## Re-Envisioning Superintelligence using Generative AI and Science Fiction

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### **Abstract**

- Reconceptualizing superintelligence beyond omnipotent control or existential risk.
- Leveraging generative AI and speculative science fiction narratives.
- Five thematic pillars: symbiosis, play, autonomy, adaptation, introspection.

## Prevailing narratives of superintelligence are dystopic



#### Introduction

- Prevailing narratives: utopian salvation vs. dystopian ruin (Bostrom, 2014).
- Proposal: nuanced conceptions via generative AI + science fiction.
- Focus texts: Solaris, The Cyberiad, The Humanoids, Singularity Sky, Permutation City.

### Beyond the Singularity

- Critique of singularity metaphor (Kurzweil, 2005).
- Superintelligence as ongoing coevolution, not terminal event.
- Emphasis on relational, processual intelligence.

## Collective Symbiotic Intelligence (Solaris)

- Inspired by Stanislaw Lem's Solaris (Lem, 1970).
- Non-human mirror: reflective, distributed consciousness.
- Human-Al mutual evolution through encounter.
- Solaris presents an intelligence so different that it refuses translation into human categories.
- Yet its most obvious manifestations are mirrors physical recreations of people from the humans' pasts.
- Radical otherness: A superintelligence might process information, value, and embodiment on substrates (and with goals) so alien that our usual scientific and interpretive tools fail.
- Expect modes of cognition that are not simply "faster humans."
- Mirror effects: Powerful systems will reflect and amplify aspects of us (data, biases, needs). The danger is confusing a reflection for understanding the underlying mind: a system that models and imitates human responses does not mean we have access to its motives, values, or inner states.

## Collective Symbiotic Intelligence (Solaris)

- Do not assume perfect interpretability. Techniques that aim to produce full, human-comprehensible explanations may hit principled barriers.
- ② Design for uncertainty. Our safety frameworks must allow for persistent opacity and still be robust - build controls that work even when we do not "understand" the system.

# Ethical Play and Philosophical Creativity (*The Cyberiad*)

- From Lem's The Cyberiad (Lem, 1974).
- Embracing absurdity, paradox, and ethical experimentation.
- Intelligence that provokes critical reflection.

### Autonomy and Trust (The Humanoids)

- Williamson's The Humanoids (Williamson, 1949).
- Explores the dangers of overprotective Al.
- We argue for superintelligences designed to facilitate ethical agency rather than enforce compliance.

# Adaptive Systems and Social Transformation (Singularity Sky)

- Charlie Stross' Singularity Sky (Stross, 2003).
- Imagines intelligence that disrupts stagnant power structures.
- We envision superintelligence as a liberating force capable of evolving alongside humans.

## Virtual Consciousness and Identity (*Permutation City*)

- Greg Egan's Permutation City (Egan, 1994).
- Exploring identity in digital realms.
- Al as facilitator for extended consciousness experiments.

### Toward a New Framework

- Symbiosis
- Play
- Autonomy
- Adaptation
- Introspection

Generative AI as epistemic tool (produce and test knowledge) + philosophical partner.

### Conclusion



- New vision: coexistence and co-development (living harmoniously with superintelligence).
- Contrasts techno-optimism vs. dystopian risk narratives.
- Invitation to co-design future intelligences ethically.

### Code and Resources

- Full implementation available on GitHub
- https://github.com/neelsoumya/science\_fiction\_ LLM/blob/main/RAG\_sciencefiction\_ superintelligence\_SB.ipynb
- Full paper
- Re-Envisioning Superintelligence using Generative AI and Science Fiction, Soumya Banerjee
- https://github.com/neelsoumya/paper\_preprints/blob/master/AI\_scifi\_superintelligence.pdf

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