ROBOTS AND PRIVACY IN JAPANESE, THAI AND CHINESE CULTURES

Discussions on Robots and Privacy as Topics of Intercultural Information Ethics in 'Far East'

MAKOTO NAKADA
University of Tsukuba
Tennoudai1-1-1, Tsukuba-shi, Ibaraki, 305-8571 Japan

Abstract. In this paper, I will analyze 'cultural meanings and values' associated with some of the important IIE(intercultural information ethics) topics in 'Far East, 'i.e. 'human and robot interaction(HRI)' and 'privacy.' By focusing on these relatively newly emerging topics in 'Far East,' I will attempt to make the cultural *Ba* (locus/place where different meanings of things, events, people's experiences come together; or frameworks for understanding meanings of phenomena and events) visible through analysis of research data done in Japan, Thailand and China in the past several years. The research data shown in this paper suggest that we can't understand people's attitudes toward robots and privacy in 'Far East' without taking into consideration people's broader views on 'what is a good life?' and 'what is a virtuous life?'

1. Introduction

'Human-robot-interaction (HRI)' and 'privacy' in the information era are among the most important topics in IE (information ethics) or IIE(intercultural information ethics) in at least 'Far West.' A lot of scholars and authors as well as journalists are eagerly engaged in discussions on these topics in Europe or the USA.

According to Veruggio and Operto, "the name Roboethics was officially proposed during the First International Symposium of Roboethics (Sanremo, Jan/Feb. 2004), and rapidly showed its potential (Veruggio and Operto, 2006)." In fact, so far as I took a look at the related papers or journals, I have to agree with Veruggio and Operto with regard to importance and necessities of discussions in this new field. But with a few exceptional cases, as far as I know, this topic has been being discussed mainly by 'Western' scholars. For example, as Kitano says, Japanese scholars in robotics tend to 'focus on enhancing the mechanical functionality with having little ethical discussion on the usage of robots, while in the West, the robotists often discuss the social and ethical problems for applying robots to human societies (Kitano,2006).' The tendency

regarding poverty of discussions on 'HRI' seems to be similar in other societies and cultures in 'Far East.'

Concerning the other topic, 'privacy,' the situation is somewhat better in 'Far East,' compared to 'Robots.' But generally speaking, in this case too, the discussions are very limited within small groups of scholars, in particular, in the case of discussions on privacy grounded on our(their) own cultural perspectives. The following discussions are among these exceptional cases.

In one of his papers on IIE in 'Far East,' Rafael Capurro has attempted to deal with the distinction between direct and indirect speech in the "Far East" and the "Far West (Capurro, 2010)." ('Far West' is a term suggested by the French sinologist François Jullien.) Capurro insists in this paper and in other papers about comparison of 'Far West' and 'Far East' (for example, Nakada and Capurro, 2009; Capurro, 2005) that we can't fully understand to what extent people in 'Far West' and 'Far East' are able to communicate with each other using the same terms 'privacy,' 'public and private,' unless we see the whole communication structures including human relations, political structures, people's ways of life and the sense of 'what is a good life?' Even in 'Western' cultures, people might not be aware of the fact that 'the tension between the public and the private is deeply rooted in the Greek distinction between *oikos* and *polis* but conceived from a modern perspective.' Or they might not be aware of the distinction between 'sphere of intimacy' and 'the private sphere' described by Hanna Arendt (Arendt, 1983). This might mean that people in 'Far West' don't know the complex meanings of privacy in which they are involved in their every day life.

Similarly, 'Eastern' people might not be aware of complex of meanings regarding to 'privacy' in Japan until they (or we Japanese ourselves too) know the contradictory meanings of *Watakusi* combined with privacy. *Watakusi* is often regarded as something or some realm with negative meanings such as egoism, selfishness, unfairness. But at the same time, in different situations, *Watakusi* is regarded as something leading to inner values or emotional meanings (Nakada and Capurro, 2009; Capurro, 2005). This tension of *Watakusi* goes back to the *Kokugaku* tradition in the feudalistic era of Tokugawa or even to the era of Heian when 'the Tale of the Genji' was written (Morse, 1974). (*Kokugaku* is an indigenous discipline in Japan born in Tokugawa Era the purpose of which is to look back to Japan's own traditional cultural origins apart from Chinese influence.)

Capurro's discussions are important in the sense that we need to see the cultural and historical structures in order to know the meanings of 'privacy' and 'public and private' in 'Far East' as well as in 'Far West.'

Charles Ess is another exception of scholars in the 'West' who show strong interest in comparison of 'East' and 'West.' While examining the differences between 'East' and 'West' regarding the meanings of privacy and the related ethical topics, he seeks to find out common points on which people in 'East' and 'West' as well can see the presuppositions of understanding their differences and similarity. For example, he focus on the potentiality of ethical pluralism between contemporary Western ethics and Confucian thought or he tries to look into individualism and collectivism traditions strongly determining the directions of discussions on privacy in 'East' and 'West' (Ess, 2005; 2006).

