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From the Faculty Advisers:

This journal is student-directed. From vetting submissions to advising selected authors in revision to final production, the work has been that of undergraduate students. We have merely served as faculty advisors ready to offer advice when solicited.

Each paper printed here can be seen as an opinion offered to and as intentionally part of, an ongoing discussion. The student journal aims to become a place in print where international liberal arts can be celebrated, examined and enriched. We welcome all readers to offer your thoughts on the ideas presented here and to join the discussion.

Finally, a word of gratitude must be given to AIU's president, president Mineo Nakajima, for his foresight in supporting this endeavor in its infancy and for continuing to support it by providing the funding for this third edition through a university President Research Fund grant.

Also, a fond farewell and best wishes for his future ventures must be given to one of the journal's founding faculty advisers, Dr. Al Lehner. Dr. Lehner's dedication to the student journal and in particular to student writing was a driving force in seeing this journal come to fruition. The Student Journal of International Liberal Arts will continue to pursue its mission to become a truly international forum for undergraduate students to publish their best work, as Dr. Lehner envisioned years ago. A fitting end to the faculty advisers' message for this issue must include Dr. Lehner's parting words:

As this third edition goes to press, I am in the process of moving to another university after eight years of challenging—and always rewarding—work. One project that I am most proud of is this student journal. As far back as 2005, Dr. Kirby Record and I had many discussions about the high quality of writing we were beginning to see among our students and wanted a way to showcase that work. We also wanted to create a forum in which students could contribute writing while they studied abroad as well as to include international student writing both from here at AIU or from our partner schools. Eventually, we applied for a President's Research Grant and were enhanced in our efforts by the addition of Mrs. Laura Kobata, another committed writing instructor with a vision.

While the journal has not developed as rapidly as we had initially hoped, it has published some quite worthwhile student writing. I would especially like to thank President Nakajima and Dean Kenneth Quinones for their unflagging support of this project, Mrs. Laura Kobata for her constant, thoughtful oversight—and hours of work, and Dr. Kirby Record for helping to stir the embers some seven years ago. I hope the journal finds a way to achieve its mission: to give undergraduate students an opportunity to publish an academic paper in a peer-vetted journal that is distributed globally.

All the best, Dr. Al Lehner

Laura Kobata

Al Lehner

Faculty Advisers

March 2012

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Japanese Film Propaganda: Censorship of Films Still Exists in 21st Century Japan

Akari Suzuki

Abstract

This paper demonstrates two ways of looking at propaganda films. The first is the act of showing films that contain especially politically sensitive topics to manipulate people's minds. The second is the act of deliberately not showing films that are politically sensitive to one nation to avoid or shut down inconvenient facts or information. This paper mainly discusses the second way of looking at propaganda films, and reveals the fact that film censorship still exists in 21st century Japan. The Cove, screened worldwide in 2010, is a documentary film depicting dolphin hunting in Japan. This film has been controversial among Japanese nationalists and dolphin hunters in Japan and has generated debate over whether this film should be screened or not. Films have a history of being an effective partner of Japanese militarism to manipulate Japan's citizens. However, by examining The Cove's case, this paper reveals the fact that films are still the target of censorship by a small group of people. Because this paper focuses on just one specific film, there is a limitation to demonstrate the exact amount of government involvement in the process that results in a film being banned. However, it is worth noting that a small group with political intentions, namely to cover up potential scandals, continues to censor films in Japan.

Introduction

Since the film industry was introduced to Japanese society in 1900, films have been both exported and imported, thus shaping the cinema's role as popular entertainment in Japan. For Japanese citizens foreign films were, as Tadao Sato the author of *Currents in Japanese Cinema* describes, major and a rare medium to "make contact with Western civilization and ways of life" (1982, p. 31). However, at the same time, the influence of foreign films simply could not be ignored or welcomed. Films have both positive and negative influences on people and can be used to manipulate people's opinions and minds. Historically, films indeed have been used to control the masses during war-time, not only by screening propaganda films but also by prohibiting them. Thus, there are two ways of looking at film propaganda. First, showing films which contain manipulated information to control people's minds will be simply considered

as an act of propaganda by the government. Second, not showing foreign films politically sensitive to the government will be considered the second method of propaganda used by the government. The latter manipulation at the same time delivers another message--fear of revealing another's truth. That is, not showing a film on a sensitive topic may arouse suspicions about the government and in fact draw greater attention to the topic. In addition, this may create internal problems within the country.

