

“Heavenly principle(天理), state law (国法) , human sentiment/compassion (人情) ” and nuclear in East Asia

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At this panel, I argue;

- 1) Every energy, renewable, fossil, nuclear, has own risks and benefits and we must examine different scenarios of energy mix instead of assessing nuclear energy alone in order to achieve certain consensus about best energy mix<sup>1</sup>,
- 2) Energy policy is highly political and we must take it as major challenge for democracy because political decision-making in liberal democracy must be democratic,
- 3) Complex socio-technological system such as nuclear energy plants needs a new way of approach based on not the myth of rational controllability of the entire system, but recognition of bounded rationality of human,
- 4) “Heavenly principle, state law, human sentiment”, the East Asian political ideal is worth reexamining as a guiding principle in facilitating public dialogue on a new way of approach about energy policy in East Asia.

**Energy policy as politics**

Tokyo Electric Power Company(TEPCO)’s Fukushima Daiichi Nuclear Power Plants (hereinafter referred to as the “TEPCO’s Fukushima nuclear accident”) in March 2011 caused fundamental reconsideration and reformation of the energy policies including nuclear energy in Japan.

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<sup>1</sup> Rafaela Hillerbrand, the role of nuclear energy in the future energy landscape: energy scenarios, nuclear energy, and sustainability in Behnam Taebi & Sabine Roeser eds., *The Ethics of Nuclear Energy: Risk, Justice and Democracy in the Post-Fukushima Era*, Cambridge University Press, August 2015.

As a result, the 4<sup>th</sup> strategic energy plan was approved by the Cabinet in 2014<sup>2</sup>.

The 4<sup>th</sup> strategic energy plan admits<sup>3</sup>;

**Under these circumstances, interest in energy issues has surged in Japan compared with before the accident, and various people have expressed various opinions, such as 1) that use of nuclear power should be stopped immediately, 2) that nuclear power generation should be abandoned someday if possible, that 3) large-scale, concentrated power sources like nuclear power plants are unnecessary for Japan, 4) that even if nuclear power generation continues, its scale should be kept at a minimum, and that 5) there will be continued need for nuclear power generation, and discussions are ongoing.**

Accordingly, the 4<sup>th</sup> strategic energy plan set the nuclear energy policy as follows<sup>4</sup>;

**Dependency on nuclear power generation will be lowered to the extent possible by energy saving and introducing renewable energy as well as improving the efficiency of thermal power generation, etc. Under this policy, GOJ will carefully examine a volume of electricity to be secured by nuclear power generation, taking Japan's energy constraints into consideration, from the viewpoint of stable energy supply, cost reduction, global warming and maintaining nuclear technologies and human resources.**

One year later, based on the 4<sup>th</sup> strategic energy plan, the Long-term Energy Supply and Demand Outlook 2015<sup>5</sup> presented more concrete projection of each energy as power source in FY 2030, 22-24% renewable energy, 20-22% nuclear energy, 27% LNG, coal 26%, oil 3%.

However, the projected target in nuclear energy seems unachievable despite of the efforts of the Japanese government and the relevant sectors mainly because democratic

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<sup>2</sup> The 4<sup>th</sup> Strategic Energy Plan (provisional translation) approved by the Cabinet on April 11, 2014.

<[http://www.enecho.meti.go.jp/en/category/others/basic\\_plan/pdf/4th\\_strategic\\_energy\\_plan.pdf](http://www.enecho.meti.go.jp/en/category/others/basic_plan/pdf/4th_strategic_energy_plan.pdf)>

<sup>3</sup> *ibid.*, p.47.

<sup>4</sup> *ibid.*, p.24.

<sup>5</sup> Long-term Energy Supply and Demand Outlook 2015(provisional translation).

<[http://www.meti.go.jp/english/press/2015/pdf/0716\\_01a.pdf](http://www.meti.go.jp/english/press/2015/pdf/0716_01a.pdf)>

consensus building process is missing.

It is because neither the government nor the people are prepared for deep democratic deliberation on reasonably disagreeable issues such as nuclear energy in order to reach certain consensus about national energy policy.

I argue that energy policy is highly political and we must take it as major challenge for democracy because political decision-making in liberal democracy must be democratic. In this sense, Taiwan and Japan illustrate highly contrasting trajectories and consequences.

