# Book Review Five books on the 3/11 earthquake and nuclear disaster

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This is my first book review on the 3/11 disaster. The 3/11 quake, tsunami, and nuclear disaster gave a tremendous shock to Japanese society. In order to record and understand the unprecedented scale and meaning of the disaster, Japanese have been writing and publishing hundreds of books. A huge amount of experiences, knowledge, and discussion are contained in these books. Given the nature of the disaster, I am convinced that Japanese experiences should be shared globally. However, most books are written in Japanese, and remain inaccessible to non-Japanese. To convey the impact of the 3/11 to non-Japanese readers, I wrote this book review.

### 1. History of Tsunami in Modern Japan

Mainichi Shimbun Company, 2011, Mainichi Shimbun Company, 96 pages. Japanese title: Meiji, Showa, Heisei Kyodai Tsunami no Kiroku.

This is a photographic collection of annihilating tsunamis in Japanese modern history. Modern Japan has suffered colossal tsunamis four times: 1896 Meiji-Sanriku earthquake, 1933 Showa-Sanriku earthquake, 1960 Chilean earthquake, and 2011 Tohoku earthquake. Mainichi Shimbun, one of the major newspaper companies in Japan, compiled the history of tsunami by using archives of Tokyo Nichinichi Shimbun, Osaka Mainichi Shimbun, and Mainichi Shimbun.

1896 Meiji-Sanriku earthquake occurred on June 15. Including missing persons, 21,959 people were dead. Very few people were killed by earthquake. Kaisho, the old name of tsunami in Japanese language, caused a tremendous loss. Massive kaisho struck a typically ria coastal region on the Pacific Ocean, from southern Aomori Prefecture to northern Miyagi Prefecture. In fact, the kaisho hit region would be known as Sanriku coast after the earthquake. At that time, news was transmitted very slowly. The first report appeared in newspaper only after two days. Detailed local reports appeared after 10 days or so with hand drawn pictures.

1933 Showa-Sanriku earthquake killed 3,064 people. Again, the extent of the damage from the quake was minor. Fire and tsunami caused serious damage. Taro district of Miyako City, Iwate

Prefecture, suffered severe damage as in 1896. 763 people were dead, and 358 houses were totally destroyed. Or, 42% of the total population of the village and 98% of the houses were lost.

1960 Chilean earthquake with M 9.5 annihilated Chile in South America. After 22 hours of the quake, on May 24, tsunami reached across the whole extent of Japan, from Hokkaido to Okinawa. Once more, Sanriku coast was severely damaged with 142 dead persons. Professor Kato Yoshio, who observed Sanriku coast from the air on the day, concludes his report as follows (p72). "Recently they have built industrial zones in the coastal region. We have to learn a lesson from this disaster. Without measures against tsunami, it will be Sajo no Rokaku." Sajo no Rokaku, or a castle on the sand, means that it looks magnificent, but will be broken down easily because its foundation is not solid.

In this book, there are many pictures from the 3/11 quake taken from the air. Disaster situation in each community is clear at a glance. I have to confess that watching the pictures of Sendai, Natori, Kamaishi, Ishinomaki, Otsuchi, Minami-Sanriku, Soma, Hitachi etc. is really depressing. I am filled with the sense of loss. This book also makes me acutely aware of our ignorance. While tsunami has attacked Japan repeatedly, we could not draw a lesson from history. Or, we must have overestimated civil engineering technology. How many times we have heard the word of "an unanticipated situation" from experts? We have to reconsider overconfidence in science, and be more humble in front of nature.

#### 2. Atlas of the Tohoku Quake

Shobunsha, 2011, Shobunsya, 144 pages. Japanese title: Higashi Nihon Daishinsai Fukko Shien Chizu.