Lü Yao-huai's discussions on people's ways of understanding of privacy in China, which have changed dramatically since the 1980s, follow the line or frameworks of discussions set by Charles Ess, Soraj Hongladarom and Krisana Kitiyadisai putting emphasis on subjects of 'individualism and collectivism' and 'privacy as instrumental goods or intrinsic goods' in 'Eastern' cultural surroundings.

Lü says that 'contemporary notions of privacy in China' is characterized by 'a dialectical synthesis' of traditional Chinese emphases on the family, the state, collectivism and Western emphases on individual rights. In this situation, in China today, privacy, Lü says, is justified as an instrumental good, rather than an intrinsic good (Lü, 2005).

Reflecting on the context of Thai culture in which people have been wondering of merits and demerits of introduction of a digital national identification card into Thailand with no specific law protecting personal information, Soraj Hongladarom tries to describe how their own cultural tradition, in particular, Buddhism, more specifically Buddhism tradition under influence by Nagarjuna, the founder of the Mahahāyāna Buddhism, and Nagasena, explicitly and implicitly determines the direction of debate on privacy in Thailand. Hongladarom says that from an absolute Buddhistic standpoint, the distinction between subject and object, on which the discussions on privacy in 'West' rest, has no meaning any more but at the same time Thai people don't reject the idea of privacy in their culture. They believe that the concept of privacy is important to develop and keep democracy. In this sense, in Thai culture, privacy has an instrumental value rather than an intrinsic value (Hongladarom, 2007).

Krisana Kitiyadisai puts emphasis on Buddhistic culture in Thailand and on the views on privacy reflecting Buddhism as well as other cultural tradition in Thailand including Confucian values and the feudal heritage of Thai society. According to Kitiyadisai's explanation, we have to see these cultural complexities in order to understand the meanings of discussions on privacy in Thailand. In the Thai culture which is based on consensual collectivism and non-confrontation, people are always concerned about keeping and losing face (dignity of self tied to face). Under such circumstances, the concepts of privacy helps people with avoiding to lose their face because, in this case, 'privacy' works as the right of 'non-interference' to keep other people away from one's face-related-matters as well as one's appropriate who-status. Along with feudalistic tradition, Buddhism is important too. According to Kitiyadisai, in Buddhism, human rights are not intrinsic to human individuals but are necessary for conducting a virtuous human existence (Kitiyadisai, 2005). In this sense, if my understanding is correct, privacy in Thailand lies in-between instrumental values and intrinsic values.

2. Robots and Privacy in *Ba* as Cultural Contexts or Locus

2.1. HRI AND PRIVACY IN 'FAR EAST'

As I mentioned above, the discussions on HRI (human-robot-interaction) and privacy in 'Far East' are characterized by scarcity of authors and scholars being engaged in these discussions. This might be explained in many ways like the one of Paolo Dario. He said that religious and philosophical differences have influenced the development of

anthropomorphic machines in Europe and in Japan. In 'Western' cultures with Judeo-Christian religious tradition, creating human-like machines is a daring act against the God, as God created the human kind in his shape (Dario, 2005). Lack of this sort of religious and cultural reluctance might influence the need for ethical discussions on robots in 'Far East.'

Or we might take into consideration the possibility of Eastern people's unawareness of newly emerging concepts or schemata in the fields of robotics and artificial intelligence, i.e. 'connectionism,' 'oscillation,' 'resonance' and so on. At least in Japan, as I wrote somewhere else (Nakada, 2011), the 'out-of-date' frameworks on robots, artificial intelligence and information studies in the 1970s or 1980s,which are based on 'symbolism,' 'classical symbolism' or 'computationalism,' have strongly influenced the scarcity of ethical discussions on 'autonomous' robots in Japan.

And concerning privacy, 'Eastern' orientation to collectivism rather than individualism might influence people's relatively weaker interest in the discussions on privacy in 'Far East.'

2.2. *BA* AS POTENTIAL LOCUS FOR IIE IN 'FAR EAST'

But this (scarcity of discussions on HRI and privacy) doesn't mean that people in 'Far East' live in a different world where there are no serious ethical problems. On the other hand, as the cases of Paro, Aibo, Asimo suggest, people in 'Far East' already live in the world where 'autonomous' robots play an important role. And people's preference for CMC, Twitter, Blogs and SNS has clearly entangled people of 'Far East' in potentially serious ethical problems regarding ICTs and CMC.

