

# Personality is required for robots to coexist with humans

メタデータ	言語: eng 出版者: 公開日: 2017-10-03 キーワード (Ja): キーワード (En): 作成者: Shibata, Masayoshi メールアドレス: 所属:
URL	<a href="http://hdl.handle.net/2297/46336">http://hdl.handle.net/2297/46336</a>

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 International License.



Personality is required for robots  
to coexist with humans

Matching HUB Kanazawa 2016  
at ANA Hotel Kanazawa

Vice President of Kanazawa University  
Masayoshi Shibata  
Nov. 1<sup>st</sup>, 2016



# Agenda

1. Without the personality, could the world evolve?
2. The status of the personality in humans
3. Some results of robots with or without the personality
4. Moral communities and a new stage of the evolution(?)

# Ontological Status of Personality, or Individuality

- Personality is a difference of the properties that presupposes a certain kind of identity of an individual and does not destroy the identity.
- The kind of identity varies from cities or biological species to humans or micro particles.
- For example, a and b are identical in being a walled city in medieval Europa, but may be different in having the free market with different sizes. That makes the personalities of the 2 cities.
- Likewise, 2 ladies are identical in Japanese, but may have different personalities in the property of “liberal attitude”.

# Differences that make the evolution possible

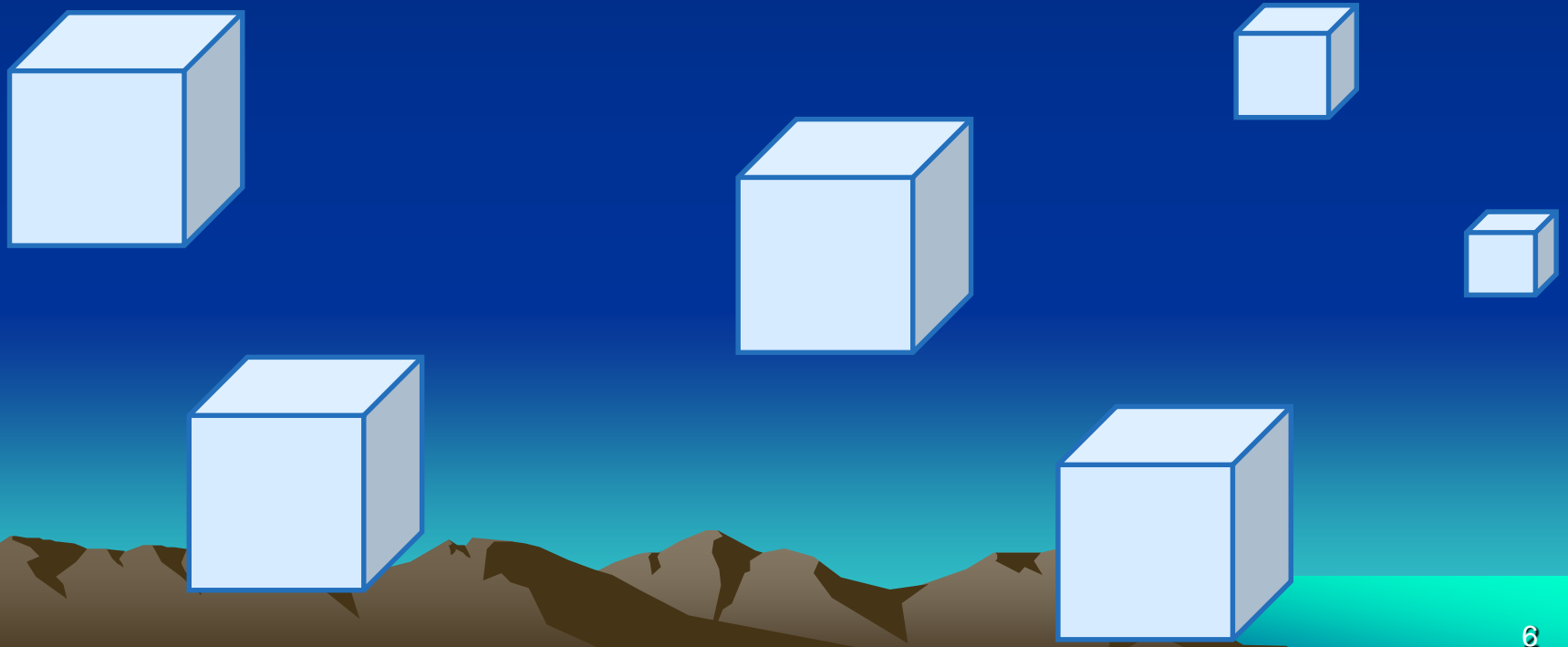
- Imagine a possible world where there is only one kind of elementary particles,  $\alpha$  that are distinguishable from each other only by their spatio-temporal positions. Is the evolution of the physical matter possible there?
- If another kind of particles  $\beta$  cannot be created by fission and fusion of  $\alpha$  in that world, probably, the evolution wouldn't occur.
- In our world, the identity of individuals allows the difference of the properties to such extent that the biological evolution is possible, and, as time goes by, other identities (species) emerge due to the difference.

