



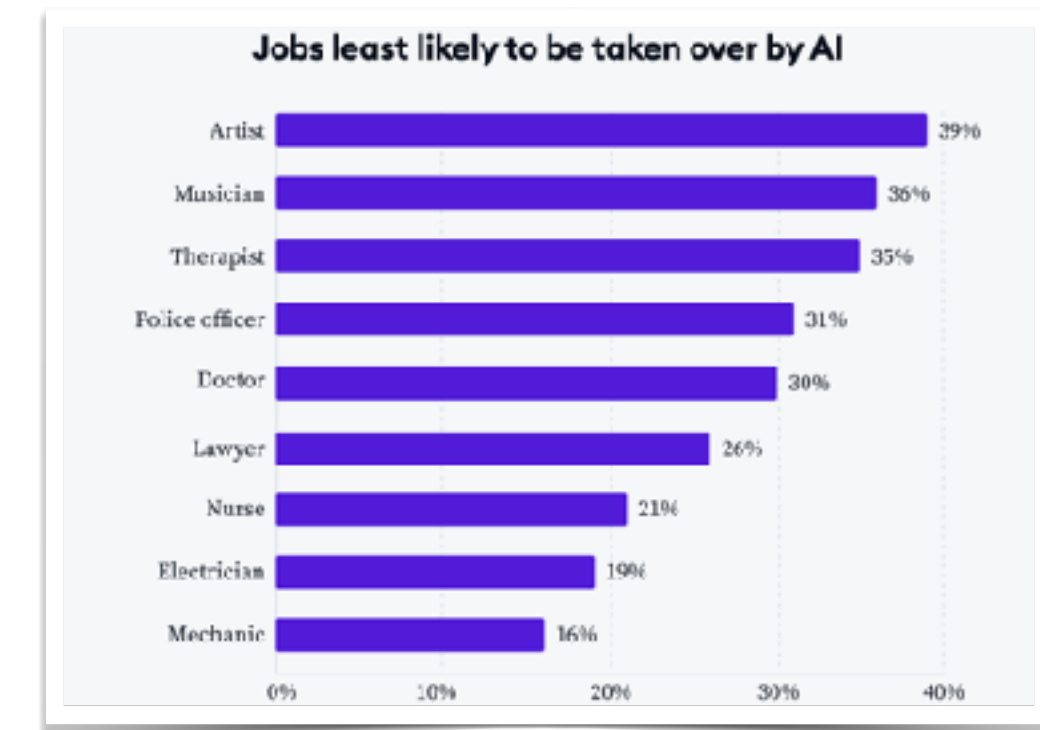
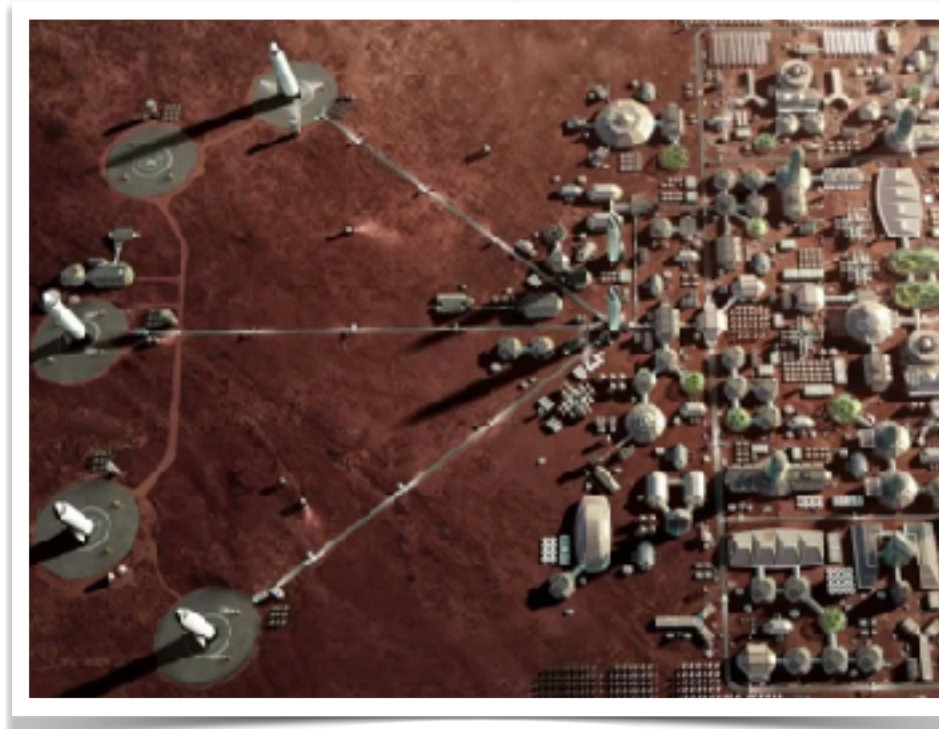
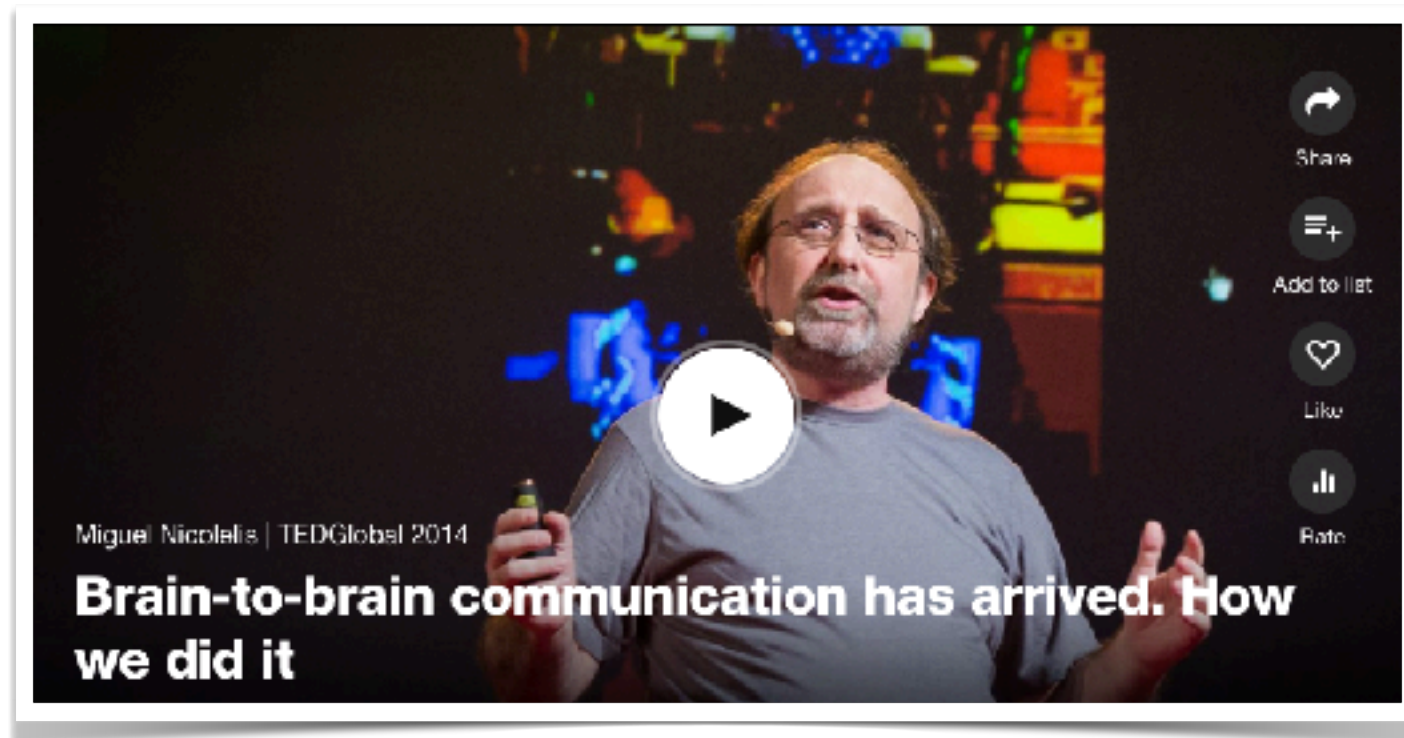
*„Memory is our imagination of the past...*

