

The Future of Humanities

Is the Society of Cohabitation with Robots Possible?

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1. Needs for the Information Ethics of the 21st Century

- Since ancient times, the question “What are the humanities?” has long been one of our eternal major problems.
- Recent great developments of computer technology, bio-engineering, robotics, etc. have caused quite new problems.
- These problems are hard to be solved without interdisciplinary academic collaborations.

2. Some problems related to WWW

- Although World Wide Web with its search engine is wonderful technological achievement, could we totally believe in it?
- A spread of demagogic and irresponsible discourses through the net
- Frequent copy right infringements, etc.

3. Mechanization of Human Thinking

- There are no logical consistencies among the enormous amount of knowledge propositions.
- Searching consists of pure mechanical and automatic processes. (e.g. Listing priority by the past frequency of references to the pages)
- In time, artificial Intelligence may not only assist but also replace human thinking.
- What is the essential difference between humans and robots/computers?

4. Need for the Dialogue between the East and the West

- Human thinking process is based on physical activities, and human body is far from electrical equipment.
- Risk: Dissolution of the concept of humankind itself
- There are no universal answers!
- Differences in the Eastern and Western way of thinking of what humanities are

5. Entertainment Robot

- Frédéric Kaplan, *Les Machines Apprivoisées: Comprendre les Robots de Loisir (The tamed machines: Understanding the entertainment robots)* , Vuibert, Paris, 2005.
- The Author: a French researcher in the field of artificial intelligence and children's language acquisition, has been engaged in the development of entertainment robots in the Sony laboratory in Paris.

6. Sony's AIBO(1999-2006)



7. Three axes for Robots

- (1) **Utility**: industrial robots in unmanned factory
- (2) **Intelligence**: artificial intelligence robots to explore human mind
- (3) **Affection**: entertainment robots to please human beings and stimulate their passion (AIBO etc.)

8. What does an Entertainment (Humanoid) Robot means ?

- Western People: Fascinating but embarrassing *Weird Monster*, suggesting Dr.Frankenstein
- Japanese People: Pure scientific dream, wonderful technological achievement, recalling *Astro Boy*, who is children's friend and human's ally
- Entertainment robots would not have been born other than in Japan.

9. The Japanese Spirit & Western Learning (和魂洋才)

- In 19th Century: How to cope with the heterogeneous (Western) culture ?
- Japanese attitude toward Western Technology: *Don't merge but tame it!*
- Make good use of Western technology, while keeping one's own spirit unchanged.
- Preserve some *distance* from technology. This *distance* makes easier for Japanese to accept entertainment robots.

10. What is the Essence of Japanese Spirit?

- Animistic World View: Everything was born spontaneously, and has its own spirit. (Not created by God.)
- The *artifact* is not opposed to *nature*. There is no sharp line between the two.
- Artifacts can be used to inquire into and even improve natural beauty.

11. An Episode of Tea Ceremony: Rikyu and Oribe

- At tea-ceremonies, the roji (small garden outside of a tea-ceremony house) must be kept clean.
- When to sweep up the roji?
- Rikyu: Sweep it up at the previous night, to achieve unintentional harmony through wind-blown fallen leaves.
- Oribe: After sweeping up the roji, lay deliberately some pine needles by hand, to achieve perfect natural beauty.

12. Sen no Rikyu (1522-1591)



13. Furuta Oribe (1544-1615) & Oribe-ware



14. Relation vs Order

- Japan: Desire for Relation
- A human being is an element of the fabric of nature, like a bird or a stone. Artifacts are also integrated into the fabric on an equal footing.
- The West: Desire for Hierarchical Order
- A human being holds a special position in the Hierarchical Order of existence. In it, artifacts are positioned below animals.

15. The Answer to “Why only in Japan?”

- Japanese people think more of relating things than of ordering them.
- The Japanese spirit is never threatened by robots as far as the spirit successfully adapts itself to technology.
- The production of a robot is included in the aesthetic pursuit of beauty that is peculiar to Japanese spirit.

16. Some Comments on Kaplan's Conclusion

- Kaplan owes most of his argument to that of Augustin Berque.
- The East is not uniform. A humanoid robot is expected to be accepted in China and Korea, but not in nations with Islamic tradition like Indonesia.
- But it is suggestive of not only robots but also of future human beings.

17. Characteristics of Japanese Information Society

- Interested more in detailed technical improvements and refinements than in the philosophical meaning of their product in society
- Unfamiliar with the World Order (Hierarchy of existence)
- Vague borderlines between objects in general

18. Problems of Modern Japan

- Traditional indifference to the world order does not necessarily offer a safeguard against a cyborg and/or mechanization of human thinking.
- If everything has its own spirit and the same value, why are we not allowed to reconstruct our bodies and thoughts as freely as we like by using information technology?
- *The Japanese spirit and Western learning is no longer sufficient.*

19. Real autonomous robot?

- The *autonomous* robot AIBO does not sell well. Is it autonomous in true sense?
- A usual *autonomous* robot is a simple *learning machine* which changes its action in response to outer stimuli in such a way as to increase some calculated value.
- Without deep inquiry into biological autonomy, a care robot could never be appreciated by old people.

20. Autonomy

- The concept of *autonomy* must be investigated in more detail, to avoid machine reductionism.
- The Japanese concept of *an autonomous subject* differs greatly from that in Western countries.
- The Western argument on *human free will* is hardly found in Japan (cf. E. Kant, *Kritik der praktischen Vernunft*).

21. Harmony rather than Autonomy

- In a Japanese community, harmonious cooperation with others is respected, and autonomy is easy to be ignored. People must *behave just like others!*
- An ordinary life of the average Japanese is mostly carried out with clock-like mechanical rhythm. He/She looks like a mechanical person.
- This attitude can be dangerous in a highly developed information society dependent on WWW.

22. Inquiry into Autonomy

- The autopoiesis theory insists that autonomy is the essence of living things.
- A sharp line between living and non-living things can be found. Robots are *not autonomous* in a true sense.
- A new approach to the human freedom is necessary in the field of Information ethics. (Fundamental Informatics)

23. Conclusion

- Robots can never have true human mind, but human beings can gradually lose their free will and make themselves closer to robots.
- Consideration on robots is expected to bring about fruitful discussions on *the future of humanities*.

References

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- [3] Hitoshi Matsubara, *Tetsuwan Atomu wa Jitsugen Dekiruka? (Can we realize the Atomic Boy?)*, Kawade-shobo Shinsha, Tokyo, 1999.
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- [5] Special Issue on « Neocybernetics and the Wisdom of the 21st Century », *Shiso*, Iwanami-shoten, July 2010.
- [6] Bruce Clarke and Mark B. N. Hansen (Eds.), *Emergence and Embodiment: New Essays on Second-order Systems Theory*, Duke University Press, NC, 2009.