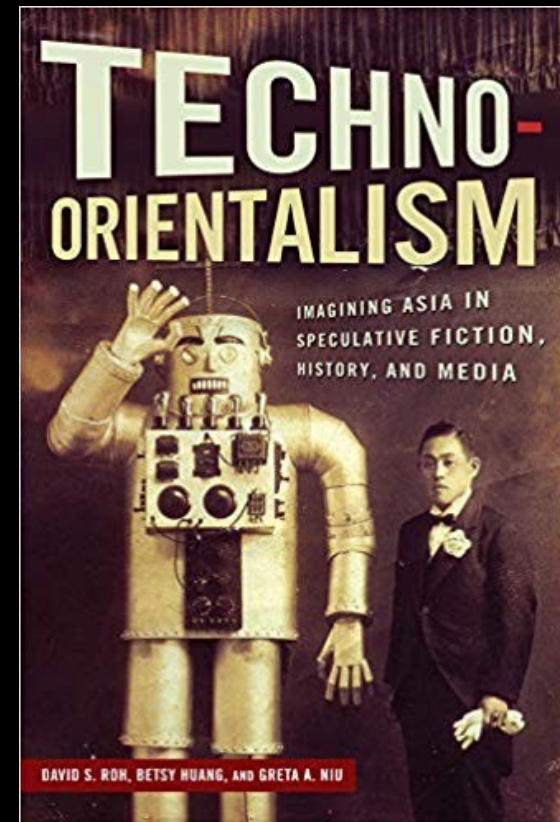# Technology in Japan

Ghost in the Shell

Introduction

- Orientalism > Techno-Orientalism
  - „The phenomenon of imagining Asia and Asians in hypo-or hypertechnological terms in cultural productions and political discourse" (Roh et al)
  - „Cyberpunk, with its fetishizing gaze upon Japan as a seductive and contradictory space of futuristic innovation and ancient mystique, sharply focused the SF critical and creative lenses upon Asia." (Roh et al)
  - „Japan has been located in the future of technology. Morley and Rovins say: ‚If the future is technological, and if technology has become 'Japanised', then the syllogism would suggest that the future is now Japanese, too.' (Ueno)

Is Japan a hi-tech country?

- late 70's and 80's – Japan's success on the consumer electronics market
  - Sony, Toshiba, Panasonic…
  - TV, VCR, Walkman, CD, DVD…
  - technology as a big factor in the Japanese „economic miracle"
- big companies in worse condition in present day
  - more focus on technology development, less focus on consumers (application)