*...and imagination is our memory of the future“*

# Prologue

# Technofutures...

- ▶ ...are **mediated statements** about our world being changed by new sciences or **technologies**, at a time when these technologies **have not yet materialised**.
- ▶ ... come in the form of **presentations**, foresight reports, advertising, corporate visions, **images**, etc.
- ▶ ... are fictional by nature, but they are "a fiction that **masks its fictionality**" (Iser 1993, 13)
- ▶ ... **attribute meaning** to a technology that does not exist yet
  - ▶ ... which **forges alliances** (Ferrari & Lösch, 2017)
  - ▶ ... or **decides on promotion and regulation** of the technology (Grunwald, 2019, p. 106)



Iser, W. (1993). The Fictive and the Imaginary: Charting Literary Anthropology. The Johns Hopkins University Press.

Ferrari, A., & Lösch, A. (2017). How Smart Grid Meets In Vitro Meat: On Visions as Socio-Epistemic Practices. NanoEthics, 11(1), 75–91. <https://doi.org/10.1007/s11569-017-0282-9>

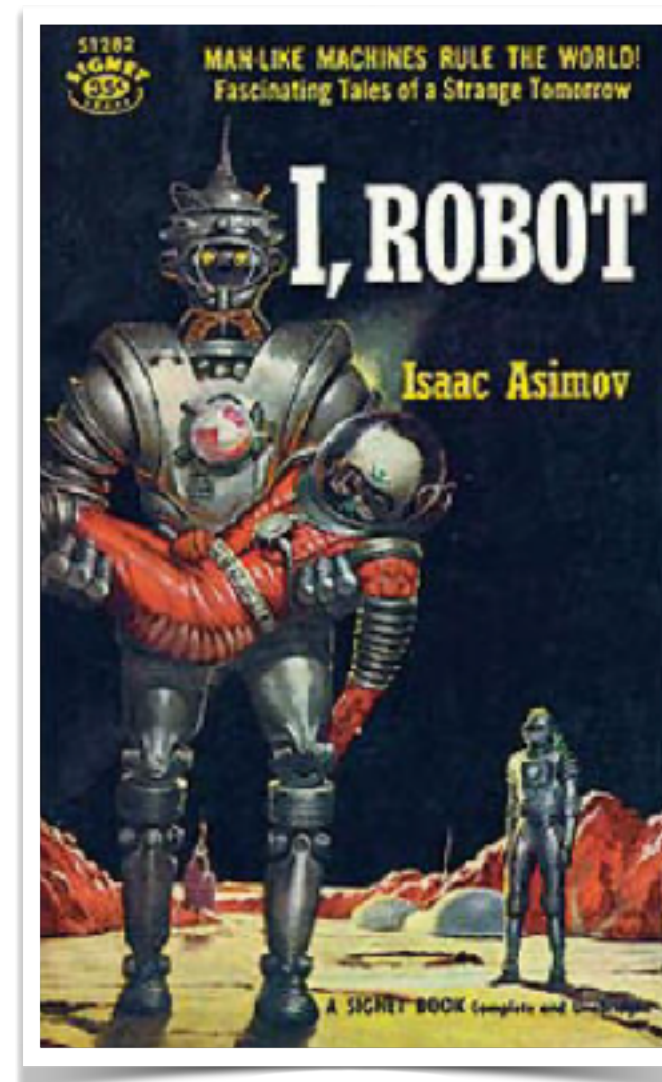
Grunwald, A. (2019). Technology Assessment in Practice and Theory. Routledge.