Taiwan decided to abandon nuclear power generation by 2025 through participatory democratic process whereas Japan swung from abandonment to obscure policy due to government change in 2012, which set 20-22% as a target proportion of nuclear power generation by FY2030 in the 4<sup>th</sup> strategic energy basic plan. Yet, in 2017, nuclear has produced 16% of overall electricity in Taiwan and 2 % in Japan.

The huge gap between target and achievement in Japan represents unbridgeable distance between the ruling and the ruled about energy policy, which could be narrowed if proper training and education on deliberative democracy were provided. Unfortunately, nuclear energy has turned to “taboo” in Japan, initially manipulated by the ruling and later self-imposed by the ruled, which makes difficult to discuss and deliberate it in public for reaching certain consensus on energy policy.

Prof. Lee Bollinger, the president of Columbia University and a leading scholar on the freedom of expression, emphasizes that citizens are not naturally inclined to go and participate the public political debate and if there is even a slight risk to be punished by their public statement, they would be likely to shy away speaking in public.

Japan, as a late starter in modernization, tried to become a member of the advanced states since Meiji Restoration, absorbing modern science and technology from the West actively while putting off the spiritual challenge accompanied with modernization process.

One of such unfinished projects is creating own unique democratic culture which is the prerequisite for political open dialogue.

### **New technologies need new approach and new mind-set**

The 4<sup>th</sup> strategic energy plan points out<sup>6</sup>;

**As far as our energy policy would be on an extension of the present technologies and**

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<sup>6</sup> The 4th Strategic Energy Plan, p.84.

**supply structure with respect to the vulnerability of the energy supply-demand structure, which mostly has to rely on overseas resources, it would be difficult to find a fundamental solution. In addition, it is necessary to achieve the goal of reducing greenhouse gas emissions by half in the world by 2050 and by 80% in developed countries simultaneously. To fundamentally solve such difficult problems, it is imperative to introduce revolutionary energy technologies throughout the society.**

Cathy N. Davidson, a global leader of education reform at the digital age, holds that expertise, specialization and hierarchy most valued in the twentieth century becomes outdated and obsolete at the information age<sup>7</sup>.

Steve Case, a founder of America Online, coined 2016 as the first year of the third wave of the Internet, in which ubiquitous connectivity starts transforming the real-world structure including the mindset of the people and their code of conduct<sup>8</sup>.

Major lessons we have learned from “TEPCO’s Fukushima nuclear accident” are;

- 1) Japanese organizations may have structural weakness in responding to uncertain and unpredictable emergency beyond standardized manual,
- 2) Any complex system sometimes becomes malfunctional although dedicated individuals make maximum effort, meaning that system is more than sum of individual members.

In my account, complex socio-technological system such as nuclear energy plants needs a new way of approach based on not the myth of rational controllability of the entire system, but recognition of bounded rationality of human. In this sense, nuclear energy system represents the future landscape of “connected society” at the “industry 5.0” age. In this sense, “TEPCO’s Fukushima nuclear accident” should not be taken as a special case of failure TEPCO alone was responsible but a representative case of the modern society in Japan which needs revolutionary transformation as a whole.

We need to change our mind-set developed at the standardized mass production age in order to introduce revolutionary energy technologies throughout the society.

For this end, we have to look over our way of thinking unconsciously embedded in our mind as a de-facto framework, which was mainly formulated through modernization process, heavily influenced by the West as the prime paradigm.

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<sup>7</sup> Cathy N. Davidson, *Now You See It. How Technology and Brains Science Will Transform Schools and Business for the 21<sup>st</sup> Century*, Penguin Books, 2011, pp.70-71.

<sup>8</sup> Steve Case, *The Third Wave*, Simon & Schuster, 2016, pp.4-5.

**Heavenly principle(天理), state law (国法) , human sentiment/compassion (人情)**

“Heavenly principle, state law, human sentiment” is the East Asian political ideal and basically means that state law must comply with the heavenly principle, transcendental from any secular authority, and must resonate with human sentiment as embodiment of the heavenly principle in human heart.

