- Nils Nilsson
- James Miller
Who Else Has Seriously Thought About the AI-Employment Question?

- Kelseo & Adler
- Herbert Simon
- Jim Albus
- Leontief & Duchin (automation)
- Nils Nilsson
- James Miller
- Brynjolfsson & McAfee
Who Else Has Seriously Thought About the AI-Employment Question?

• Kelseo & Adler
• Herbert Simon
• Jim Albus
• Leontief & Duchin (automation)
• Nils Nilsson
• James Miller
• Brynjolfsson & McAfee
• S Bringsjord, J Johnson, A Bringsjord
A Realistic Timeline

seen

Watson

foreseeable

claimed

Deep Blue

Al

MiniMax

Sing

Al<Hi

Al=Hi

Al>Hi

past

present

future
A Realistic Timeline

- Deep Blue: past
- MiniMax: present
- Watson: foreseeable future
- AI: seen
- AI creativity
- AI = HI
- AI < HI
- AI > HI
- Sing: claimed
A Realistic Timeline

- Deep Blue: past
- AI: present
- MiniMax: foreseeable
- Sing: claimed

Creativity

$?$
A Realistic Timeline

creativity

seen

foreseeable

claimed

past

present

future

Deep Blue  AI  MiniMax  Al<HI  Al=HI  Al>HI  Watson  Sing

$?
Further Reading for Rationalists
Further Reading for Rationalists

• Certain theorems inform our thinking, and specifically make The Singularity formally brittle, and perhaps just a pipe dream.
Further Reading for Rationalists

• Certain theorems inform our thinking, and specifically make The Singularity formally brittle, and perhaps just a pipe dream.

• Interested, see me.