# Fictional Technofutures are...

... statements about the future, that **impact our thinking about the future** and are **clearly labeled as fictional**.

- ▶ Prominent examples:
  - ▶ R.U.R. – Rossum's Universal Robots (Capek, 1920)
  - ▶ The three laws of Robotic by Isaac Asimov



Asimov, I. (2008). I, Robot (Reprint Edition). Del Rey.

Capek, K. (2017). Die weiße Krankheit / R.U.R. (J. Mols, Trans.; 1. Edition). CreateSpace Independent Publishing Platform.

*"We have: One, a robot may not injure a human being, or, through inaction, allow a human being to come to harm."*

*"Right!"*

*"Two," continued Powell, "a robot must obey the orders given it by human beings except where such orders would conflict with the First Law."*

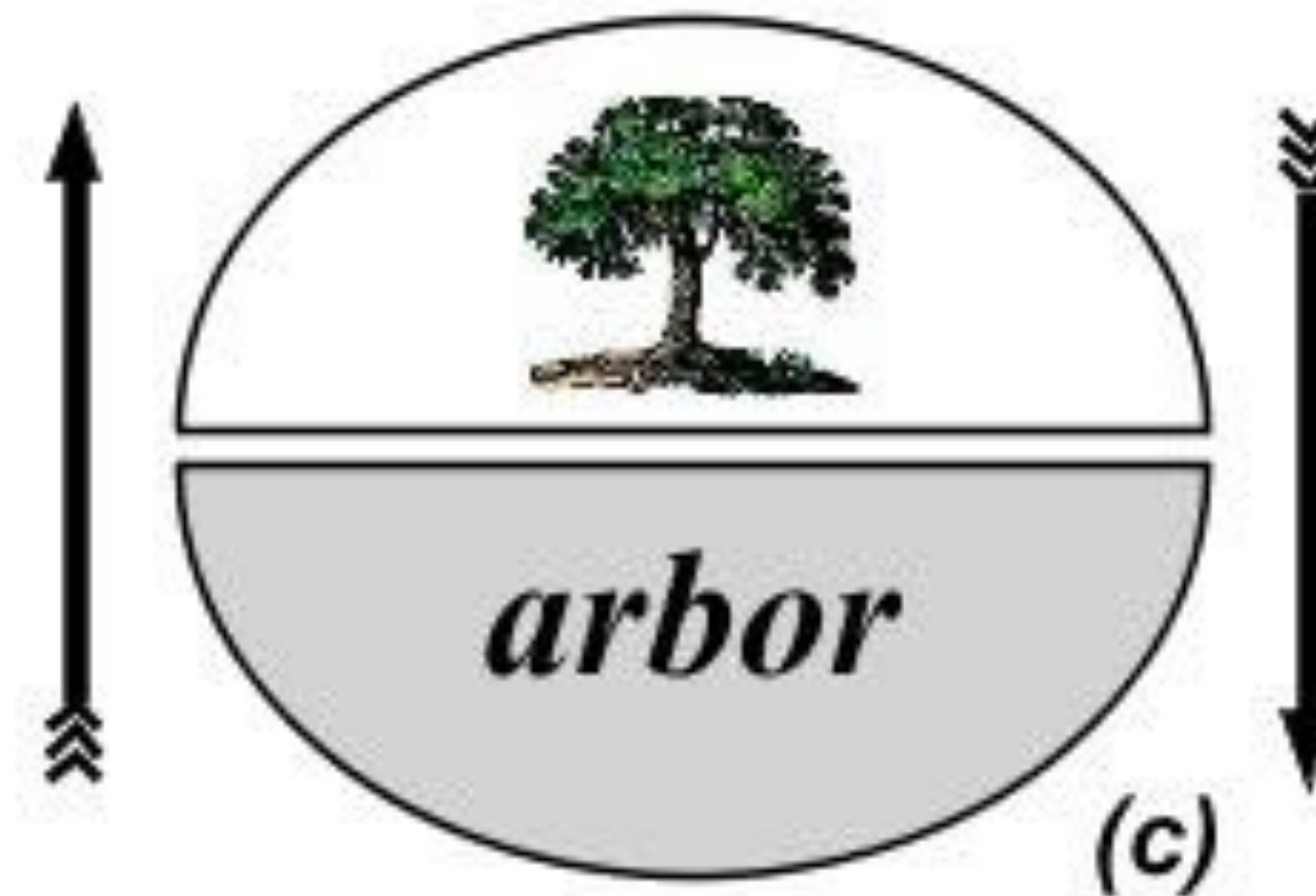
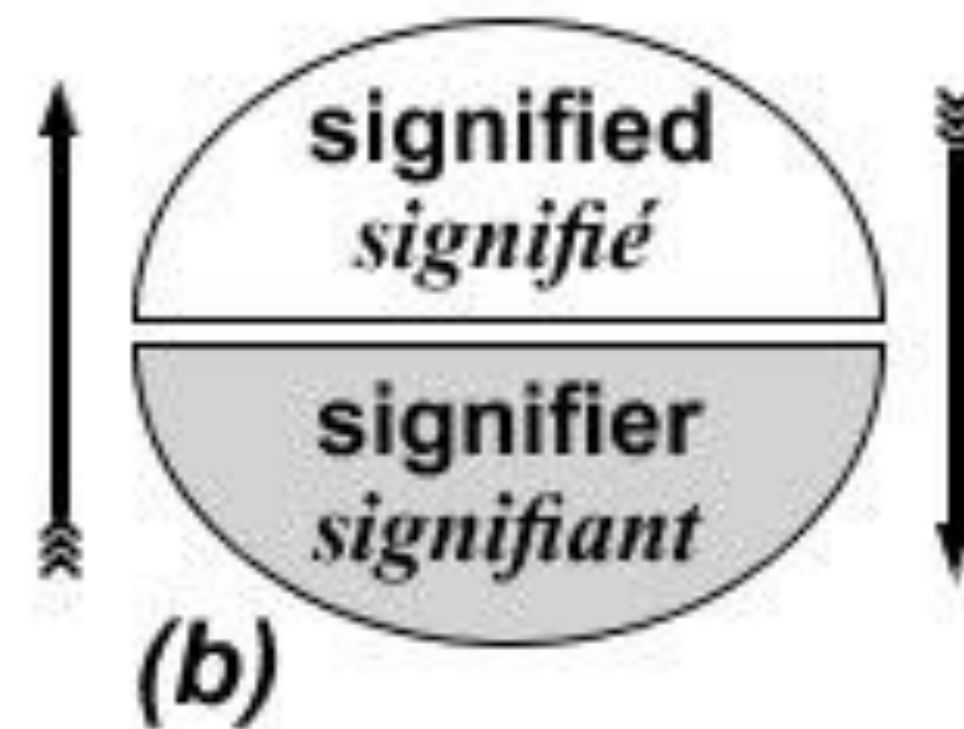
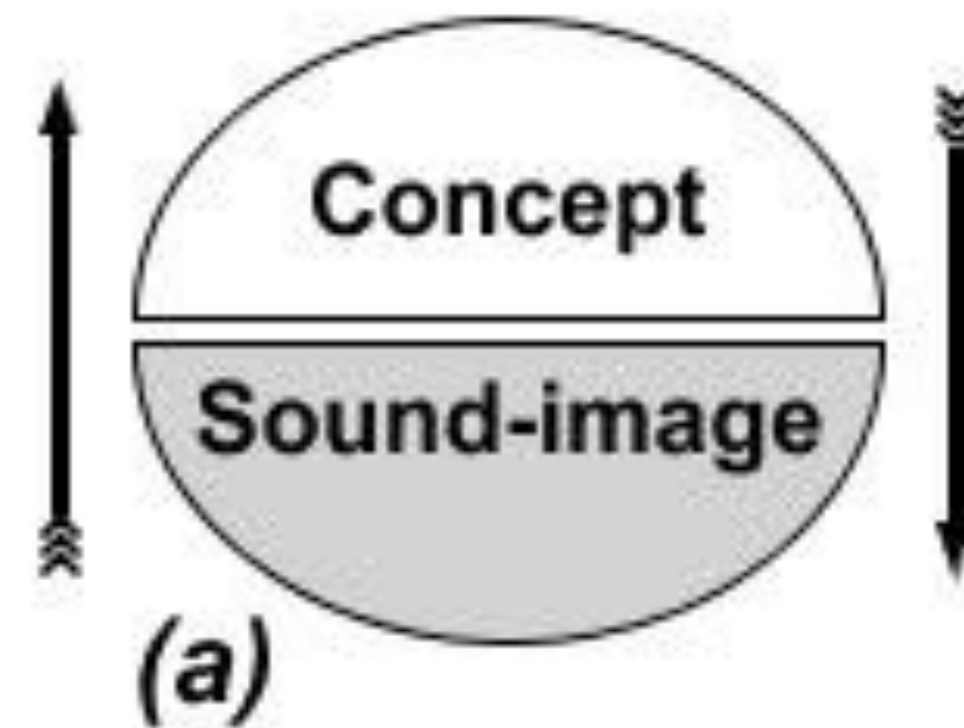
*"Right!"*

*"And three, a robot must protect its own existence as long as such protection does not conflict with the First or Second Laws."*

*"Right!"*

In the beginning was the word

# Semantics (Ferdinand de Saussure)





# Futurolinguistic

*„Foot.*

*„Good. Onefoot, twofoot. Threefooter, fourfooted. Footing, footingly, footling. Footage, befootery. Footment. And footloose gets you footless, unfooted, defeeted. Ah, defeetism. Feetish, fetus ... feedback? Infoot and outfoot! I think we're getting somewhere. Feetality, twofootalitarianism.“*