Importantly, the word "propaganda" needs to be defined. The Oxford English Dictionary defines the word propaganda as "the systematic propagation of information or ideas by an interested party in order to encourage or insist a particular attitude or response" (1989, p. 632). However, this definition could lead to the question as to which information can be properly considered propaganda. In other words, as the film critic Nicholas Reeves describes (2004, p. 11), "one person's 'truth' is all too often another's 'propaganda.'" Naturally, propaganda works well by continuously delivering certain information or thoughts to its target. However, in this paper propaganda is also defined in a different way. That is, certain information or actions are often presented with political intentions, and once they are chosen to be concealed or prohibited, they should be considered propaganda.

As mentioned previously, film has its own history as a role of propaganda both inside and outside of Japan. The Japanese film industry of the 1930s was probably at a peak in its history as propaganda. In 1931, there was a battle, which is described by Sato (1982, p. 9) as a battle between old and new, which was in other words over films as entertainment for the masses or as propaganda films. During the occupation of Manchuria in China, Japanese film makers faced an obligation to produce a new form of films for the purpose of glorifying militarism. In fact, there was a legal restriction on films called *Eigaho* (the Film Law), which justified the mobilization of the cinema during the war. The film law was enacted in 1939, and consists of twenty six articles which prescribe the regulation on foreign films and advance inspections of films. This law was modeled after the national film policy of the Nazis and advanced the legitimate intervention of the government in the national film industry. Although officially the film law was established in order to develop the national film industry as a national culture, it in fact gave absolute power to the government for the total control of the film industry within the country. As noted film scholar Dr. Mitsuhiro Yoshimoto analyzes, because of the collective nature of the cinema (2000, p. 86), films were one of the most useful tools for the government to control the masses during the war-time period. That is, because films are produced by a large group for the masses, the responsibilities of the individual are naturally reduced. Thus, the filmmakers could easily obey the government's national film policy without even noticing it. Needless to say, there was no freedom of opinion or expression whatsoever during this

war-time period.

However, it is rather surprising that such a manipulation of films still exists in Japan in the 21st century. As mentioned previously, there are several interpretations of the word propaganda, though this paper focuses on film propaganda. This paper considers the action of censorship of imported films as in a sense a part of a propaganda campaign. This paper will discuss the further details of the film industry from the war to the occupation by General Headquarters (GHO). This is to demonstrate how the government attempted to control the film industry by banning and censoring foreign films and how this is relative to today's film industry in Japan. The film *The Cove* will be discussed as an illustration in order to reveal the fact of censorship over imported films in today's society. There are three reasons why this film was selected. Firstly, The Cove is a widely known film throughout the world especially because the film won the Academy Award in 2010. Secondly, the case of *The Cove* raises questions about the role of movie theaters, which is crucially important to clarify the argument throughout this paper. Thirdly, The Cove was successfully exported to Japan despite the amount of criticism the film has drawn. It is worth noting that a lot of foreign films have been kept silent in Japan just because showing these films widely may lead to potential scandals over the content. This paper also attempts to reveal which parties are involved in the process and how the process is applied in determining which films are to be banned. Furthermore, the reasons as to why these foreign films are prohibited will be revealed as simply being because the films are considered to threaten the national policy as well as to contradict the history that Japan has taught to its people for decades. Also, it is simply because films are indeed "powerful weapons of imagination" as the director of The Cove Louie Psihoyos observes in a message to Japan ("From Director" n.d.). Thus censorship of films simply cannot be separated from the violation of freedom of expression and freedom of opinion. Furthermore, the role of a movie theater should be redefined. A discussion needs to take place on whether movie theater owners should be simply businessmen or more than that--cultural activists. This paper attempts to redefine what a movie is in terms of movies for the masses. Because film significantly influences the very fabric and functioning of past and contemporary society, it is important to question whether films ought to purely be seen as entertainment, or if they should be seen as having purposes beyond entertainment.