Shobunsya is a well-known map publisher in Japan. In collaboration with Dai Nippon Printing, they compiled this atlas in May 2011, and donated 30,000 copies to municipal headquarters for disaster control and disaster volunteer centers in the affected prefectures. Later, it became available in ordinary bookshops. Based on the research in April, evacuation centers, headquarters for disaster control, temporary municipal offices, traffic regulations, and range of tsunami inundation were mapped. The affected areas of the 3/11 disaster were so widespread, and visitors could not work there without a detailed map. This atlas must have been useful for various relief operations.

## 3. The Days After

ISHIKAWA Bon, 2011, Asukashinsha, 128 pages. Japanese title: The Days After: Higashinihon Daishinsai no Kioku.

Ishikawa Bon, a freelance photographer, remained in devasted towns for two months after 3/11. He recorded a long and painful time in the affected areas. A scorched ship which looks like a charcoal. Letters of Coca-Cola on a vivid red board, to be found a part of a torn vendor machine. An isolated

building in shorefront: it was located inland, but the surroundings are submerged. He presents peculiar sights of the days after 3/11.

Ishikawa also recorded people in silence. A woman sitting in front of many flower offerings. In the next picture, she is walking away, through mountains of debris. A man sitting on a red box, showing his back. In front of him, there is a large truck, overturned and buried in debris. Footnote tells that the man is waiting for his son every day. A little boy standing by dozens of newly built grave-posts in a makeshift cemetery. He lost his family member(s).

Today, most debris is cleared, and it is even difficult to remember how it was just after the quake. This photo book puts the days just after 3/11 on record. At the same time, this is requiem, dedicated to the soul of the dead. Each and every picture takes us a long and silent thought.

#### 4. Hot Spot: Networking for Radioactive Contamination Maps

NHK's ETV Special Team of Reporters, 2012, Kodansha, 285 pages. Japanese title: Hotto Suppot: Nettowaaku de tsukuru Hoshano Osen Chizu.

In Japan today, hot spot means a highly contaminated place by radioactive substances from Fukushima No. 1 Nuclear Power Plant (F1). This book is a by-product of NHK's TV program entitled "Networking for Radioactive Contamination Maps". A few NHK TV crews went into the radius of 30 km from F1 in March 2011. It was against an official notice from the upper-level management, saying "Do not go into the 30km zone". At that time, independent thinking and action was disappearing from Japanese TV stations and newspapers. They were just repeating "There is no immediate health damage" following the announcements of the Japanese government. While measuring radiation dose in various places in Fukushima, defiant NHK crews with Dr. Kimura Shinzo (an expert on radiation hygiene) found that radiation was dangerously high in the areas of the northwest direction from F1, and people and animals were just left behind without proper information. In Iitate, for example, villagers were supplying food and accommodations for earthquake and tsunami evacuees without knowing the level of radiation in their own land. The book criticizes government officials for monopolizing and not using information on radiation dose for helping residents. The first TV program was broadcast on May 15, 2011, and received favorable opinions from the general public. As a result, the program was officially recognized within NHK and serialized.

This book is consists of 9 chapters.

Chapter 1 Beginning of research on March 16, 2011

Chapter 2 Networking of scientists

Chapter 3 Left behind in "the Area advised to stay indoors"

Chapter 4 Making radioactive contamination maps

Chapter 5 Iitate Village: People dispossessed of their land

Chapter 6 Children in danger: Contamination of schoolyards in Fukushima City

Chapter 7 Uprooted by nuclear crisis Chapter 8 Detection of plutonium Chapter 9 Measuring effect on human bodies in Nihonmatsu City

Chapter 1 is by Nanasawa Kiyoshi. With Dr. Kimura, who quit his office to go to Fukushima, Nanasawa visits Fukushima on March 15. He has been to Chernobyl twice, and he says, it was inevitable for him to do so. They found hot spots, highly contaminated places. In Yamada district of Futaba Town, radiation dose was 1.5mSv (millisievert) per hour. Japanese law prescribes that 1mSv per year as the limit of radiation dose for ordinary people. In the middle of the hot spot, he's convinced that the contamination is equal to, or more than the Chernobyl disaster, at least in some places. Still, it takes a good one month for the Japanese government to announce Level 7, or the highest in the international nuclear event scale.