*„But these words have no meaning!“*

*„At the moment, no, but they will. Or rather, they may eventually acquire meaning, provided footeries and defeetism catch on. The word 'robot' meant nothing in the fifteenth century, and yet if they had had futurolinguistics then, they could have easily envisioned automata.“*

- (Lem 1970/1985, 23)

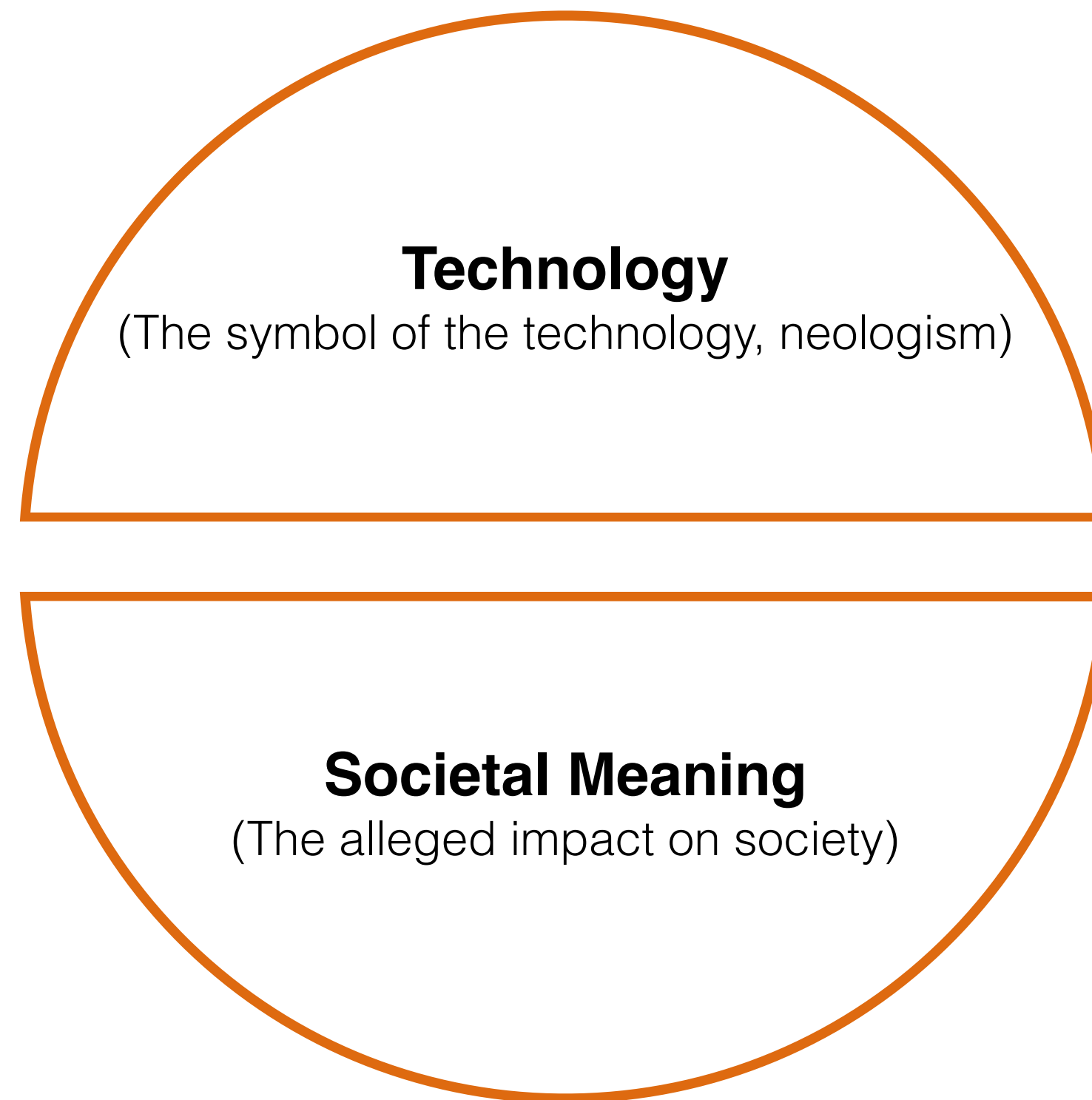


## [Neologism]

**Definition:** A new linguistic figuration, either in form of a new word (lexical neologism) or a new meaning of an existing word (semantic neologism)

**Example:** „Science-Fiction encapsulates social, technological or cultural changes in form of neologisms and thus makes unnamed phenomena or concepts linguistically accessible and imaginable.“





## [Cyberspace]

**Definition:** The virtual space created by networked digital communication - i.e. the entirety of all data spaces, networks and interactions on the Internet.