Restriction on Foreign Films 1930s-1950s

The Film Law enacted in 1939 played an important role in achieving the first attempt to mobilize the cinema for the war. Among twenty six articles, the restrictions on imported films are stated in articles twelve and sixteen (The Nakano Library, n.d.),

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Each article prescribes the restrictions on foreign films and clearly states the necessity of inspection by the ministry before either the film distribution agencies or the film producers show imported films in Japan. In addition, for those who violated the law, certain punishments were inflicted. Thus, the establishment of the Film Law clearly demonstrates the government's concern and consideration for the influence of foreign films on people. Especially during the Pacific War with the United States from 1940 to 1945, the regulation on American movies was tightened and no American movie was allowed to be exported to Japan. The Japanese militarists attempted to teach the people that Americans were evil. In order to achieve this, the military leaders attempted to remove all American influence from Japanese society as well as any affinity for the United States that the Japanese public might feel. Indeed, before American films were banned, Japanese people felt a sort of envy of and longing for the advanced American culture and freedom of spirit, according to Sato's analysis of the situation during pre-war Japan (1982, p. 31).

However, the control over the film industries was continued by the GHQ even after the defeat of Japan. Abolishment of militarism, promotion of liberalism and establishment of pacifism, were the three main goals of the GHQ by controlling the film industry in Japan (Kakeo, 2009, p. 7). At the same time, the role of the cinema was revived as a form of mass entertainment and was no longer just the propaganda tool it was during war-time in Japan. In addition to dominating the national film industry, the GHQ set the Central Motion Picture Exchange (CMPE) to monopolize the imported film industry.

If even today there are still such manipulations by power in the film industry in Japan, we should redefine what film precisely is. Since films have carried responsibilities as entertainment and as art in terms of self-representation, there are always conflicts between freedom of expression, ethics and the publicity right of portrayal. These are very controversial issues in the film industry. Thus, *Eirin*, which governs as a film censorship body in Japan, was established in 1956 to protect both the viewers and producers of films. According to *Eirin*, it is an "independent, non-governmental organization, which has been responsible for the classification of motion pictures" (2012).

Eirin set the regulations on both domestic and foreign films to be screened in Japan by reviewing films in order to judge if films are appropriate to show or not. *Eirin* has played a crucial role in the Japanese film industry since its establishment as a recognized film censoring organization. However, it is necessary to note that there were more people and issues involved in the disputes over the film discussed in this paper. It is important to address that there are still manipulations over imported films in 2 1st century Japan.

Illustration: The Cove

The basic information listed by The Internet Movie Database on *The Cove*, is as follows:

Title: *The Cove* Year: 2009

Length: 92 minutes

Genre: Documentary, Crime Director: Louie Psihoyos Writers: Mark Monroe

Country: USA

The site goes on to offer the following summary of the documentary: "Using state-of-the-art equipment, a group of activists, led by renowned dolphin trainer Ric O'Barry, infiltrate a cove near Taijii, Japan to expose both a shocking instance of animal abuse and a serious threat to human health" (IMDB, 2009).

The Cove is unique in that it was actually shown on screen in Japan despite the fact there were radical demonstrations and political involvements over whether it ought to be screened or not. The Cove won several film awards in March 2010 and the Oscar Award for best documentary. This contributed to further awareness and attention toward the film by the world. Despite the broad recognition of the film, the release of the documentary in Japan was suddenly postponed and even canceled in many movie theaters.