I hold that this political ideal is worth reexamining as a guiding principle in facilitating public dialogue about energy policy for three reasons;

- 1) This ideal includes human sentiment (emotion) as element and could shed light on the unconsciously embedded emotional attitude which fundamentally frames reasonings of opponents and proponents on nuclear energy,
- 2) The history of this ideal illustrates the response of the East Asia when they faced the modern West, which, in my account, deeply framed our way of thinking in East Asia,
- 3) This ideal is widely shared by the Chinese ruling class and should be highlighted in order to encourage the intellectuals in mainland China, a major actor in nuclear energy in East Asia, to join the regional dialogue on the future of energy policy.

Arguments on nuclear energy focus on balance between benefit and risks.

Proponents argue that nuclear energy is more secure as quasi-local energy source, environmentally less burdensome than fossil energies and the most cost-effective.

Opponents hold that focus should be shifted to the intergenerational burden in terms of radiotoxic wastes, the risk of nuclear proliferation, particularly the one of plutonium and health risk by exposure to radiation released by nuclear power plant accident.

It seems to me that neither side pays attention to the deeper dimension of emotion, human sentiment.

The emotions of opponents include indignation at risks imposed without advanced informed consent and lack of opportunities to get their voices heard in decision-making process about energy policy, which is their fundamental human right and should not be overlooked.

The underlying emotion of proponents is derived from their insulted confidence and wish to develop better and safer nuclear technology. It may also contain indignation at arbitrary political interventions without scientific and rational justification.

Benham Taebi, Sabine Roeser and Ibo van de Poel suggested that addressing emotions as starting points of debates rather than taking them as endpoints of debates would disclose and articulate underlying ethical/evaluative judgements and facilitate further

dialogue<sup>9</sup>.

Emotion or human sentiment has been considered vital element in politics in East Asia and we should reexamine it in public dialogue about nuclear energy.

“Human sentiment/compassion” was considered as manifestation of the cosmic order as embodied in law, *The Great Ming Code*, in Ming Dynasty China(1368-1644 A.D.). Jiang Yonglin<sup>10</sup> refutes widely shared assumptions that law was an oppressive political tool and had nothing to do with “superhuman” values in imperial China and argues that law was established, reflecting their cosmology consisting of the world of spirit, the realm of human beings and the emperor in which the emperor received the Mandate of Heaven as the cosmic mediator for retaining harmony between the spirit world and human realm<sup>11</sup>.

In Yonglin’s account, in *Great Ming Code*, law was considered as a concrete embodiment of the cosmic order and heavenly principle was understood as the ultimate origin and fundamental pattern of the cosmos. Human sentiment was human compassion based on heavenly principle<sup>12</sup>.

Reevaluation of emotion/human sentiment also takes place in the West. Margaret R. Graver arguably illustrates that the founders of the Stoicism intended not to eliminate human emotions but to sort out what is the natural feeling for human if he/she becomes free of false belief<sup>13</sup>. Graver’s argument intends to refute the established understanding of stoicism as “absence of emotion.”

Ethically justifiable emotion or human sentiment such as indignation should be taken seriously and “heavenly principle, state law, human sentiment” should be reexamined in this sense.

More fundamentally, this political ideal could be used for exploring our deeply embedded premises which unconsciously regulate our way of thinking.

Wang Hui argued that the heavenly principle as a universal set of values for a moral-political community was taken over by the modern universal principle (公理) since its

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<sup>9</sup> Benham Taebi, Sabine Roeser and Ibo van de Poel, The Ethics of nuclear power: Social experiments, intergenerational justice, and emotions, *Energy Policy* 51(2012)202-206, p.205.

<sup>10</sup> Associate professor at the Department of East Asian Languages and Cultures of Bryn Mawr College(Pennsylvania, USA).

<sup>11</sup> Jiang Yonglin, *The Mandate of the Heaven and the Great Ming Code*, University of Washington Press, 2011, pp.175-180.

<sup>12</sup> Ibid., p.4.

<sup>13</sup> Margaret R. Graver, *Stoicism and Emotion*, The University of Chicago Press, 2007.

embodied worldview, cultural identity and political legitimacy turned out to be lost after China encountered the modern West<sup>14</sup>.