# The social evolution of human kind

- Considering the evolution itself, the difference within limit of personality may be neither sufficient nor necessary for the biological evolution.
- A large amount of egg production and their deaths in fish or social insects such as ants (individuals without the personality) is also one of the evolutionary strategies.
- But under the strategy of nurturing a small number of individuals, the existence of each individual has a much greater significance.
- What would happen, if such individuals are indistinguishable from each other?

If individuals of humans were, in such a sense, almost indistinguishable from each other, there wouldn't emerge such a difference of social roles, or the evolution of relationships among individuals.

Because any special "rule of behavior" is not required to adjust the differences among individuals.



It is the difference among individuals, the personality, that is the origin of all our purposes(1/2)

- In our world, even in humans the spatio-temporal maximum spreading and sustaining of self-genes is the ultimate goal of our individuals' survival. (Dawkins)。
- But in our human society where we live in a upper layer far beyond genes, what sets up the purposes of individual activities is the difference among individuals, that is the personality.



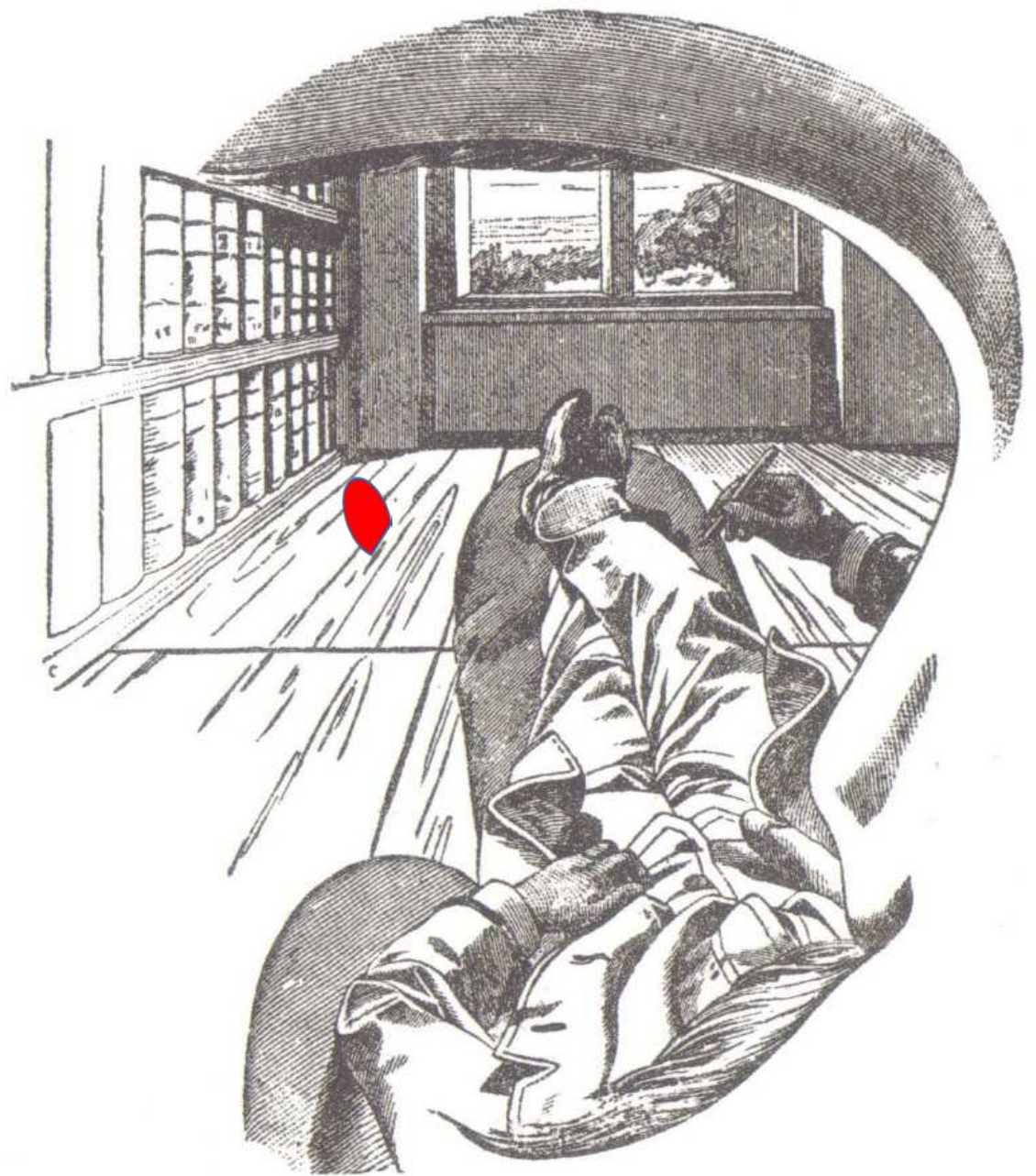
It is the difference among individuals, the personality, that is the origin of all our purposes(2/2)