And as I have shown with my previous research data on Japanese people's awareness of ethical and ontological issues on disasters, privacy, robots, business ethics, good ways of life and concerns for important social problems, we can think that in 'Far East,' at least in Japan, there is a potential *Ba* (place, locus) for discussions on important IIE topics. In my view, *Ba* is the place or locus where people are motivated by orientation to virtuous life, the pursuit for the ideal aims of life, searching for the answers to 'what are the meanings of our better life?' In addition, *Ba* is the place where things and various material meanings including means for communication are interpreted and evaluated by humans. In Japanese *Ba* or cultural context(s), mobile phones are considered to be as means for communication strongly characterized by phatic function (the term used by Roman Jakobson) (see: Nakada and Capurro, 2009). In this sense, *Ba* is the place where virtue, people's ways of life, things and interpretations of things come together.

Originally, *Ba* (*Basho*) is one of the central topics for Japanese scholars and authors who seek to find out a philosophical, theoretical and ontological basis for discussions beyond the limits of subject-object-separated-world views. In our Japanese culture, there is a tendency to urge people to look for existential or ontological criteria for understanding of better life and of meanings of this world, in spite of its highly developed industries, technology, science and social systems. Thoughts of *Mu* (nothingness), oneness and *Ba* are considered to be related to these criteria by various scholars and authors.

For example, Yujiro Nakamura tries to urge us to turn our eyes to thoughts of *Mu* and oneness. According to Nakamura, *Mu* is not mere emptiness but as a source of beings (*Yu*) on which articulations of beings are founded. Nakamura insists that oneness of *Mu* and *Yu (beings or Being)*, or oneness of subjects and objects, oneness of events (*Koto*) and words (*Koto=Gen*) needs *Ba* (or *Basho*) (Place, Field) where these things (*Mono*), meanings, beings come together (Nakamura, 2001). (*Basyo* is the term used by Kitaro Nishida.) *Koto* and *Mono* are used by Bin Kimura, a Japanese psychiatrist who is influenced by Kitaro Nishida, Zen-Buddhism and Heidegger. Kimura tries to overcome the limitations of subject-object-separated-world views by saying that we ourselves lie in-between *Mono* and *Koto* (Kimura, 1975).

At first glance, *Ba* might be considered to come from pre-modern and non-rational ways of thinking. But the recent tendency of studies and researches on robotics and artificial intelligence shows us that *Ba*, even if we don't use this term itself, is latently useful. For example, Brooks' robots' 'autonomy' depends on the process or mechanism of interdependency of modules or parts and this interdependency needs *Ba* or place in which a certain sort of environment-adaptive function of robots is made possible. These environment-adaptive-functions of robots can be explained by the terms such as 'resonance,' 'oscillation,' 'entrainment' (and so on) of modules or functions. In the case of artificial intelligence too, a set of networked artificial neurons need *Ba* where interdependency of these artificial neurons are possible. In this sense, 'connectionism' can't be separated from *Ba* (see Nakada, 2011).

And as I discussed somewhere else (Nakada, 2011), 'intention' and 'intentionality' (these terms are used in Deborah Johnson's papers) might be incorporated into robots through *Ba* (Johnson, 2006; Johnson and Miller, 2008).

If we can interpret the meanings of *Ba* from broader perspectives which are not confined to Japanese cultural perspectives, *Ba* might be considered to be potential locus in which people in 'Far East' can discuss ethical and ontological topics or in which people's understanding of HRI and privacy come together with their ethical, critical and existential understanding of life. In fact, if we follow Hongladarom, Buddhistic tradition in Thai culture suggests people that 'privacy' has to (can) be interpreted on the views about 'what our life means in this transient world and also in the other 'real' world?'

Concerning *Mu*, we know that *Mu* comes from at least partly from thoughts of Lao-tse and Zhuangzi. In this sense, *Ba* might (can) be seen from broader cultural perspectives potentially spreading out through 'Eastern' cultures.

In the following sections, we will see the findings of our research surveys done in Japan, Thailand and China in the past several years. As the findings of the following tables show, although it is not clear to what extent people in 'Far East' are aware of these findings, we can conclude that *Ba* works as a locus or a set of criteria for understanding meanings of HRI and privacy in different cultures in 'Far East.'

3. Privacy and Robots in Japanese, Thai and Chinese ultural contexts (*Ba*)

In the following passages we will see the findings of our 4 researches conducted in 2010, 2011 and 2012 (along with our other past researches for the purpose of comparison) in Japan, Thailand and China. The purposes of these researches are to find

out different cultural *Ba* in 'Far East' and the relations between people's *Ba*-related-views and IIE-related-views (robots and privacy).

