COMPANIONS INTELLIGENT, PERSISTENT, PERSONALISED MULTIMODAL INTERFACES TO THE INTERNET

Artificial Intelligence and Religion

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COMPANIONS INTELLIGENT PERSISTENT PERSONALISED MULTIMODAL IN AFAC TIbetan Prayerwheel being turned by a stream



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- Starting with Cybernetics—the old embarassing relative of AI: Two pioneers: Wiener and Beer
- 2. Theology of omniscience and benevolence
- 3. Romantic visions of machines as perfect: (a) making human-like things
- 4. Romantic visions of machines as perfect: (b) augmenting humans
- Romantic visions of machines as perfect: (c) God-machines and Al religions



6. Automating religious practice



Always remember: great intellects are full of surprises

- "I am not a religious man, but I cannot help seeing every problem from a religious point of view." Wittgenstein
- Bayes, a cleric, derived his theorem (that underlies much modern AI) so as to defend miracles against Hume's arguments.
- Goedel spent his last years in Princeton on the Ontological Proof of God's existence.
- Dennett has written of his puzzlement at the survival of religious belief for Darwinists like himself—how can it have survival value?



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COMPANIONS INTELLIGENT, PERSISTENT, PERSON LISED Shows bernetics and Al

- Cybernetics (1950s and 60s)
 - Continuous mathematics
 - Anti-representations
 - Analogue computing
 - Modelling animals, insects
 - Models based on brains and networks
 - Based on feedback and learning
- Grey Walter's "tortoises" that went about a room seeking electric plugs so as to keep going.



Banished to the attic by AI





Cybernetics and AI

- Traditional symbolic AI (1950-1990)
 - Based on representations and logic
 - Digital hardware
 - Intelligence independent of brains, animals, humans etc. (John McCarthy)
 - Non-statistical
 - Not continuous mathematics
- This declined with the rise of Machine Learning in the 1990s



Cybernetics

- The word almost vanished by 1980s
- Old discredited ancestor of AI, locked in the attic and forgotten
- Now out and about again with the rise of Machine Learning which has many of its features.
- It profoundly influenced much modern French thought (Lyotard et al.)





Feedback as a mathematical notion

NORBERT WIENER

GOD AND GOLEM, Inc.



A Comment on Certain Points where Cybernetics Impinges on Religion





God and Golem

• The Great Golem of Prague C16





COMPANIONS INTELLIGENT PERSONALISED WULTIMODAL IN WIENER'S monograph (1961)

- He argued there was a cosmic, evolutionary, significance in selfreproducing machines
- These were now in principle possible and humans would then take on a key function of a God that makes things in its own image
- Evolution is just the mechanism for this, and cybernetics is part of evolution.
- What, he asked, is the *image* of the machine to be?



C O M P A CONSTITUTE LIGENT, PERSISTE Stafford Beer 1926-2002

- The original UK cyberneticist
- 1966 paper on "Knowledge of God"
 - "Hylozoism: everything is alive (cf. Panpsychism: all is mind)
 - Cybernetics a system of black boxes that adapt to the world, learn it, but cannot know it.
 - The world as incomprehensible (cf. Heidegger), vs. conventional science as knowing a comprehensible world



 Compare modern machine learning that models, but does not explain. COMPANIONS INTELLIGENT, PERSISTENT, PERSONALISED MULTIMODAL INTERFACES TO THE INTERNET

2. Theology of omniscience, benevolence and consciousness

A machine with God-like traditional properties?





COMPANIONS INTELLIGENT, PERSISTENT, PERSONALISED MULTIMODAL INTERFACES TO THE INTERNET OMNISCIENCE

- Knowing everything, a classic property of God.
- Laplace's demon (19C) would know the positions and velocities of all atoms in the universe but would need 10*120 bits for that—more computing than could be done in the history of the universe.
- Is the WWW approaching a state that practically knows everything as facts?
- Cf. Danto on knowing the facts but not knowing the significance of anything!**



** we'll come back to this later

COMPANIONS INTELLIGENT, PERSISTENT, PERSONALISED MULTIMODAL INTERFACES TO THE INTERNET CONSCIOUSNESS

- Could something that knew everything be conscious—a notion which seems to imply attention/focus.
- The girl with the brain implant in TV's Years and Years: could she be aware of every beggar in Delhi?
- Leibniz's God—the supreme Monad---had awareness of all lower dimmer Monads
- Hegel 19C and world consciousness---us as the the knowing part of the universe,
 coming into being? The WWW?





Benevolence

- The "Bostrom problem"—would a superintelligence be benign?
- Bostrom believes (in *Superintelligence*) it would probably destroy us.
- Humans have generally thought their creator benign, so why would a superintelligence not continue that tradition?