Technology and the economic miracle

- postwar Japan importing foreign technological know-how and improving technologies
- *keiretsu* groups trying to cover as much market share as possible
  - funds for technological innovations
  - environment of extreme competition
    - copying of design and production techniques
- investments in large, high-value sectors as automobiles or electronics
- state support of big companies, cheap and educated workforce
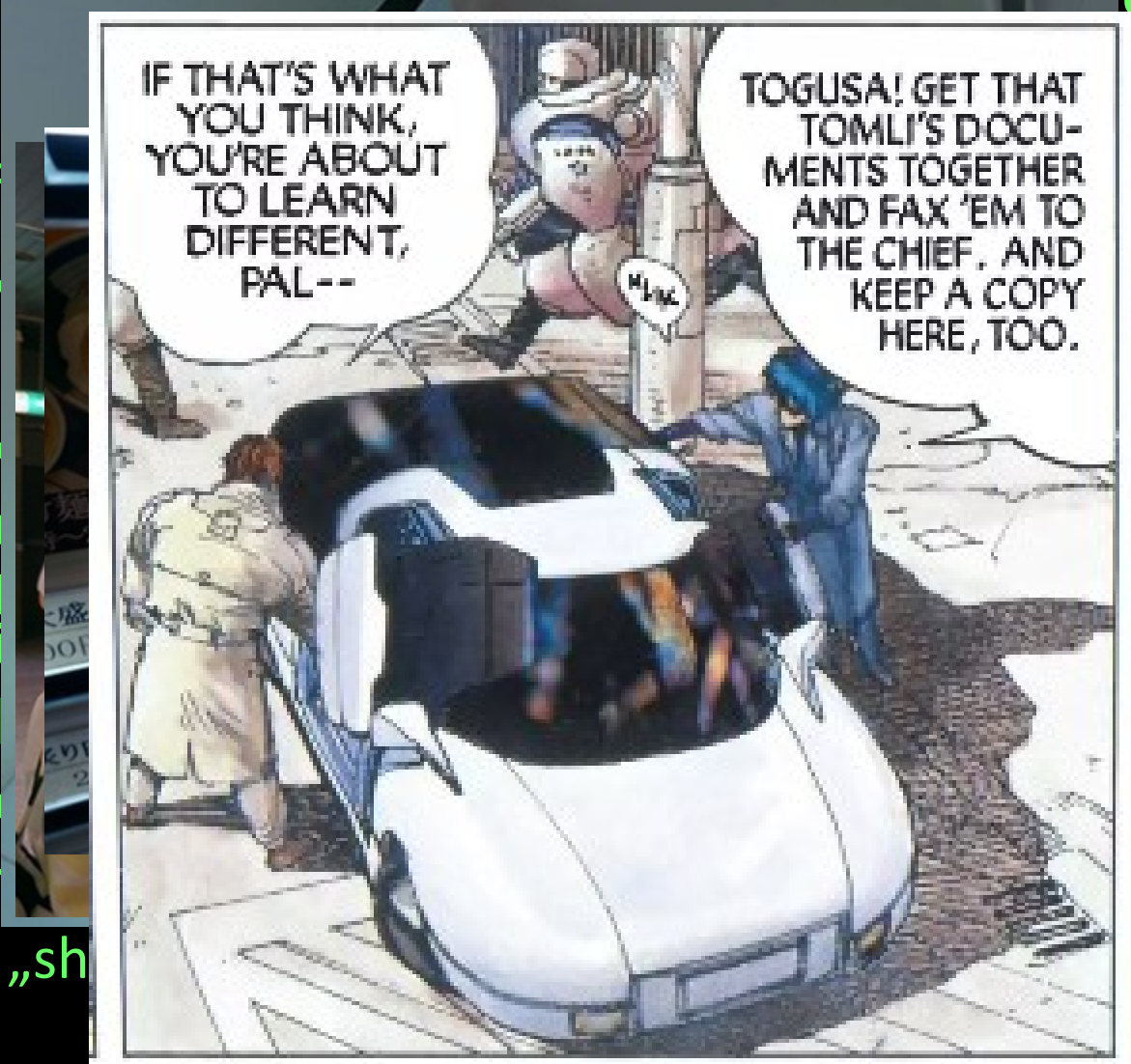
Japan as a follower

- Robert J. Crawford: Reinterpreting the Japanese Economic Miracle

successes than any other government. The Ministry of International Trade and Industry's "visionary research"—its much feared projects that were supposed to catapult Japan to technological leadership —have been largely a bust. The "fifth-generation project," which MITI officials had boasted would leapfrog U.S. capabilities in artificial intelligence, turned into an $850 million dud. Other multimillion dollar debacles include the magnetically levitated train, micromachines (robotic devices with tiny silicon gears), and high-definition analog television. Those failures make the country appear likely to remain a brilliant follower, synthesizing and improving upon the work of others but struggling to make big leaps of invention on its own.