These researches are as follows. (1) 2011HG: Research done in Japan from August 19 to August 21, 2011. The respondents are 744 men and women with age 25-44. The respondents (Internet users living in Fukushima, Miyagi and Iwate Prefectures) were selected by a research company in Japan. This survey was designed as quota sampling, and ratios of gender and age were quoted from the official statistical report of the Japanese government about the Internet users in 2010 in Japan. (2) 2010CG: Research done in China from August 9 to August 17, 2010. The respondents are 481 men and women living in Beijing, Shanghai and Guangzhou. This survey was designed as quota sampling, and ratios of gender and age were quoted from the official statistical report of the Chinese government about the Internet users in 2010 in China. (3) 2010CS: Research done in China in 2010. The 367 respondents are Chinese university students, Guangdong College of Industry and Commerce (Guangzhou, Guangdong Province) and Jishou University (Jishou, Hunan Province). (4): 2012TS: Research done in Thailand in January, 2012. The respondents are 141 students studying in Chulalongkorn University, Bangkok. This survey was done with help from Soraji Hongladarom of Chulalongkorn University. This research in Thailand was done on the limited samples of Thai students. But this research is considered to be a useful step to the comparison of people's attitudes in 'Far East' regarding HRI and privacy-related topics. (Other research shown in the following tables was done by Nakada and his colleagues in Japan.)

In my view, Japanese of today live in two different realms or two different aspects of world/society. If we use the term described in the sections above, we can say that Japanese people of today live in two different *Ba*. According to my interpretation, one of these *Ba* is characterized by strong influence by modernized, advanced, rationalized, individualized and Westernized ways of life. And another is characterized by orientation to more traditional, indigenous and non-rational (i.e. virtuous life is more important than income, advancement in life regarding occupation and social status or personal benefits gained through rational judgment) life. We might call the former 'rationalized life-oriented-*Ba*' and the latter 'virtuous life-oriented-*Ba*.' Or more simply, 'rationalized *Ba*' and 'virtuous *Ba*.'

We have to add additional explanation to the latter, 'virtuous *Ba*.' In traditional ways of life in 'Far East,' at least in Japan, in many cases, virtue, dignity, ascetic attitudes, righteous soul and emotional/aesthetic sensitivity to this world are more important than modernized, advanced, rationalized, individualized and Westernized ways of life. Or we might say that people in Japan live in a life world characterized by tension between modernized, rationalized, and Westernized ways of life and virtuous, ascetic and aesthetic ways of life.

In Japanese, we have a proverb, '*Wakon* and *Yousai*.' *Wa* means traditional Japanese ways. *Kon* means mind, spirit or righteous soul. *You* means Western. *Sai* means intelligence. So '*Wakon* and *Yousai*' means 'we need Western intelligence but we have to keep our original and righteous soul.' This 'righteous soul' is based on "nation's past righteous good deed," "lessons deriving from 'our past cultural, political, historical, and religious experiences related with Buddhism, Confucianism, *Shinto*, *Kokugaku*, thoughts of Lao-tse and Zhuangzi, *Bushido* (moral and ethics of Samurai),

traditional views on nature, orientation to solidarity and so on,'" and also "our past shared emotional sensitivity to this world associated with our literature, poems, essays such as 'The Tale of the Genji.' I think that 'virtuous *Ba*' is full of meanings and interpretations of these ethical, existential, ascetic and aesthetic ways of life. In addition, in my view, important social problems including HRI and privacy, which are evaluated with criteria related to 'rationalized *Ba*' on one hand, are almost always interpreted by the measurement grounded on 'virtuous *Ba*' on the other hand.

According to my previous research in Japan, these frameworks for understanding or hypothesis about this dualism, 'rationalized *Ba*' and 'virtuous *Ba*' have been proved to be fundamentally correct (see Nakada, 2009; 2010). And if my understanding is correct, this dichotomy is not confined to Japanese culture. People in 'Far East' share the heritage of cultures, thoughts as well as the past memories coming from encounter with advanced (at least with regard to 'Western intelligence'), rationalized, individualized ways of life in 'Far West.' In this sense, we can think that people in 'Far East' share at least some aspects of traditional and virtuous *Ba* and also the experiences of conflict arising from different *Ba*(s).

The following table (Table 1), the one mainly associated with 'virtuous ways of life,' shows that this interpretation is fundamentally acceptable. The items or statements shown in Table 1 are originally thought out for the research about Japanese respondents. But as this table shows, the agreement of the importance of 'virtuous ways of life' is not confined to Japanese respondents. The range of the respondents in Thailand is limited. So we have to be careful not to draw too many implications from this data, but at least we can say that people in 'Far East' including Thailand might be considered to share a certain aspect of 'virtuous ways of life.' It is surprising to know that people's views on 'virtuous ways of life' are very similar in 'Far East.'