There are mainly two arguments against *The Cove* being shown in Japan. The first argument is whether or not *The Cove* is a propaganda film. This was protested on both an official level (government) and an unofficial level (blogs and private homepages). Reeves (2004, p. 11) was right in that, "one person's 'truth' is all too often another's 'propaganda." The genre of the film plays a critical role, which raises the

question of the true definition of documentary films. Despite the fact that *The Cove* was officially categorized as a documentary, the "truth" in this instance was a contested concept. Therefore, the word propaganda was often used by many critics and viewers to describe this film. Here is one example, taken from a blog, of how opposing arguments from critics describe *The Cove*.

Only from a one-sided point of view, *The Cove* is substantially fiction and an anti-Japan propaganda film. I define a documentary film as a film that gives the viewers a new point of view and makes them think about issues/events. However, I define this film as propaganda which plants one-sided opinions in the viewers. (Tamagawaboat, 2010)

There have also been political and legal activities against the film *The Cove*. There is a conservative civic group called Shuken Kaifuku wo Mezasu Kai (Shuken Kai 主権会) in Japan, which is led by Shuhei Nishimura. This organization, aiming to achieve Japan's complete sovereignty, was the center of the controversy over *The Cove* and led to legal and political actions against the film. Shuken Kai made an objection to the distributing company (Unplugged) in April 2010 and even took political actions against the company. According to a written protest to the company, Shuken Kai repeatedly criticized the film as being terrorism/propaganda against Japanese cultural interests.

This film, *The Cove*, is not a documentary film at all. Although the intention of the film makers was to base *The Cove* on the truth, the film itself seeks to manipulate people's minds to have them believe that Japanese people are evil. In addition, they (the producers) filmed the dolphin hunting culture in Taijii-machi without any permission. The distributers and movie theaters are servants and terrorists on the behalf of foreigners.

(Shuken, Kaihoku, 2010)

Needless to say, these two arguments directly indicate that *The Cove* is a propaganda film from Shuken Kai's point of view. A film's nature and message are indeed, in part, shaped by those who see the film. The genre plays a critical role in this because the nature of the film is radically changed by how the film is categorized. According to the Oxford English Dictionary, the word "documentary" is defined as "factual, realistic; applied to a film or literary work, etc, based on real events for instruction or record purposes" (1989, p. 917).

This paper does not go into the examination of whether the film was really based

on the truth or not; however, it is important to note that the classification of the film as a documentary did raise controversy. This is because the film really does inspire us to think about the dolphin hunting culture regardless of whether people believe what the film tells them or not. Indeed, films have certain influences on both the people who see them and for those who do not. However, whether the film should be shown or banned should not be judged only by a small group of people. One film journalist Tomohiro Machiyama remained neutral over whether or not the film should be released to the general public. He believed it was not reasonable to deliberately ban a certain film only because some people think it is propaganda. He also states that usually a propaganda film has the ability to deliver the intentions of the producers beyond just the message of the film itself (2010). That is, whether it is propaganda or not depends on the individuals (the viewers of the film) because even though some may perceive it as propaganda, others may not. Furthermore, this argument might raise the question of whether a film should be controlled by only a handful of people for especially political purposes.

However, there is another reason that *The Cove* has been in dispute. The issue of right to privacy is at the heart of critics' arguments. This is mainly because this film was filmed without the permission of the people of the city of Taijii and especially without the permission of the dolphin hunters. There is a critical difference between the Japanese version and the original version, which is the adaptation of masking the identity of the Japanese dolphin hunters through pixilation distortion in the Japanese version. However, this was a mutual agreement between Unplugged and the producers. This also led to another argument concerning both the positive and negative characteristics of the identity distortion technique. That is, on the one hand, the adoption of this technique protects the right to privacy of the Japanese dolphin hunters. However on the other hand, it sometimes emphasizes the negative images of the hunters as "people who do bad things" (Yura, Yura Dokei, 2010).