- Japanese society not as supportive of innovative approaches, preferring collectivism

Daily life and technology

- diff
  - A
  - ...anies by
    ...T
    ...are

- Gal
  - c

- con...ome?
  - „sh

Smartphone usage in Japan

	Country		Percentage
01.	United Arab Emirates		73.8%
02.	South Korea		73.0%
03.	Saudi Arabia		72.8%
04.	Singapore		71.7%
05.	Norway		67.5%
06.	Australia		64.6%
07.	Sweden		62.9%
08.	Hong Kong		62.8%
09.	United Kingdom		62.2%
10.	Denmark		59.0%
11.	Ireland		57.0%
12.	Israel		56.6%
13.	United States		56.4%
14.	Canada		56.4%
15.	Spain		55.4%
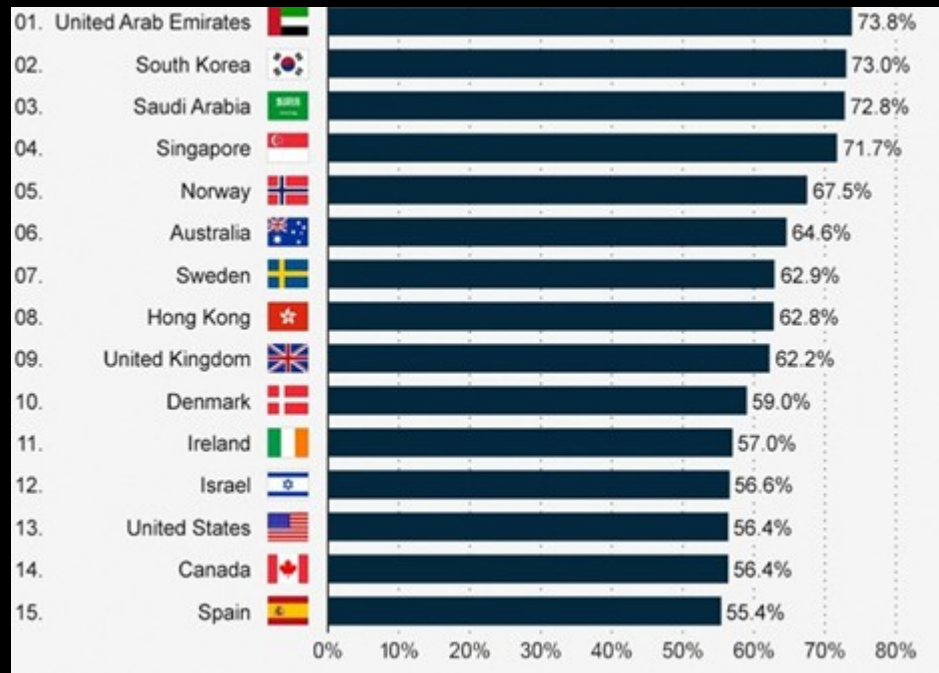
- Japan ranked 44. out of 48 with 25.7% in 2013
  - source: „Our mobile planet" survey

Technology in future Japan

- high [research and development spendings](#)
- Robots?
  - declining/aging Japanese population, workforce needed
  - "Robotics is to be for the Japanese economy in the 21st century what automobiles were in the 20th," says Jennifer Robertson, a professor of anthropology at the University of Michigan.
- Space engineering, medical technologies…

Ghost in the Shell

- Kōkaku kidōtai (Mobile Armored Riot Police)
- 1995
- directed by Mamoru Oshii
- based on 1991 manga by Masamune Shirow

- 2017 a Hollywood adaptation w/ S. Johansson

世界同時公開決定
この秋、このアニメが
映画を進化させる!!

People love machines in 2029 A.D.
"Who are you? Who slips into my robot body and whispers to my ghost?"

GHOST IN THE SHELL
攻殻機動隊

Sources

- Crawford, R. Reinterpreting the Japanese Economic Miracle. Harward Business Review, 1998. URL: https://hbr.org/1998/01/reinterpreting-the-japanese-economic-miracle

- Fitzpatrick, M. Why is hi-tech Japan using casette tapes and faxes?, BBC. URL: https://www.bbc.com/news/business-34667380

- Roh, D.; Huang, B.; Niu, G. (eds.). Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media. Rutgers University Press: 2015.

- Ueno, T. Japanimation and Techno-Orientalism. URL: http://www.t0.or.at/ueno/japan.htm

- Wong, Kin Yuen. On the edge of spaces: 'Blade Runner', 'Ghost in the Shell', and Hong Kong's cityscape, Science-Fiction Studies 27:1-27, 2000.