3. Romantic visions of machines as perfect: (a) making human-like things





COMPANIONS INTELLIGENT, PERSISTENT, INTELLIGENT, PERSISTENT, INTELLIGENT, PERSISTENT, INTELLIGENT, PERSISTENT, INTERFACES TAKING Better Humans

- Ovid: Galatea and Pygmalion
 My Fair Lady!
- Kleist on Marionettentheater
- Puppets as more perfect than us:
 - No consciousness
 - Not "touching the ground"
- Perfection a step towards Godlikeness by definition





COMPANIONS INTELLIGENT, PERSISTENT, PERSONALISED MULTIMODAL INTERFACES TO THE INTERNET

Galatea and Pygmalion







COMPANIONS INTELLIGENT PERSISTENT PERSONALISED MULTIMODAL ITTERFALES TO THE IN GRAY ON Kleist: The Soul of the Marionette

- Gray explores self-awareness as a barrier to freedom
- JD Bernal 1929 "Consciousness itself might vanish in a humanity that had become completely etherialised".
- Mystical and Eastern traditions of overcoming consciousness





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- Japanese/Buddhist approach to machines seems different :
- "In Japan we believe all inanimate objects have a soul, so a metal robot is no different from a human in that respect, there are less boundaries between humans and objects," Prof Minoru Asada, President of the Robotics Society of Japan.
- On that view, there is no problem in making machines like us.





4. Romantic visions of machines as perfect:(b) augmenting humans





C O M P A N Making humans better: MULTIMODAL INTERFACES TO THE INTERNET IN BENEFICIENT DE LIGENT DE LIGEN

- The transformation of the <u>human</u> <u>condition</u> by developing and making widely available sophisticated technologies to greatly <u>enhance</u> <u>human</u> intellect and physiology
- Transhumanism via body parts
 Perfect soldiers
- Transhumanism via "brain upload":



 Am immortal digital existence in an artificial environment

Forerunners: the 19C and 1920s: Eugenics

- 19C Romantics:
 - Nietzsche's Superman
 - Mueller: "Will kein Gott auf Erden sein, sind wir selber Goetter" !!
- Julian Huxley, JD Bernal, JS Haldane---social Darwinists.
- Modern Transhumanism is a fusion of immortality, physical perfection, and union with intelligent machines that do not have to



die.

IJ Good, Kurzweil, and Bostrom: the "singularity"

 "Let an ultraintelligent machine be defined as a machine that can far surpass all the intellectual activities of any man however clever. Since the design of machines is one of these intellectual activities, an ultraintelligent machine could design even better machines.....the intelligence of man would be left far behind. Thus the first ultraintelligent machine is the last invention that man need ever make" (IJ Good 1965)



COMPANIONS INTELLIGENT, PERSISTENT, PERSONALISED THE INTERNET THE Singularity

- Kurzweil (along with Al-ers Hans Moravec, Hiroshi Ishiguro and Kevin Warwick) have argued that this ultraintelligent machine will fuse with humans and create Transhumanism.
- Oxford's Bostrom founded the World Transhumanist Association in 1998
- Kurzweil looks beyond the Singularity to say that "the intelligence that will emerge will continue to represent the human civilization." Further, he feels that "future machines will be human, even if they are not biological".



COMPANIONS NTELLIGENT, PERSISTENT, PERSONALISED ULTIMODAL INTERACES OT THE INTERNET Ishiguro's double: a step to immortality?







C O M P A N LO N S INTELLIGENT, PERSISTENT, PERSISTENT

- The solar powered video on Italian"vidstones"
- Not a brain download, but an upload of all writings and images on the web: your weblife plus years of conversation with your Comapnion.
- Deep fake voice and image
- Imagine asking a dead parent how they'd met, which you'd never asked.



C O M P A N I O N S INTELLIGENT PERSONALISED MULTIMORAN ACES FTHE INTERNET And of course, being in posthumous movies The late Oliver Read in *Gladiator*

"Death, thou shalt die" John Donne





COMPANIONS INTELLIGENT, PERSISTENT, PERSONALISED MULTIMODAL INTERFACES TO THE INTERNET

5. Romantic visions of machines as perfect: (c) Making Gods and God machines, Al religion







Making Gods: Three Abrahamic faiths and make "Make no graven image"

- Old fashioned way: e.g. Roman Emperors, Aaron's Golden Calf, Baal and the God of Iron. The Golem again.
- All representations of living things are *haram* in Islam.
- Religious statues in Protestantism, and Iconoclasm in the East





C O M SAN I O N.S INTELLIGENT Superintelligences as Gods?

- Superintelligences: but now not as enhanced humans but as gods
- Kurzweil insists that superintelligences will be fused with the human
- For Bostrom they will be monotheistic, inhuman and malevolent. But why?
- Wiener asked what the image of machine is to be. Von Neumann answered that "the ultimate automaton...that you yourself don't know any more what the automaton will be".