Of course there are counter arguments against these demonstrations and protests. One of the arguments is that the freedom of expression, which is guaranteed under the Japanese constitution, should be fully recognized. First of all, the director of *The Cove*, Louie Psihoyos insisted that "*The Cove* is not an anti- Japanese propaganda film, but it is a 'pure message' from me" (n.d. "a message from the director"). If the word "message" is translated as an expression or opinion, then the pursuit of the freedom of expression has validity as an argument. The freedom of expression is clearly guaranteed in the Constitution of Japan, Article Twenty One (enforced on November 3, 1946, English Edition by Government Printing Bureau), and is set forth as follows: "Freedom of Assembly and association as well as speech, press and all other forms of expression are guaranteed. No censorship shall be maintained, nor shall the secrecy of

any means of communication be violated."

Hiroyuki Shinoda, an editor of Tsukuru Publishing, observes that "this delivers the fact of the limitation of the freedom of expression in Japan to the world" (H. Shinoda, 2010). Indeed, if movies are still the objects of censorship in Japan, the freedom of expression which is declared in the Japanese Constitution may not have any value whatsoever.

This paper does not lead to the conclusion as to whether *The Cove* is a propaganda film or purely a documentary film delivering a certain message. This paper reveals the fact that numbers of foreign films are still utilized to manipulate information and opinions within Japan. However, it is important to contemplate the role of movie theater owners and operators because they play an important role in deciding whether or not to show a film upon release.

The Role of Movie Theatre owners and operators: Businessmen or Cultural Activists?

Film critic Keiko McDonald says, "Film making is business just as a film is a form of mass entertainment" (1990, p. 54). Theaters are necessarily involved in this controversy as to whether one film will be screened or not, because theaters are the main places where films are screened. Therefore, the owners of theaters can decide whether to show a film or not. As it is demonstrated in *The Cove* case, many theaters voluntarily decide not to show certain films on the public screen. As McDonald says, although on the one hand films are for mass entertainment, on the other hand, they are naturally products for business. Machiyama observes, "it is obvious that showing movies is a business -- not a cultural activity" (2010). Therefore, it seems natural that theaters should be able to decide whether or not to show certain controversial films that might affect the sales of the theaters.

However, some journalists claim that theaters play a significant role in the sense that theaters provide opportunities for people to express themselves. This is clearly demonstrated on a blog of the main homepage of *The Cove*, which refers to the fifty five journalists and movie directors who gathered to claim the theaters' roles as cultural activists (The Cove blog, 2010).

It is difficult to determine if movie theaters are just businesses or should play more to values. However, the discussion of *The Cove* in this paper leads to a certain suspicion of the abuse of power by a small group of people. Movie theaters were partially forced to bear responsibility for showing this politically sensitive film. Furthermore, a question can be asked regarding the relationship between theaters and society. Professor of Sociology at Tokyo Metropolitan University, Dr. Shinji Miyadai has observed a lack of connection between local communities and movie theaters

("The Cove ni miru futatsuno jishukisei", 2010). As previously illustrated, demonstrations and warnings are major actions taken by opponents. Considering movie theaters are a part of a local community, theaters need to consider the possibilities of mass protests by a movie's opponents, which may also be harmful to the community at large. Thus, it is important to note that we live in a society where we have to redefine the role of films and of movie theaters. It might also be true that films are no longer just entertainment but media that are bound up irreversibly within the fabric of our society.

Conclusion

Since films first were launched in Japan, many people have been aware of the influences that films have on people and society. Throughout the Japanese history of the cinema, films were mobilized by the government under the Film Law to control its citizenry. Not only domestic films but also foreign films were its target during the war-time period. The word "propaganda film", which is mainly discussed throughout this paper, is widely used to demonstrate the role of films during that time. As already discussed, this paper has categorized propaganda films into two types: The first type sees film as a medium of political propaganda which ultimately aims toward manipulating the thoughts of its viewers on certain sensitive topics. The second type views propoganda as the act of deliberately not showing films which one government or certain people consider as distributing information that is inconvenient for them. This paper selected a specific imported film *The Cove* that provoked a controversy over whether or not it should be screened by the public. This demonstrates that manipulation in the imported film industry still exists today in Japan. Furthermore, this paper reveals the politics regarding the process to force a film to be banned.