Wang held<sup>15</sup>;

**It is worth noting that one of the main characteristics of the worldview of Universal Principle is to use science and its empiricist methodology to expose the fictional essence of such naturalist categories as Heaven, the Way of Heaven, the Mandate of Heaven, and Heavenly Principle and to place Nature into objective reality, thus changing the ontological (and originary) significance of the word “Nature”(ziran).**

**The modern worldview of Universal Principle views Nature as an object that can be known and controlled, and argues that the process of the control of Nature in itself is a demonstration of the freedom of the subject.**

In Wang’s account, this sharply contrasted description of modern universal principle and patriarchal heavenly principle accompanied a story that the idea of the self and scientific/positivist method was taking over the non-scientific idea of heavenly principle since the late Qing era<sup>16</sup>.

However, Wang stressed that both the heavenly principle and the universal principle share the same concept “principle(理)“, which means a universal rule or law that transcends and immanent simultaneously in “things(物)”<sup>17</sup>.

In this connection, Wang presented one contradiction about “principle”.

In this contradiction, “principle” as a concept penetrating through cosmology, always faced certain dilemma. In the theory of the heart-mind and nature, “principle” is what human could understand and master through daily self-cultivation practice. This understanding of “principle” made it possible for this practice of “investigating things and extending knowledge”(格物致知) to be gradually identified with scientific methodology, which paved the way from “Heavenly principle” to “Public Principle”.

“Universal principle”, in Wang’s account, was established by exposing fictional features of “Heavenly principle” and transformed the ontological view of Nature as a controllable object in the early modern period.

Viewing nature as object is another expression of autonomy of human completely

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<sup>14</sup> Wang Hui, translated by Michael Gibbs Hill, *China from empire to nation-state*, Harvard University Press, 2014, p.61.

<sup>15</sup> *ibid.*, p.98.

<sup>16</sup> *ibid.*, pp.86-87.

<sup>17</sup> *ibid.*, p.70.

independent and disengaged from nature.

However, in the same theory of the heart-mind and nature, “principle” is not an object for scientific investigation. In this sense, the practice of “investigating things and extending knowledge” should not be mixed up with scientific observation.

In short, “principle” embraces both scientific and moral outlooks which could bring about its endogenous self-transformation.

Wang insists that if modernization is identified with denaturalization of nature including inner nature of human, “Universal principle” must be deuniversalized and denaturalized in order to re-examine the modernization process.

In my account, viewing modernization as the process of development of scientific investigation of nature tends to put aside private ethical conviction usually accompanied with deep emotional attachment as irrational and non-public.

“Heavenly principle, state law, human sentiment” has great potentiality for re-examining the modernization process in East Asia.

In late 1990’s, Jeremy T. Paltiel held that the language of national identity does not find widespread adherence in the professional classes who are pushing the expansion of legality and rights language in China. In his account, Chinese intellectuals, wishing to expand their personal and intellectual autonomy from the state, were cautious if discourse around national identity and reference to Confucianism would be utilized by the state in strengthening its authoritarian control upon citizens including intellectuals<sup>1 8</sup>.

**Only when the contest for authority and legitimacy has yielded to a search for meaning will greater effort possibly be put into restoring Confucianism as a living tradition from which to draw universal values<sup>1 9</sup>.**

Paltiel’s concluding remark, viewed from where we are in 2017, looks very indicative. The contemporary East Asia, undergoing a fundamental transformation process due to a gradually declining U.S. presence and emerging China after half a century of relative stability under U.S. domination, seems to lend impetus for reviving East Asian traditional thoughts including Confucianism.

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<sup>1 8</sup> Jeremy T. Paltiel, Human Rights and Chinese Tradition in Political Discourse, in WM.Theodor de Bary and Tu Weiming eds., *Confucianism and Human Rights*, Columbia University Press, 1998:270-296, pp.283-289.

<sup>1 9</sup> *ibid.*, p.289.



I emphasize that we need to develop a set of new stories to transform the regional political order in the Asia Pacific, based on the universal norms such as human rights, democracy and rule of law and the underlying new stories must be grounded in the common narratives of human, society and their transcendental values in the region. In this sense, “heavenly principle(天理), state law (国法) and human sentiment/compassion (人情)”, is worth revisiting and reexamining.

### **Human rights linked with energy policy in East Asia**

I propose linking regional/international energy cooperation framework with regional/international human rights bodies.

