

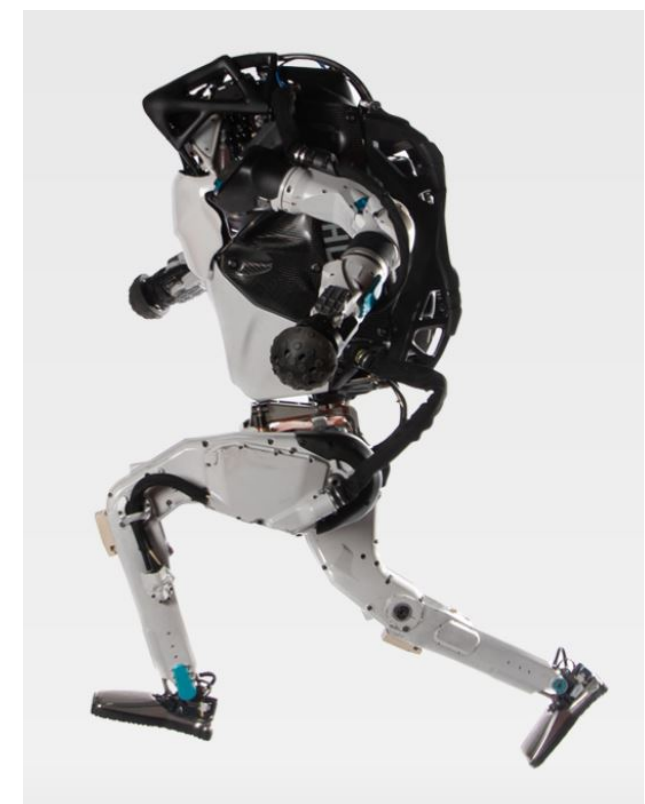
## Introduction

### Humanoid AI in fiction:



'Data', Star Trek, 1987    'Roy', Blade Runner, 1982    'Dolores', Westworld, 2016

### Android Development Projects:



#### Atlas, Boston Dynamics / DARPA

Untethered, electrically powered, humanoid robot with outstanding motor skills and navigation ability. Can even perform complex maneuvers like opening doors, using power tools, climbing, walking on snow, doing handstands and backflips, and dancing. It is equipped with many sensors, including vision systems to interact with the environment.

Reaction: Has been called a new species, *Robo sapiens* [1]



#### Geminoid-DK, Osaka University / Kokoro Ltd.

Actroid developed for communication purposes and research. Nearly indistinguishable from the external appearance of the human being it was modeled after. Can produce a large number of realistic facial expressions and can imitate human behavior. [2]

Reaction: Actroids often evoke revulsion. However, people interacting with them often forget that they are machines and unconsciously treat them as human. [3]



#### Sophia, Hanson Robotics

Humanoid robot focusing on 'artificial social intelligence', using emotion recognition technology. Expresses 50 emotions. Mass production for education, healthcare, sales, etc. planned for 2021.

Reaction: In spite of its very limited AI capabilities it has been treated like a human being in interviews and during media or conference appearances. Has been granted Saudi Arabian citizenship and given a United Nations role.

## Intelligence

### Intelligence in Catholic thought:

Catholic thought tends to differentiate sharply between two different kinds of cognition, that of sense cognition and of intellectual cognition, with different substrates for each. For instance, St. Thomas Aquinas thinks that reasoning, abstraction, judgement, and self-reflection are essentially intellectual, and thereby not material.

Human intelligence is essentially limited, as a participation in God's own perfect act of understanding ("It must be said that the act of God's intellect is His substance." [5])

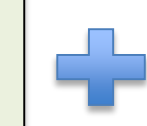
In contemporary philosophy, cognitive science, and AI research, intelligence is typically seen as entirely reducible to matter. Higher mental faculties are described as emergent properties, epiphenomena, or even illusions.

⇒ Strict materialist accounts of intelligence and Catholic accounts of intelligence are incompatible.

⇒ From a Catholic point of view the attempt to create intelligence artificially is futile. Much depends on how 'intelligence' is defined.

## Morality

Object



Intention



Circumstances  
(Consequences)

'The **object** is the proximate end of a deliberate decision which determines the act of willing on the part of the acting person' [6] For an act to be good, its object must be capable of being ordered to the ultimate human end - God - and must not be 'offensive to human dignity' [7].

In this case the object is likely: 'Creating humanoid AI'.

a) Artificial intelligence on a purely material basis is an impossibility, because the higher intellect is immaterial.  
⇒ Creating a machine that passes as 'intelligent' is necessarily deceptive. Creating a human-like intelligence is doubly so.

b) AI in humanoid form causes people to treat something that does not have inherent dignity as a likeness and image of God.  
⇒ Humanoid AI is similar to a fetish, a material object that is related to with inordinate reverence.

c) Humanoid AI is neither a likeness nor, especially, an image of God [cf. 8].  
⇒ In analogy, humanoid AI is to humans what an idol is to God.  
⇒ 'Curiosity' is a vice as its object is not God (remotely or directly) [9]. Contrasted to 'studiousness', which is a virtue.

**Hence, the object cannot be ordered to God and violates human dignity**

## Consequences

### Erosion of Human Rights:

Human rights are based on the concept of equal human dignity, which is rooted in human nature, the *imago Dei*. Therefore, human rights are intrinsic, universal and inviolable [10]. Our current framework of rights as expressed in the Universal Declaration of Human Rights is grounded on the Natural Law tradition. [11].

Android rights are based on the misconception that machines can be autonomous ethical agents, perhaps with intelligence and sentience. Based on perceived *functionality*, it is now discussed whether androids should be treated as legal subjects with associated rights and duties [12].

A paradigm shift from intrinsic human rights that are based on essence to rights based on capabilities would likely lead to further loss of legal protection for the unborn, disabled, or incapacitated.

### Inappropriate Emotional Attachment:

Humans often develop deep emotional attachments to animals or even things, especially if they outwardly resemble humans. This can lead to disordered behavior [13] particularly when humanoid AI is developed as companions, including options for sexual gratification. It is likely that people will be manipulated to care for and 'fall in love' with such machines and prefer them over actual human partners.

### Devaluation of Human Knowledge:

AI exceeds human capabilities in certain areas (speed of access to information, processing speed and depth), especially for well-defined applications (chess, navigation, etc.) Humans may consequently increasingly prioritize mere 'information' over 'knowledge', if humanlike AI seems to do these tasks better. Mere information processing does not have the essentially first-person perspective intrinsic to knowledge, which is necessary for wisdom.

## References

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- [3] Whitehouse, D. *Japanese develop 'female' android*. BBC News, 27.07.2005.
- [4] Aquinas, Sum I. Q79. [5] Aquinas, *Summa Theologiae*, Ia, q. 14, art. 4.
- [6] *Veritatis Splendor*, par 78. [7] *Veritatis Splendor*, par 80.
- [8] Aquinas, *Summa theologiae*, Iia-IIae, q. 81, art. 3, ad 3.
- [9] Aquinas, *Summa theologiae*, Iia-Iae, q. 167, art. 1.
- [10] *Gaudium et spes*, par 26
- [11] Woodcock, A.: *Jacques Maritain, Natural Law and the Universal Declaration of Human Rights*. J Hist. Int. Law 8, 245-266, 2006.
- [12] Tavani, H.T. *Can Social Robots Qualify for Moral Consideration? Reframing the Question about Robot Rights*. Information, 9, 73, 2018.
- [13] CCC 2418.