The Cove is a controversial film that has been questioned as to whether it is propaganda or purely a documentary film. This film has prompted an examination of propaganda from two competing perspectives. The first perspective is that The Cove is simply a propaganda film because it depicts a one-sided argument over dolphin hunting in Japan. The second perspective is that the attempt by a self-interested handful of people to ban The Cove from being released in Japan could also be considered as an act of propaganda. Despite the fact that the latter has not succeeded, this case demonstrates the fact that films are still censored to some extent by the minority in Japan. It reminds us that films should be entertainment for the masses and also of the roles movie theaters should play in today's society where freedom of expression is guaranteed. It is worth noting that there are more films that have been concealed and kept silent in Japanese society because they bring up politically sensitive "truth" for certain

interest and political groups. It is important to emphasize that even the Japanese government to some extent is involved in the process that results in a film being banned in 21^{st} century Japan.

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Playing "Information Hide-and-Seek" in Fukushima: Did the Japanese Government and TEPCO Hide Information from Us?

Kanako Sue

Abstract

Japan has been dealing with unstable nuclear power reactors in Fukushima since the Great East Japan Earthquake on March 11. The nuclear reactors have leaked radioactive smoke, and the radiation has caused radiation fears. I focus on the issue of health problems because I believe it is the most important issue for Japanese people and was made worse by the Japanese government and Tokyo Electricity Company (TEPCO). The more unreliable Japanese people feel the government and TEPCO are, the more difficult the problems that the nuclear accident posses become. The government and TEPCO should have provided truthful and accurate information quickly to prevent what has led to accusations of a lack transparency.

Introduction

On the night of March 11, 2011, there were an uncountable number of people in Ueno public hall, Tokyo who could not go back to their homes. People were lying down on the floor to rest and were gazing at televisions which were broadcasting the scene of the tsunami hitting the Tohoku area. That day, a magnitude 9.0 earthquake hit Japan, and the resulting tsunami devoured many towns and people. The earthquake brought another lethal problem: Fukushima Daiichi Nuclear Power Plants (NPP) were out of control. Japan's government and Tokyo Electric Power Company (TEPCO) are trying to regain control of the plants, but their actions have not worked successfully so far. Because of the experience of Hiroshima and Nagasaki, Japanese people have a strong fear of being exposed to radiation and have been taught radiation will bring on formidable diseases.

In the days and weeks following the earthquake and tsunami, Japan's government indicated the radiation dose around the plants rendered that area unsuitable to live in, so some people living near the plants had to evacuate to other prefectures. However, TV programs showed that some people living in the Kanto region also evacuated to the west because they were scared that radiation might affect their residential area and health. Although the government denied the danger of radiation, residents in the

Kanto region suspected that the radiation dose was dangerous enough to affect their health. There are people who do not believe what the government and TEPCO says. Why do people not believe either organization? I believe the feelings of distrust on the part of Japanese citizens have come from the actions which the government and TEPCO took after March 11. I will explore why the government's and TEPCO's actions made people suspicious of both organizations and made health fears worsen. I focus on health fears caused by the accident because the people of Japan will have to face the aftermath of this nuclear accident for the next 30 years.

Government

Where did a sense of Japan's government being unreliable come from? After the earthquake, high government officials held press conferences every day. Top administration officials explained their plan of evacuation and informed the public of the level of radiation dose. Although the government had many chances to explain what they were going to do, the public's fears were not assuaged but rather public distrust increased. Thus, I think the government's explanation and plan influenced people's attitude. I will focus on the actions after March 11 that the government took.