Table 1. Sympathy with 'virtuous and ascetic life'-related meanings in 'Far East'

	1995G (Japan)	2000G (Japan)	2008G (Japan)	2010S (Japan)	2011G (Japan)	2010CG (China)	2010TS (Thai-land)
Distance from nature	73.6%	-	79.8	77.0	78.0	90.6	91.5
Honest poverty	83.7	81.5	84.0	84.7	87.0	86.2	54.8
Destiny	84.4	79.0	81.2	89.5	82.4	81.5	52.1
Denial of natural science	88.5	88.3	86.2	89.1	88.2	94.2	89.4
Criticism of selfishness	85.5	88.3	90.2	62.8	80.3	93.8	-
Powerlessness	71.9	64.8	73.4	62.9	77.8	-	-
Superficial cheerfulness	73.3	65.6	71.0	50.8	72.7	83.8	-
Belief in kindness	-	68.1	77.2	82.3	74.3	83.4	95.0
Scourge from heaven	62.7	49.5	-	-	-	-	12.7
Warnings from heaven	-	-	67.4	38.1	60.2	81.7	19.7

1) Table 1 shows the percentages of the respondents who said 'agree or somewhat agree' to 'virtuous and ascetic life'-related meanings. These statements are: "Within our modern lifestyles, people have become too distant from nature"(Distance from nature); "People will become corrupt if they become too rich"(Honest poverty); "People have a certain destiny, no matter what form it takes"(Destiny); "In our world, there are many things that cannot be explained by science"(Denial of natural science); "There are too many people in developed countries (or Japan)(or China)(or Thailand) today who are concerned only with themselves" (Criticism of selfishness); "In today's world, people are helpless if they are (individually) left to themselves" (Powerlessness); "In today's world, what seems cheerful and enjoyable is really only superficial" (Superficial cheerfulness); "Doing your best for other people is good for you" (Belief in kindness); "The frequent occurrence of natural disasters is due to a scourge from heaven" (Scourge from heaven); "Occurrences of huge and disastrous natural disasters can be interpreted as warnings from heaven to people"(Warnings from heaven).
2) Figures in **bold type** indicate the items to which over 50% respondents showed affirmative answers

The following tables (Table 2, 3, 4 and 5) show people's views on robots and privacy in 'Far East.' (The original questionnaires include some items which don't deal with privacy and robots directly. But in my view, these are privacy-related- or robot-related-items in a broader sense.) As these figures show, people in 'Far East' have various views on robots and privacy. It is not clear whether 'encountering' with my questions provides them with chances to think about these problems or whether these views lie in their minds in a latent way. But it is important to find that people in 'Far East' can, at least potentially, see these problems from ethical and critical perspectives.

Generally speaking, Chinese respondents tend to show their attitudes toward these problems in a clear way. Japanese respondents tend to show relatively vague attitudes compared to Chinese respondents. But on the other hand it is very interesting that Japanese respondents show very strong attitudes toward 'The earth, mountains, rivers are expected to be a subject of affection or consideration, even though they have no life' and 'When our houses are destroyed by some sad and hard accidents like natural disasters, we feel that we lose our own part.' This might be a typical case of Japanese emotional sensitivity to nature and *Mono* (things).

Table 2. Views on robots in 'Far East' (What are your thoughts about various views on robots shown in the following list?)

	2008 G (Japan)	2010S (Japan)	2011 HG (Japan)	2010 CG (China)	2010 CS (China)	2012 TS (Thai-land)
To leave handicapped or elderly persons in the care of robots worsens isolation of them from societies even though this idea seems to be appropriate at first glance	42.2%	**58.6**	-	**83.5**	**88.2**	**54.2**
It is very natural when children sympathy or some kind of affection towards virtual creatures like Tamagotchi.	33.8	**62.4**	-	**81.3**	**78.8**	-

Robots should be given similar rights in the future as fetuses or patients in a coma without consciousness or awareness.	9.4	13.5	-	49.4	27.6	23.9
Robots are expected to be a subject of affection or consideration in the future just as the earth, mountains, rivers are treated so, even though they have no life.	21.4	29.6	-	**67.4**	**54.3**	40.2
To leave children in the care of robots would be better than to leave them alone without any care.	19.6	35.7	-	**71.1**	**56.6**	46.5
To provide robots with capability of expression of their emotions such as pains would be good in order to prevent (avoid) cruelty or maltreatment to them.	31.4	27.7	-	**65.3**	**66.6**	-
.It is natural for some people to get mad when their avatars are insulted, because they feel that the avatars are part of themselves.	25.8	32.5	-	-	**64.1**	-
Friendly robots like pet robots for the purpose of human-robot communication are just fake because they have no real minds or feelings.	22.6	30.7	-	-	43.4	-
It is very natural when children show sympathy or some kind of affection towards robots without life just as they show sympathy towards characters of animated cartoons.	-	-	40.1	-	-	**79.5**
It would be very good to use robots as the purpose of education for children at schools in order to promote effects of education.	36.4	41.3	40.9	**61.6**	36.2	**57.7**
To use robots on the battlefields would be good because we can reduce the number of causalities of warfare.	14.6	27.6	-	**74.3**	49.8	-
To use robots on the battlefields and to have them kill human enemy soldiers would cause serious ethical problems.	-	-	**58.3**	-	-	**64.1**
To use robots to do domestic chores would be good because we can lesson the burdens of family members.	40.2	44.9		**85.8**	-	-

1) The percentages are added figures of 'strongly agree' and 'somewhat agree'. 2) Figures in **bold type** indicate the items to which over 50% respondents showed affirmative answers.