**Example:** „Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts.“ (Gibson, 1984, 37)



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**Example:** „Since I'm talking about means of man/machine interaction, I can make the case that 'cyberspace' means a three dimensional domain in which cybernetic feedback and control occur.“ (Walker 1989, CEO Autodesk)

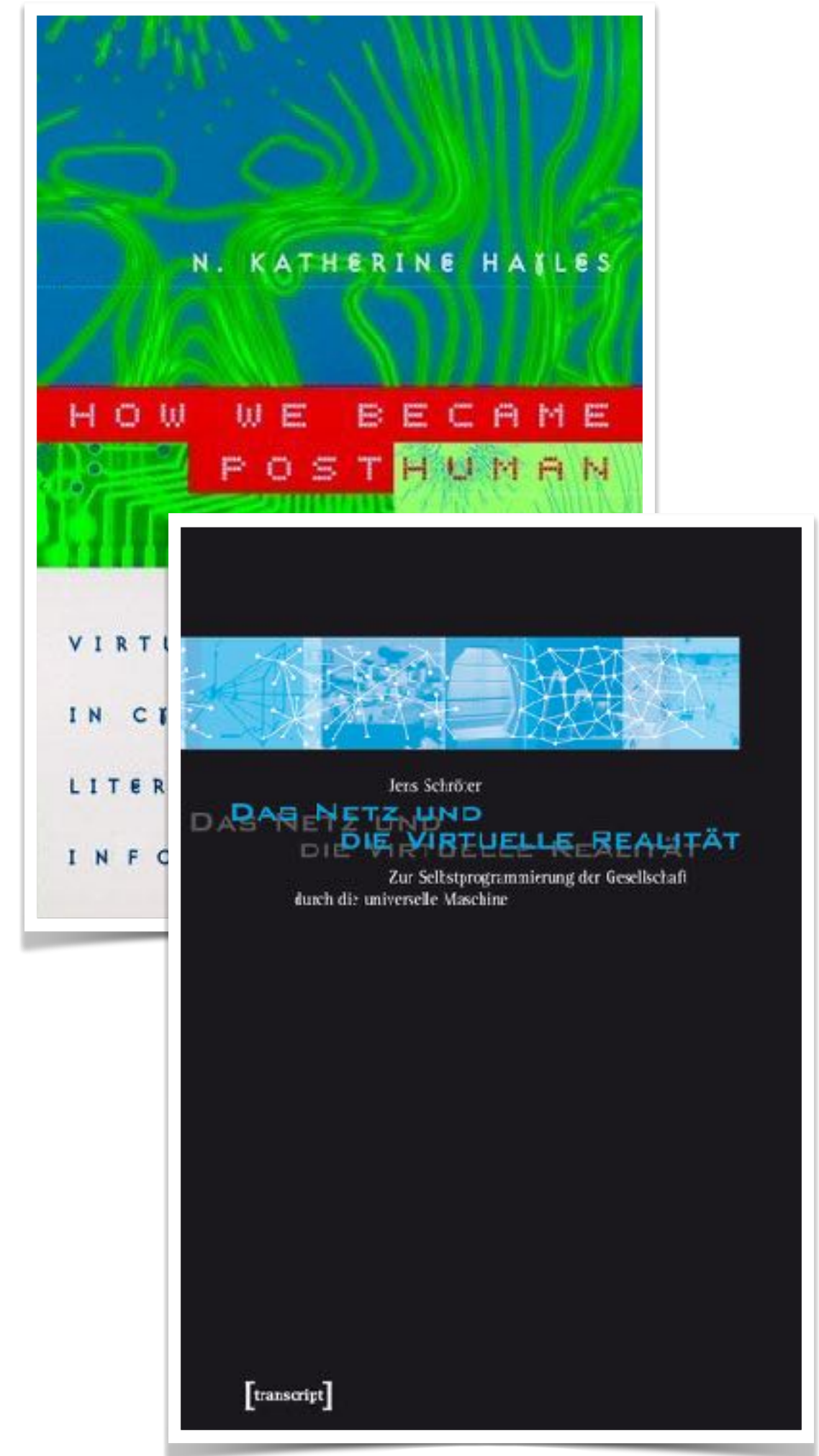
# Figuration and Commodification of Neologism

## ► Figuration

„*The Neuromancer trilogy **gave a local habitation and a name to the disparate spaces** of computer simulations, networks, and hypertext windows that, before Gibson's intervention, had been discussed as separate phenomena. Gibson's novels acted like seed crystals thrown into a supersaturated solution; **the time was ripe for the technology known as cyberspace to precipitate into public consciousness.***“ (Hayles 1999, 36)

## ► Commodification

„*Picking up on popular semantics can also be useful because **concepts such as cyberspace or holodeck can also be used outside of science**, which may favour communication between research and industry or the procurement of funds for research projects“ (Schröter 2004, 32 [own translation])*



Hayles, N. K. (1999). How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics (1. Edition). University of Chicago Press.

Schröter, J. (2004). Das Netz und die Virtuelle Realität: Zur Selbstprogrammierung der Gesellschaft durch die universelle Maschine. transcript Verlag. <https://doi.org/10.14361/9783839401767>