The first action the government took was as announcement made by Chief Cabinet Secretary Edano on March 18. When he made the announcement, it was identified that the radiation dose of 30 km northeast from the plants was over 100 micro sievert per hour (μ Sv/h). NHK news (2011, March 18) reports Mr. Edano said that 150 μ Sv/h was not high enough to threaten people's health immediately. According to the Ministry of Education, Culture, Sports, Science and Technology-Japan (2011a), 150 μ Sv/h may not be a dangerous level, but Fukushima prefecture's usual radiation dose was 0.037 $^{\sim}$ 0.046 μ Sv/h in 2010. There are different safety limits of radiation, and the individual dose limit depends on the situation. The Institute of Applied Energy (2011) shows that the individual dose limit is regulated within 1000 μ Sv/h in Japan for the general public in normal time. The safety limit for the general public will be temporarily allowed to be within 20 $^{\sim}$ 100 m Sv per year in an emergency period. During the recovery period from a nuclear accident, the safety limit is regulated within 1 $^{\sim}$ 20m Sv per year.

The problem is the unclear boundaries of those three time periods. And the government did not make a clear statement about what time period we are/were in. There are huge differences between safety limits in emergency and normal periods. If people get $150 \,\mu$ Sv/h for seven hours, the radiation dose they receive will be easily beyond the safety limit during normal time, but it will not be beyond the limit amount during an emergency period. Compared to Fukushima's usual radiation dose, $150 \,\mu$ Sv/h is

2,500 times higher. That figure of 2,500 times higher made people anxious over health fears. Nevertheless, when the government dealt with the radiation dose, Chief Cabinet Secretary Edano repeated the statement: the radiation dose would not cause health problems immediately. Without any specific explanation of the limit amount and time period, the use of the word "immediately" caused people to feel uneasy. How did the public respond to the announcement? They did not take his announcement at face value. Many people simply read between the lines that the government was telling them that the radiation would affect their health "gradually." Most people have a onesided image or limited information about radiation. In the days following the Fukushima Daiichi NPP accident, Japanese people were reminded about the worst cases of exposure to radiation, Hiroshima and Chernobyl. Therefore, the government should have had the sense to deal very sensitively with the public concerning the radiation problem. However, what the government did by using terms like "immediate" was just increase people's fear. The reputation of "immediately" and the obscure time period of the limit amount raised unreliable feelings towards the government in the early phase of the Fukushima Daiichi NPP accident.

The second action on the part of the government that weakened public trust was the setting of the evacuation zone. Yoshino (2011) stated that the evacuation zone was set within a 10 km circular area from Fukushima Daiichi NPP on March 12. The next day, the zone was expanded to a 20 km circle. At that time, the government did not take into consideration radioactive dust being carried in the wind. The Yomiuri Online (2011, March 26) reports that residents who were within 30 km of the plants were asked to stay indoors, but the order was changed from "indoor evacuation" to "voluntary evacuation" on March 26. Chief Cabinet Secretary Edano announced that the government recommended voluntary evacuation because of the difficulty of the distribution of commodities within the areas affected by the earthquake, tsunami and nuclear accidents. It was that true some companies postponed transporting commodities into the area because the safety of the Fukushima area was not confirmed. Thus, daily life for people in the affected areas was difficult.

The government's decision caused confusion at the local government level. Local governments were relegated to make a decision: evacuation or not. Nippon Television Network Corporation reported that the mayor of Tamura City, Tomitsuka wondered whether it was an order or request. To Tomitsuka it seemed as though the national government's attitude was "everything (evacuation or not) was up to you (local governments)" (2011). Japan's government explained the radiation dose was not at a high level within areas in the 30 km range of the nuclear reactors. There was another problem which local governments faced: there were no means of transportation. After the earthquake, the transportation infrastructure was broken. People were isolated and

had no heat, food or water. Even if people knew it was better to evacuate, they did not have the means. Gasoline was the most unavailable commodity in the affected areas. The government did not provide a specific solution to transport residents. The government's decision was irresponsible considering that residents did not have a way to evacuate; it was, in fact, a tracasserie for local governments. The government's evacuation plan was not well organized.