The 4<sup>th</sup> strategic energy plan proposed expanding the framework of multilateral energy cooperation<sup>2 0</sup>;

**It is necessary to actively contribute to the IEA, which has abundant accumulated experiences in the field of emergency response and in a broad range of energy policy fields, stable multilateral frameworks with substantial secretariat functions, such as the IAEA, and international and regional forums such as G8, G20 and the Asia-Pacific Economic Cooperation (APEC) forum. If Japan plays a leading role in initiatives to enhance the stability of energy supply and demand in Asia, where energy demand will grow considerably, it will improve Japan’s own energy security environment. It is imperative to further develop the East Asia Summit (EAS) into a more effective multilateral framework for discussions about energy security with the Economic Research Institute for ASEAN and East Asia (ERIA) as the core organization. In addition, by making use of Japan’s strength in terms of policy and technology, GOJ takes the initiative in forming public opinions in the international arena under multilateral frameworks for specific themes, such as the International Energy Forum (IEF) for producer-consumer dialogue, the Clean Energy Ministerial (CEM), International Renewable Energy Agency (IRENA), and International Partnership for Energy Efficiency Cooperation (IPEEC).**

It is my fundamental belief and proposition that it is imperative to develop the regional human rights protection mechanism of which the rules, principles and practices must incorporate and be compatible with the global human rights standard.

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<sup>2 0</sup> The 4th Strategic Energy Plan, p.79.

All stakeholders admitted that “TEPCO’s Fukushima nuclear accident” caused grave human rights violations.

It is also widely recognized that any energy has own risks.

So, it seems reasonable to incorporate certain human rights monitoring and protection mechanism in the regional/international energy cooperation frameworks.

In my account, in increasingly interconnected world, multilayered governance system is emerging together with several non-traditional mechanisms for human rights protection and multiple channels for much wider participation of people in decision-making process.

For instance, Asian Development Bank has developed the Safeguard Policy Statement (SPS) and Accountability Mechanism which aims at protecting human rights of the people affected by ADB funding and providing them with channels for filing complaints against recipient states as well as ADB.

Many codes of conduct in different sectors, a great number of memorandums of understanding (MOUs) signed by multi-stakeholders and even de-facto standards in new technologies established by private companies constitute the regional human rights protection arrangements in addition to numerous NGO networks in the region.

At the global level, UN Human Rights Council established and mandated the open-ended intergovernmental working group to elaborate an international legally binding instrument to regulate, in international human rights law, the activities of transnational corporations and other business enterprises with respect to human rights in the resolution 26/9 of 26 June 2014.

The third session took place from 23 to 27 in October 2017 and discussed proposed elements of an international legally binding instrument and agreed to consider and negotiate a draft treaty at the next session in autumn 2018.

Business sector plays a major positive role in sustainable development, but needs to follow internationally established standards, international human rights law and their obligation will soon become legally binding through international human rights treaty.

Given this recent development, it seems to me appropriate to consider establishing regular contact, for instance, between the ASEAN and East Asia energy cooperation frameworks and regional/international human rights bodies such as the ASEAN Intergovernmental Commission on Human Rights (AICHR), the ASEAN Commission on the Promotion and Protection of the Rights of Women and Children (ACWC) as well as major international human rights bodies.

It is also worthwhile organizing inter-regional consultation between ASEAN & East Asia and Europe, for instance, through Asia-Europe Meeting (ASEM) framework about human rights and energy industry.

The 2013 survey by Plan International disclosed that the Committee on the Rights of the Child did not mention so much about natural and human-made disaster in the state report monitoring process<sup>2 1</sup>;

- 1) There was little mention of natural hazards in State and NGO reports, even in countries that were regularly subjected to them. When included, there were only a few references to the impact of natural hazards, disaster mitigation or disaster prevention on children. Disasters were not always acknowledged in the concluding observations as a factor and difficulty impeding the implementation of the Convention in countries that experienced a high number of disasters and the Committee made very few specific recommendations with regards to disasters,
- 2) Human-made hazards were not covered in any State or NGO reports and were not referred to in any concluding observations by the Committee on the Rights of the Child.

Highly complex socio-technological issues such as nuclear is a new frontier for major international human rights bodies and their regular consultation with energy institutions will enrich and expand the horizon of human rights.

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<sup>2 1</sup> *Disaster Risk Management, Conflict and Climate Change in the Monitoring of the UN Convention on the Rights of the Child* in Child Rights Series, Plan International, 2013, pp.8-9.

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