Table 3. Views on robots in 'Far East' (Continuation of Table 2) (Data: 2011HG)

	2011 HG (Japan)
The earth, mountains, rivers are expected to be a subject of affection or consideration, even though they have no life.	**72.3** %
To leave elderly persons in the care of robots might be considered to be helpful, but at the same time we feel that those elderly people are pitiful with help by machines.	**55.9**
To leave children in the care of automatized robots with monitoring devices would be better than to leave them alone without any care.	33.2
When our houses are destroyed by some sad and hard accidents like natural disasters, we feel that we lose our own part.	**76.1**
To leave children in the care of human teachers would be better than to leave them in the care of robots, even if the teachers have some problems regarding knowledge and personality.	34.1
We can't help loving cute pet robots even if we know they are machines.	43.3
We feel that robots, even though they have no life, should be protected against human's arbitrary destruction, because they are made with earnest care.	**53.2**
We should do similar requiem services for broken robots and computers just as Japanese requiem service for broken needles.	40.7
Two types of mistakes are completely different from each other: robots soldiers might kill civilians on the battlefield by mistake; human soldiers might kill civilians on the battlefield by mistake .	41.2
The plan to use automatized robots on the battlefields and to have them kill human enemy soldiers make me feel some sort of unpleasantness.	**68.4**

1) The percentages are added figures of 'strongly agree' and 'somewhat agree'. 2) Figures in **bold type** indicate the items to which over 50% respondents showed affirmative answers.

Table 4. Views on privacy in 'Far East' (What are your thoughts about various views on privacy shown in the following list?)

	2008G (Japan)	2010S (Japan)	2011 HG (Japan)	2010CG (China)	2010 CS (China)	2012 TS (Thai-land)
Watching people through crime-prevention-camera (security camera) in the streets is very important to keep public order.	55.4%	50.6	-	**76.1**	**55.8**	**50.7**
Collecting someone's personal information through search engine like Google without his/her being aware of it is a controversial issue because this information is used without permission.	64.4	66.6	-	**86.0**	**81.2**	**55.7**
To ask someone about his/her income might be regarded as rudeness (violation of privacy) even among school(personal)friends.	-	-	-	**83.4**	**63.9**	39.5
Respect for privacy is among the most important presuppositions for	-	-	-	**90.4**	**93.9**	-

building developed and civilized society and we should place greater importance on this than ever.					
Even if there is no danger for privacy-violation, to show a photo of one's face in SNS or blogs is a matter associated with a feeling of reluctance.	-	75.2	**-**	**87.1**	34.0	-
I have no secrets to my parents and I can tell them everything from my boy (girl) friend to my friendship.	-	-	-	-	40.0	-
Too much respect for personal privacy might not harmonize well with virtues in collective life culture which emphasizes shame, modesty, consideration for others.	39.6	34.4	43.1	**52.6**	-	40.8
When we worry too much about privacy, we can't honestly and frankly talk about matters with our good friends.	48.2	60.4	**54.0**	**72.0**	-	-
When the newspapers or TV report on crimes, we want to know detailed reports on suspects' or culprits' occupations, human relations, life history or personality in order to know the meaning of the incidents.	-	-	-	-	-	**66.2**
When the newspapers or TV report on serious crimes like homicide, we want to know detailed reports on victims' occupations, human relations, life history or personality in order to know the meaning of the incidents.	31.2	39.4		**76.7**	45.9	**52.1**
Photos or real names of culprits of crimes under 20 years old which are sometimes presented through the reports of mass media might be important information in some cases, although these items of information are controversial.	45.2	27.6	-	-	46.4	-
To disclose part of my afflictions of illness or failure to my friends sometimes makes our relations closer and better than to talk about my good job and success.	46.8	64.8	44.2	**79.6**	**52.3**	**61.9**

1) The percentages are added figures of 'strongly agree' and 'somewhat agree'. 2) Figures in **bold type** indicate the items to which over 50% respondents showed affirmative answers.

Table 5. Views on privacy in 'Far East' (Continuation of Table 2) (Data: 2011HG)

	2011HG(Japan)
Watching people through crime-prevention-camera (security camera) in the streets is very unpleasant even though this might be important to keep public order.	37.7%
I don't understand why Chinese people do such things without reluctance to open one's own photos of face on the Internet.	**58.7**
To bury the articles left by the victims as well as the cars in the ground in the railroad accident in China means loss for respects for the victims.	**77.4**
It is rather unpleasant that my family members or my friends use my own coffee cup without paying attention on my personal emotion.	49.5
When serious crimes occurs, I feel to know some detailed information on families and occupations of criminals and culprits in order to understand the meanings of crimes.	**52.9**
When I know the faces of criminals or culprits through the reports of the newspapers, TV or the Internet, I feel that I can understand the backgrounds of the incidents more clearly.	25.8
By posting on the Internet, I can understand my real feelings.	22.2

1) The percentages are added figures of 'strongly agree' and 'somewhat agree'. 2) Figures in **bold type** indicate the items to which over 50% respondents showed affirmative answers.