Chapter 3 is by Ohmori Junro. On March 26, Ohmori visits Kuzuo Village. He meets the Shinoki family managing a horse farm. They can't leave the farm because they have a horse about to give birth. The next day, he meets 12 people in Akogi district, Namie Town. Here in Akogi, dosimeter indicates 80microSv (microsievert) per hour, and they have never been informed anything from the government. In fact, Ministry of Education, Culture, Sports, Science and Technology (MEXT) began to measure radiation dose as early as March 15. But, MEXT intentionally did not make it public. When Ohmori asked the reason, the answer from the ministry was "We were afraid of groundless rumor." It is a very strange answer, because the radiation was indeed very high. It was 1300 times higher than the average dose in Japan before the disaster. The Japanese government gave priority to avoiding panic over people's safety.

Chapter 5 is by Ishihara Hiroshi. Ishihara is from Shirakawa, Fukushima Prefecture. He confesses that he cried when he was talking with his friend on telephone on the March 12 evening. They were thrown into despair, feeling that something irrevocable happened. Ishihara visits Iitate on March 26. Back on March 15, radiation dose was 44.7 microSv per hour in Iitate. Villagers were supplying food and accommodations for earthquake and tsunami victims without any information. Iitate people were promoting slow life. They were rather against mass production and mass consumption, symbolized by nuclear power plant. Though they have never tried to obtain any profit from nuclear power plant, they lost everything by the accident. Kanno Shingo was among them, who lost peaceful family life and farming in Iitate. Later in June, Ohmori meets Kanno Shingo again, this time in Iwaki. Now Kanno works as an employee of a subcontractor of TEPCO, who took everything from him. He tells himself "There are so many people like me."

Chapter 9 is by Yamaguchi Tomoya. On June 29, he visits Nihonmatsu with Dr. Kimura. With a request from the Mayor of Nihonmatsu, Kimura began to work with Nihonmatsu people. It is his faith that local citizens should take initiative. Firstly he measures radiation exposure of a few families. Secondly Kimura undertakes decontamination of their houses. The experiments encourage local people

greatly.

This book is one of the earliest records of radioactive contamination in Fukushima. It is also useful to understand the current situation in the prefecture, in which many parents and children live in anxiety about radiation, and suspicion with government.

# 5. *HOPE 2*

Save Iwaki Beach, 2011, Save Iwaki Beach, 119 pages. Japanese title: HOPE 2.

HOPE 2 is a community magazine published on October 2, 2011. Editor/publisher is Save Iwaki Beach, a civil society organization in Iwaki city, Fukushima. SIB's official name in Japanese is Iwakishi Kaigainhozen wo Kangaerukai.

Iwaki City is located at the south-east end of Fukushima Prefecture. 334,000 people live in the area of 1,231 square km. In terms of the area, Iwaki is one of the biggest cities in Japan (No.12 in 787 cities), and twice as large as Tokyo's 23 wards. Damage of the March 11 earthquake and tsunami was devastating, particularly on the Pacific coast. In such coastal communities as Hisanohama, Yotsukura, Taira-Usuiso, Taira-Toyoma, and Iwama, heights of tsunami reached as high as 7-8m, causing tremendous losses of human lives, private properties, and public infrastructure. The 3/11 disaster deprived of 310 lives, and 37 people are still missing. 7,640 houses were totally destroyed, and 73,000 houses were partially damaged. 200 schools and community centers, and 27 hospitals were damaged. Road damages were found in 2,546 places.

As a disaster-stricken area, Iwaki's situation is unusual. On the north, Iwaki borders on Futaba County in which F1 and F2, or Fukushima No.1 and No.2 Nuclear Power Plants are located. Due to the severe accident in F1, Iwaki people have accepted as many as 23,000 evacuees from Futaba County. A few Futaba towns are going to build respective "temporary town" within Iwaki city.

The volume contains 130 narratives of earthquake, tsunami, and evacuation from nuclear crisis. With Toyo University students, I have been translating the narratives one by one (See Nejima Seminar's Facebook.) Followings are excerpts from HOPE 2.