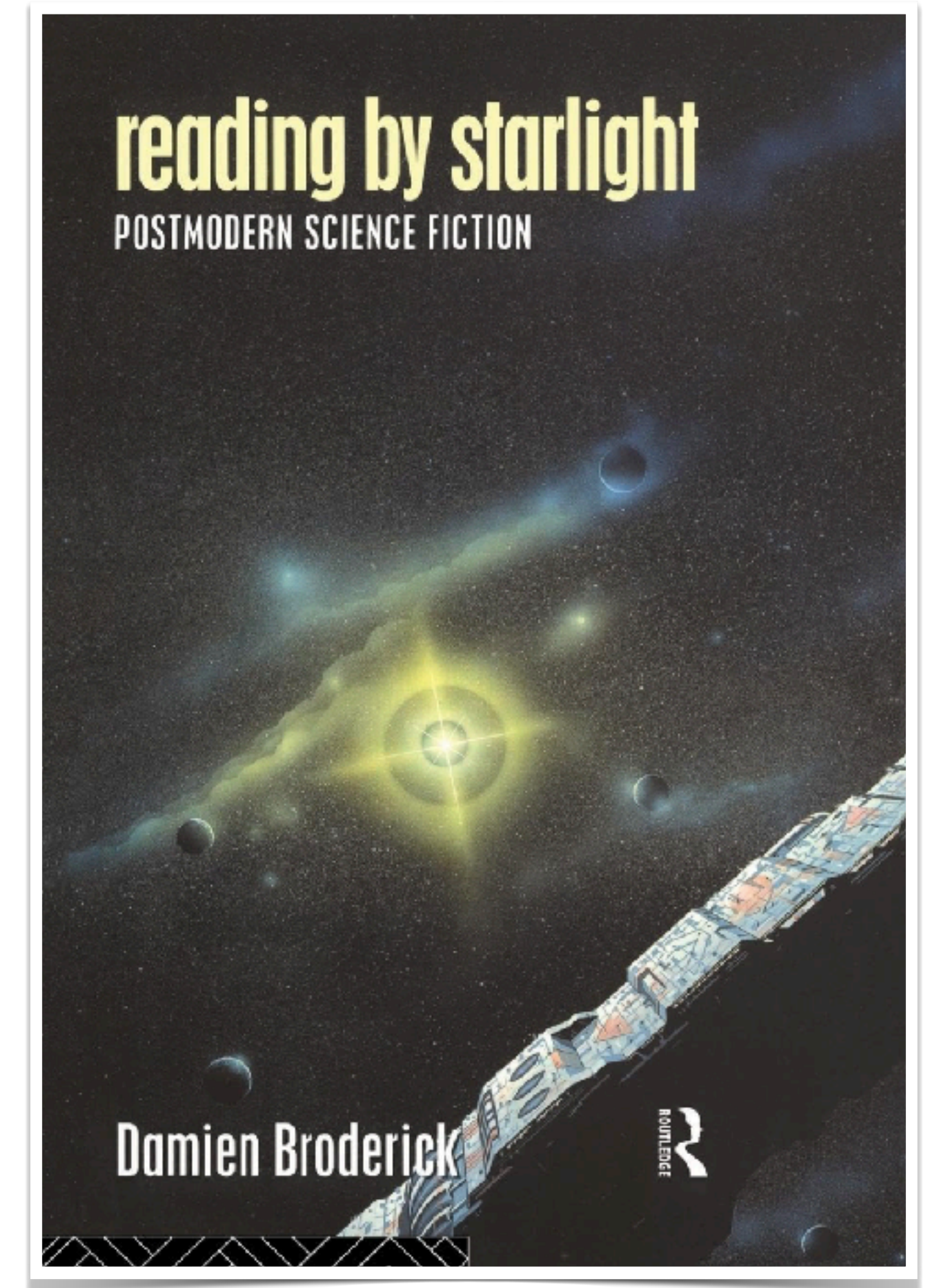


# Neologism Repository

*„As sf developed what I call its [SF-]megatext—the **virtual collective encyclopedia of typical tropes, terminology, characteristic plot moves, favorite locations, weapons, tools, psychological shifts, new cultures, etc.**—story-making became elaborate yet often non-declarative. That is, grasping the meaning and impulse of an sf story did not require detailed conscious awareness of these narrative devices, because **the tropes had become shared commonplaces even as they presented the purportedly unfamiliar—the “shock of the new.”**“ (Broderick, 2018, p. ix)*

## ▶ Examples

- ▶ Robots, Mindupload, Warpdrives, Asteroid Mining, Space Tourism
- ▶ Megacorporations, Turbo Capitalism, Totalitarian Tech Domination
- ▶ Many more....