One of the most important findings about Japanese views on robots and privacy which we got through analysis on our past researches is the one that those views have strong or fairly strong correlations with people's views on 'virtuous ways of life' (we called these '*Seken*-related views in my previous papers) (see Nakada, 2009). The following tables (Table 6, 7 and 8) show that these findings are not confined to Japanese cases. These tables show the 'virtuous and ascetic life'-factors and Robot-factors as well as Privacy-factors. 'Virtuous and ascetic life'-factors are factors which we can get by doing factor analysis (principal factor analysis, Varimax rotation) on the items indicated in Table 1. Similarly we can get 'Robot-factors' and 'Privacy-factors' by doing the same statistical methods on the items of Table 2, 3, 4 and 5. Table 6, 7and 8 show a very important finding that 'virtuous and ascetic life'-factors are strongly or fairly strongly correlated with Robot-factors as well as with Privacy-factors. For example, in the case of Thai respondents, 'Virtue 2 (denial of modern life)' factor (which is one of the factors of 'virtuous and ascetic life'-factors in Thailand) has statistically significant correlations with 4 robot and privacy factors. This means, in my interpretation, that these factors or these different (at least on the superficial level, people seem to have a variety of different views on virtuous and ascetic life as well as on privacy and robots) views in Japan, China and Thailand lie within similar frameworks for understanding various meanings of phenomena with which we encounter in this world. If we use our own term which I explained above, these findings show, if my understanding is correct, that people in 'Far East' live in a similar *Ba* or *Ba*(s) where people's evaluation on 'what is virtuous life?' has a crucial role.

Table 6. Relations between 'virtuous and ascetic life'-factors and Robot-factors as well as Privacy-factors (Data: 2011CG=China)

	Robot1 (rights and care for robots)	Robot2 (usefulness)	Privacy1 (collectivism rather than privacy)	Privacy2 (concern about violation of privacy)
Virtue1 (criticism of modern life)	.181***	.272***	.211***	.347***
Virtue2 (orientation to virtue)	.353***	.219***	.257***	.328***

1)*** =p<0.001, **=p<0.01, *=p<0.05, ns= non (statistically) significant

Table 7. Relations between 'virtuous and ascetic life'-factors and Robot-factors as well as Privacy-factors (Data: 2011HG=Japan)

	Robot2 (criticism of destruction by robot)	Robot3 (criticism of robot use)	Robot4 (empathy for nature)	Privacy1 (truth beyond privacy)	Privacy2 (criticism of railroad accident in China)	Privacy4 (human relations beyond privacy)
Virtue1(orientation to virtuous life)	.336***	.316***	.308***	.222***	.391***	.198***
Virtue2 (denial of modern life)	.196***	.188***	.301***	.081*	.309***	.250***

1)*** =p<0.001, **=p<0.01, *=p<0.05, ns= non (statistically) significant

Table 8. Relations between 'virtuous and ascetic life'-factors and Robot-factors as well as Privacy-factors (Data: 2012TS=Thailand)

	Robot1 (rights for robots)	Robot2 (positive attitudes toward teaching-robots)	Robot3 (children abuse through use of robots)	Privacy1 (collectivism rather than privacy)	Privacy2 (concern about violation of privacy)
Virtue1(non-rationalism)	-.197*	ns	.186*	ns	.186*
Virtue2(denial of modern life)	ns	.218*	.184*	.218*	.184*

1)*** =p<0.001, **=p<0.01, *=p<0.05, ns= non (statistically) significant

4. Conclusive Remarks

As we have examined in this paper, it is clear that people in 'Far East,' at least, in Japan, China and Thailand, share some sort of attitudes toward 'virtuous and ascetic life.' And we have examined too that these attitudes toward or views on life interrelate with people's views on robots as well as with their views on privacy. In my opinion, this means that people in 'Far East' live in similar cultural and existential contexts which might be called *Ba*, although it is still unclear how people in 'Far East' are aware of the roles of this/these *Ba*(s). I believe that the findings, which we could get through our empirical surveys, qualitative researches (we did a lot of interviews with Chinese people and Thai people to prepare our questionnaires) and theoretical thinking, are very important, because these findings seem to be the first ones in the field of researches in IIE, in particular, in IIE focusing on ethical problems in 'Far East.' But at the same time, I have to admit that this is only the first step to be followed by the researches in the future. Our next step, which we need in order to see this/these *Ba*(s) and also to see our minds associated with views on 'virtuous and ascetic life,' will be, I think, to look into the inner structures of *Ba*(s) in 'Far East.' We also have to see the relations among 'virtuous life-oriented-*Ba*,' 'rationalized life-oriented-*Ba*' and probably different *Ba*(s) emerging through the roles of technologies. We already know that our body (body schema) can encounter with tools (for example, see: Iriki et al., 2009; Introna, 2007) and that our body can be under influence by phenomena related with oscillation or CPG(a central pattern generator)(see: Nakada,2011). In this sense, we human beings might share some sort of *Ba*(s) with robots. Concerning privacy too, as the phenomena of 'mirror neurons' suggest, the interaction between humans through our body schema might bring forth newer and broader sight regarding privacy.