COMPANIONS INTELLIGENT Singularism as the Al religion

- Neil Lawrence: "In Singularianism doomsday is the 'technological singularity', the moment at which computers rapidly outstrip our capabilities and take over our world. The high priests are the scientists, and the aim is to bring about the latter while restraining the former.
- "Rapture for Nerds"
- Yudkowskys "singularitarian principles"



C O M P A N I O N S INTELLIGENT PER SIST PORTADOWSKI'S "AI Religion"

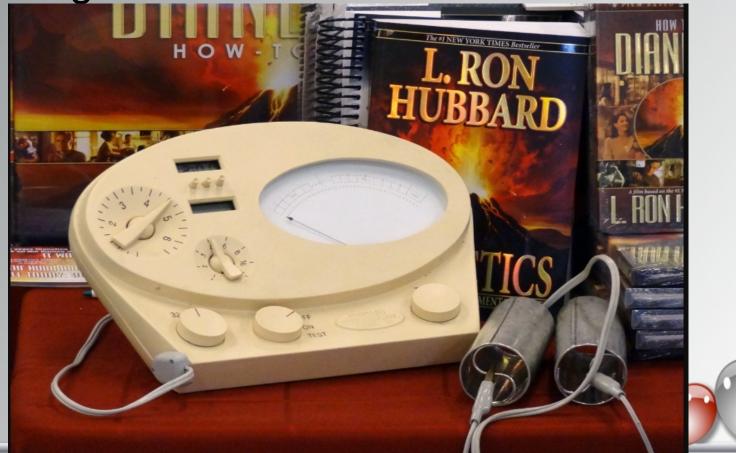
- To "develop and promote the realization of a Godhead based on Artificial Intelligence."
- Way of the Future, a registered church
- This harks back to Stafford Beer ""To people reared in the good liberal tradition, man is in principle infinitely wise; he pursues knowledge to its ultimate . . . To the cybernetician, man is part of a control system."
- Gray opposes Gnosticism vs. Cybernetics and von Neumann's "unknowability".



Back to "The web knows everything" and a whole we are part of?

to religion: Scientology's Emeter

A cargo-cult machine







7. Automating religious practice





COMPANIONS MULTIMODAL MACTING range of applications from the trivial to promising

- Some are trivial like the opening Tibetan prayer wheel in a stream
- Many simply automate access to texts and services
- Some, like MINDAR, are continuous with machine gods above.....
- More interesting ones seek to automate the role of priests/confessors
 through dialogue





A strong version: Mindar

 A robot Buddhist priest for blessings and funerals









Mindar

- Formed as Kannon, a Buddhist mercy figure
- In the Kodaiji temple in Kyoto, Japan.
- Sermons, advice, prayers, some interaction.
- Asian emphasis and Japanese attitudes: "all beings have the potential to become enlightened"
- Cheaper Chinese funeral services are now automated.
- Though there were mechanical praying monks in 16C Europe







A menu of Apps!

- An online pilgrimage at Chiswick (cf. Travel blogs)
- ALEXA will now do prayers on request (cf. bedtime stories)
- But for serious stuff, the problem is always *authority* : can machines have it?
- For Ceremonies, confessions etc.

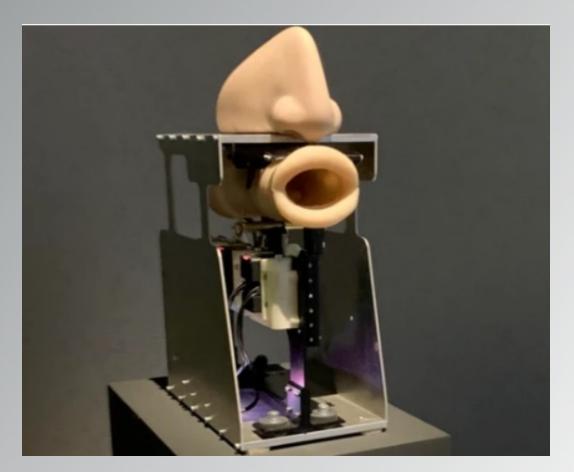


COMPANIONS INTELLIGENT, PERSIS MULTIMODAL INTERATO Design for a Companion Confessor

- That would know all about you and advise and correct
- Compare to automated sports coaches or psychotherapists
- Consider Yuval Harari's argument that when machines know us better than we know ourselves, the whole liberal individualist era is over.
- Consider someone else "knowing you better than you know yourself"



COMPANIONS INTELLIGENT, PERSISTENT, PERSONALISED MULTIMODAL IN REACE TO THE INTERTIFY Art at the Pompidou: random prayers







COMPANIONS INTELLIGENT, PERSISTENT, PERSIS

- Gray: "Gnosticism is the faith of people who believe themselves to be machines"
- Yuval Harari: trading off meaning and significance for full knowledge and control
- Lawrence: Godlike AI, all-knowing, as oppressive father or protective mother?
- But, at least Godlike Als must communicate in language, that they can't understand that better than us, and they will have to function at our speed.



COMPANIONS Conclusion: Human uniqueness?

- Lawrence: human uniqueness is in our slow output devices, which leads to human language and shared knowledge representations. Tiny signals.
- John Wisdom's analysis of "Prussia attacked France in 1870"
 - Language significance vs. full data
 - Language and what it really means
- Danto: knowing all possible facts and data is not knowing the meaning of events (for us or historians).



What theologians called *Imago Dei*: what is it, and could machines possess it?