#### The last promise by Shiga Kenichi, 65, Maruken Industry, Inc. (translated by Nejima Susumu)

On March 11, when I was driving a car, the car rolled heavily from side to side. Something unusual was happening. Electric poles were swaying, walls were collapsing, and road was cracking. It was completely different from my experience of earthquake simulation vehicle. When I confirmed the safety of all the family members and employees, it was past 8 p.m. In the nearby Namezu River, water flew upstream with terrible force. A lot of volunteer firemen were on alert. They stopped each car, and the road was congested. Though electricity and water supply were cut off, I had a generator, and well water was available. My neighbors came with electric rice cookers and we cooked many onigiri or rice

balls. We delivered hundreds of onigiri to our fire company and an evacuation center established at Takaku elementary school. I spent the night within my car.

In the next morning, I left for Usuiso district. The earthquake caused land subsidence on the prefectural road. A large truck left on the road was disturbing traffic. I could not approach from Numanouchi, so that I went to Usuiso from Yokoana. When I arrived at Usuiso, I could not utter any syllable. It was so miserable. All I could see was mountains of debris. Townscapes in Numanouchi, Usuiso, and Toyoma have changed completely. People have suddenly disappeared. Firemen and local volunteers were searching missing people desperately. With fire caused by the quake, the circumstance was extremely difficult. What can I do right now? With my employees and heavy machines, I have cleared debris from road, and sought missing people.

They had already found several dead bodies out of debris. Corpses were left on the ground, covered with sand. I went home, and came back with sheets and water. I put corpses on the sheets, and washed their faces. It was all what I could do for consolation. I have been working in the districts for more than fifty years. I knew each one of them. Tears came into my eyes. We had to find more than one hundred people. We were desperate to find missing people as soon as possible. We had to be extremely careful not to damage dead bodies. It was really tiring and painful work. I do not want to do it again.

# *For children's future* by Matsumoto Mayumi, 40, Iwaki Action! Mama Club (translated by Fujii Kaede)

I have two sons. Younger son is in the second grade of elementary school, and elder son is in the first grade of junior high school. My beloved hometown Iwaki was polluted by the explosion of Fukushima No.1 nuclear power plant. My sons' friends transferred to other schools. I had to get sons to absent from soccer team in which they had just joined in March 2011. I wanted to go somewhere far away from here for their health. Many places would accept us. However, Japan has many earthquakes, and nuclear power plants are everywhere. Where is really a safe place? I had a hard time, and eventually I decided to remain in Iwaki.

Even in such a disastrous situation, television was only repeating "Radiation doesn't affect health immediately." When I was worried about radiation, I found "Fukushima Network for Saving Children from Radiation", a group of fathers and mothers with concerns about the impact of radiation. I got a lot of information from the group. I attended every lecture about radiation in Iwaki. I was desperate. Though I was against nuclear power, I didn't take any action because of busyness. I blamed myself. Now I want to change this society depending on nuclear power plant even after 3/11, and I want to save children. I joined demonstration march for the first time. Since then, I've been acting as a member of "Iwaki Action! Mama Club".

When we decided my sons' summer stay in Okinawa, I relieved with tears. Somewhere in my mind, I was always blaming myself not for moving out of Iwaki. To imagine my sons recovering health and spending days with smile made me happy. Happiness was bigger than sadness of missing them. They could play soccer, swim in the sea, go camping, and do all what I took away from them. So many

people supported to realize their stay. I also wanted to do something. While they were in Okinawa, I engaged with decontamination of school routes. After four weeks, my sons came back with smile and vitality. They stayed Okinawa International Youth Hostel. This project was financially supported by German volunteers' fund-raising campaign. With gratitude, I determined to change Japan as German decided to decommission all nuclear power plants by 2022.

The 3/11 disaster has not come to an end. Japanese must keep a record and publish more and more books. To perceive the nature of the disaster, and to understand where we are now, I will continue to review books.