References

Arendt, Hannah (1983). *Vita activa oder Vom Tätigen Leben*. München: Piper (engl. *The Human Condition*. The University of Chicago Press 1970).

Capurro, Rafael (2005). Privacy: An Intercultural Perspective. *Ethics and Information Technology*, 2005, 7: 37-46.

Dario, Paolo (2005). Are robots accepted in the same way in Japan and in Europe? *PPT file submitted to Italy-Japan-2005 –Workshop (held on September 7-8 2005 at Ookubo Campus of Waseda University in Tokyo) organized by the Embassy of Italy in Japan*.

Ess, Charles (2005). "Lost in translation"?: Intercultural dialogues on privacy and information ethics(Introduction to special issue on Privacy and Data Privacy Protection in Asia). In *Ethics and Information Technology* 7:1-6.

Ess, Charles (2006). Ethical pluralism and global information ethics. *Ethics and Information Technology* 8:215-226.

Hongladarom, Soraj (2007). Analysis and Justification of Privacy from a Buddhist Perspective. In Hongladarom, Soraj and Charles Ess (Eds.), *Information Technology Ethics. Cultural Perspectives*. Hershey PA: Idea Group.

Iriki, A. et al. (1996). Coding of modified body schema during tool use by macaque postcentral neurones., *Neuro Report*, 7, 2325-2330.

Introna, Lucas D. (2007). Maintaining the reversibility of foldings: Making the ethics (politics) of information technology visible. *Ethics and Information Technology* 9:11–25

Johnson, Deborah G. (2006). Computer systems: Moral entities but not moral agents. *Ethics and Information Technology*, 8 (4), 1388-1957.

Johnson, Deborah G. and Miller, Keith W. (2008). Un-making artificial moral agents. *Ethics and Information Technology*10:123–133.

Kimura, Bin (1975). *Bunretsubyou no genshogaku*. Tokyo: Kobundo.

Kitano, Naho (2006). 'Rinri': An Incitement towards the Existence of Robots in Japanese Society. *IRIE 2006, vol.6* (Ethics in robotics), 78 –83.

Kitiyadisai, Krisana (2005). Privacy rights and protection: foreign values in modern Thai context. *Ethics and Information Technology* 7: 17-26.

Lü, Yao-huai (2005). Privacy and data privacy in contemporary China. *Ethics and Information Technology* 7: 7-15.

Morse, Ronald, A. (1974). *The Search for Japan's national Character and Distinctiveness: Yanagita Kunio (1875-1962) and the Folklore Movement.* Princeton: Princeton University.

Nakada, Makoto (2009). Blogs and privacy in *Seken* as a Japanese life-world including indigenous moral norms. *A paper submitted to CEPE09*(Computer Ethics: Philosophical Enquiry) in Corfu, Greece(3 days conference from 27 June to 29 June 2009),pp.1-17.

Nakada, Makoto (2010). DIFFERENT DISCUSSIONS ON ROBOETHICS AND INFORMATION ETHICS BASED ON DIFFERENT CULTURAL CONTEXTS (BA). *Cultural Attitudes towards Technology and Communication 2010*. Murdoch University, pp.300-315.

Nakada, Makoto (2011). Ethical and Critical Analysis of the Meanings of 'Autonomy' of Robot Technology in the West and Japan: Themes Underlying Discussions of the Ethical Aspects of Robotics and Human-Robot Interaction. In T. Kimura, M. Nakada, K.Suzuki and Y.Sankai(Eds.), *Cybernics Technical Reports. Special Issue on Roboethics*. Cybernics of University of Tsukuba, 61-91.

Nakada, Makoto and Capurro, Rafael (2009). The Public / Private Debate: A Contribution to Intercultural Information Ethics. In Rocci Luppicini and Rebecca Adell (Eds.), *Handbook of Research in Technoethics*, Hershey PA: IGI Global, 339-353.

Nakamura, Yujiro (2001). *Nishida Kitaro I*. Tokyo: Iwanami.

Veruggio, Gianmarco and Operto, Fiorella (2006). Roboethics: a Bottom-up Interdisciplinary Discourse in the Field of Applied Ethics in Robotics. *IRIE 2006 ,vol.6* (Ethics in robotics), 2 -8.