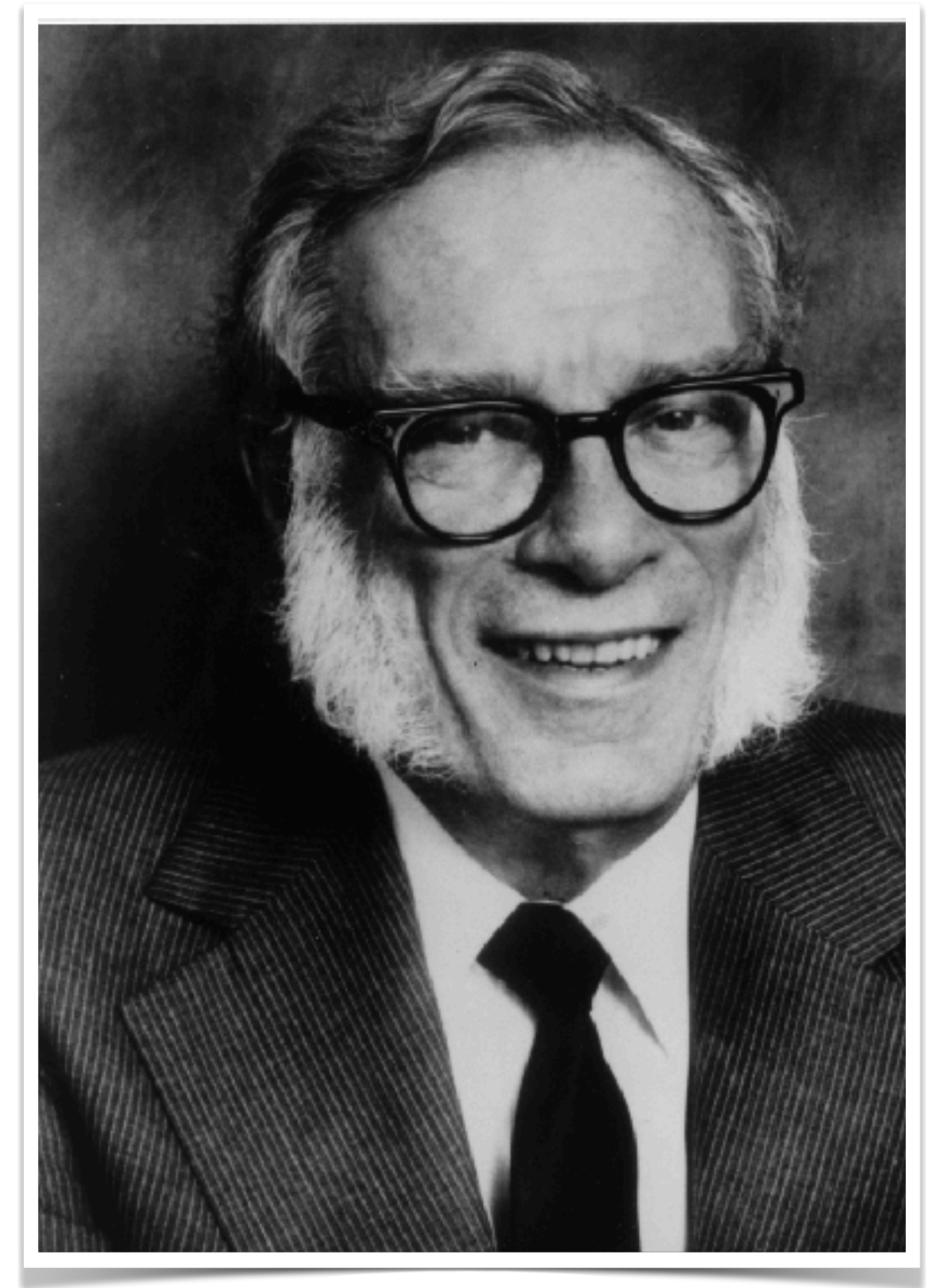




# Imagination of Expectation

- ▶ SF as a **semiotic reservoir** for future imaginaries
- ▶ SF sets **frames of expectation** long before empirical facts are available
  - ▶ ... that **make hypes possible** in the first place

*„Science-Fiction writers and readers didn't put a man on the moon all by themselves, but they created a climate of opinion in which the goal of putting a man on the moon became acceptable“*





# SF as hype seed

- ▶ Visioneers (McCray 2013) regularly invoke SF as the inevitable time to come and to justify, inspire or to create legitimacy through distancing:
  - ▶ „*This looks like Science-Fiction. It's not. [Drone Delivery]*“ (Jeff Bezos 2013)
  - ▶ „*You could [upload your memories] as a backup and restore the memories. Then, ultimately you could potentially download them into a new body or into a robot body. The future's going to be weird.*“ (Musk 2020)
  - ▶ „*[AI] is the technology that the world always wanted. Sci-Fi has been talking about this for a long time.*“ (Altman 2023)
- ▶ **The paradox:**
  - ▶ SF is dismissed as fiction while being essential point of reference to tech vision
  - ▶ Societal meaning is reattributed

McCray, W. P. (2013). The Visioneers: How a Group of Elite Scientists Pursued Space Colonies, Nanotechnologies, and a Limitless Future (Reprint Auflage). Princeton University Press.

Carlson, N. (2013, Dezember 2). Bezos On Amazon's Delivery Drones: „This Looks Like Science Fiction. It's Not.“ Business Insider. <http://www.businessinsider.com/jeff-bezos-on-amazon-delivery-drones-2013-12>

Musk, E. (Director). (2020). Watch Elon Musk's ENTIRE live Neuralink demonstration [Video recording]. <https://www.youtube.com/watch?v=iOWFXqT5MZ4>

Altman, S. (2023, December 6). Sam Altman Is TIME's 2023 CEO of the Year. TIME. <https://time.com/6342827/ceo-of-the-year-2023-sam-altman/>

# Hypothesis: Fictional Technofutures & Hype

- ▶ **Hype doesn't come out of nowhere**
  - ▶ Builds on stories that resonate, cultural memory, symbols [**neologism**]
- ▶ **SF provides the semiotic infrastructure of hype:**
  - ▶ [**Robots**] that rescue, [**AIs**] that betray, [**Zaibatsus**] that surveil, [**Solarpunk**] communities that heal.
- ▶ **These tropes travel**
  - ▶ They show up in the words of CEOs, the metaphors of politicians, the aesthetics of product launches.
- ▶ **SF central object of analysis**
  - ▶ Hermeneutic technology assessment (Mehnert & Grunwald, 2024)
  - ▶ To trace how meaning is constructed and changed through appropriation / elite capturing / commodification

Thank you

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