- The personality is a cause of what you aim, desire, react against, or avoid. In order to adjust the differences and conflicts among individual personalities, there exist various kinds of social systems, and laws and ethics.
- And the personality most clearly resides in being a folk psychological agent of its experiences, namely in having a first person “point of view”.

- .

The first person  
point of view

The world of  
your experience  
with a red lemon



# Even the robots in the movie “Star Wars” have their personality.(1/2)

- The battle droids (robots) are the most typical robots among many various ones, scarily uniformed, absolutely obedient to the orders, without emotions, and suited for the mass production in a short time.
- They are completely different from C-3PO, or R2-D2 in this respect, because the latter have their own experiences.

# Even the robots in the movie “Star Wars” have their personality.(2/2)

- When humans coexist with robots, they wouldn't want robots to be high quality tools. Pets of humans are not uniformed, indistinguishable, and easily interchangeable cats or dogs.
- We ourselves are living through our personalities appearing in the contingency, and asking for such personalities. The personality is just our life.

# If robots don't have their personality, ...

- To live with robots without personality is essentially the same as to treat shoes, dishes, clothes, or personal computers. It is none other than to use and consume the tools.
- Any conversations with such robots would be bored to death in nearly a long-term relationship, however intellectual they appeared to be. Such robots wouldn't your partner, the other person you would like to coexist with.
- They are not the origin of values, that doesn't exist for others, but exists for itself.
- They are not the basis of "eyes" that sometimes threaten your existence.
- They don't have their own first person "point of view".

# But if robots had their personality...?

- If a robot had the autonomy and intelligence, and furthermore a personality, it would be a “person”. That is an agent producing actions as a member of our society.
- But if it had hostility and evil intention against humans, ...?
- Now robots are superior to humans in intelligence and physical strength, and moreover in robustness and resistance to harsh environments.
- Wouldn't domination and demolition of humans by robots really occur, as many SF movies have told us?
- Namely the end of human kind?

# A moral community with robots(1/2)

- 2 ways to avoid the extinction of human kind
- 1. To prohibit development of robots before they become our partners with their personality. As a sealed technology of human kind.
- But this strategy would almost certainly fail. Humans would never stop developing robots, even if that is illegal. We are such a loose being.

# A moral community with robots(2/2)

- 2. To create a moral community with robots, where humans and robots have in principle the same rights and duties.
- We may be "inferior" members to robots there, like children and demented elders in our present moral community. However, if we couldn't build such a moral community, we would never get a way to coexist with robots.



# Robots and the morality

- The morality couldn't be naturalized (be a natural science). About the morality, there wouldn't be valid axioms or assured algorithms from them. The morality is a matter of attitudes rather than calculations.
- Then, how do robots acquire the morality?
- To get the moral sense, they wouldn't have no choice but to gather their experiences like us. Even humans don't have any innate moral programs.
- “Experiences” here are just folk psychological experiences, and adjustments with other moral agents about goals, desires, means , and etc.

# A new road of the evolution(?)

- Now the most important thing for us might not be our self-genes, but our own consciousness.
- Likewise, what is important for the evolution might not be the improvement of biological materials, but of material-free devices for consciousness
- In a word, the next stage of our human evolution might be “in form of the machine”, beyond “together with the machine”.
- Your consciousness, which is disembodied completely from your body and installed on the electric brain of the robot, - - - it might be the future of human kind.

# The End

Shibata's web site related to research

<http://siva.w3.kanazawa-u.ac.jp/>