The third action that weakened the public's confidence that the government had their best interests in heart was the no-confidence motion toward Prime Minister Kan on June 2. It caused the differences between Tokyo and the disaster areas to stand out. The more assembly members focused on the resignation of Prime Minister Kan, the more people in the disaster areas lost interest in politics in Tokyo. The Mainichi Newspaper ("No confidence", 2011) shows that the people in the disaster areas felt politics in Tokyo ignored them. They did not care who was Prime Minister: what they wanted was direction to overcome the disaster and compensation from the government. The no-confidence motion was perceived as ludicrous. People in the disaster areas saw politicians in Tokyo as cold and felt a big gap between themselves and the government. The no-confidence motion was not approved finally, and Prime Minister Kan stated that he was willing to continue his job. People in the disaster areas felt that the political structure was continuing business as usual without considering the tough situation of those in the disaster areas. Since the Great East Japan Earthquake, Japan's government has been slow to take action and has not shown a clear initiative to solve the problems yet.

Tokyo Electricity Company (TEPCO)

Before March 11, it was commonly believed that companies which deal with infrastructure such as electricity, gas and water would never collapse into bankruptcy. But TEPCO has faced the danger of failure. After the earthquake, the public recognized that nuclear power plants are dangerous and that Japan's nuclear power plants may not have been operating safely. The reason is that the actions which TEPCO has taken after the accident prove the lack of transparency of TEPCO. As a result, not only Fukushima but also all nuclear power plants have lost their creditability. I focus on TEPCO's actions after March 11 and explore why TEPCO lacked creditability.

What kinds of actions on the part of TEPCO disillusioned the public? I will present five actions typical of TEPCO's response to the situation at Fukushima Daiichi NPP after March 11. The first action was an irresponsible reaction toward the accident in Fukushima. Right after the earthquake, TEPCO made an announcement that there was no problem at Fukushima Daiichi NPP. But the Yomiuri Online (2011,

March 11) reports that within the same day, TEPCO announced that the ECCS, the cooling system of the nuclear reactors, had stopped working. NHK news (2011, March 12) also shows that the first reactor of the plants had a hydrogen explosion on March 12. On March 13, the Yomiuri Online (2011, March 13) shows that TEPCO's CEO Mr. Shimizu held a press conference and apologized for the accident. After the conference, he did not appear in public for two weeks. The public did not know he was absent because of poor health until March 27. Thus, during the period of his absence from the public eye, the public started to feel that TEPCO was a leaderless company.

The second action taken by TEPCO that contributed to eroding public trust was evasive press conferences. Fukushima Daiichi NPP has six reactors, and they are named from the first to sixth. Among the reactors, the first and third suffered a hydrogen explosion on March 12 and 14. When the second and third emitted black and gray smoke on March 21, it was understandable that the public were concerned about a hydrogen explosion occurring again. NHK news (2011, March 21) reports that as smoke came up from the reactors, the radiation dose 1 km west from the plants went up from 494 μ Sv/h to 1932 μ Sv/h. At a press conference, TEPCO announced that the reactors were leaking black and gray smoke, and that TEPCO was investigating the cause of the smoke. When the black smoke turned to white, TEPCO announced the smoke would soon stop.

Because of a climb in the radiation dose, it was clear that the smoke carried in it some radioactive materials. However, TEPCO did not address the issue of airborne radioactive contamination and focused only on the physical manifestation of smoke visibly escaping from the reactors. The public could see that the reactors were emitting smoke on television. What they wanted to know was the cause of the smoke and the possibility of explosion. TEPCO said they were going to investigate the cause, but when the smoke turned to white, they announced that the smoke would soon stop and never offered any information as to the source or cause of the smoke in the first place. That TEPCO could predict that the smoke would cease based on the color of the smoke indicates that the company must have had some kind of information to base that prediction on. However, to this day, TEPCO has never come forth with further details or offered a more detailed explanation about the incident.

The third action was TEPCO's attitude toward the accident. TEPCO is in the center of the accident, but TEPCO has been widely perceived as behaving as though they have nothing to do with the accident. TEPCO's company members did not work at Fukushima Daiichi NPP. Of course, its management members were there, but their job was to oversee the subcontracted employees. Those subcontractor members at the plants were forced to work in poor conditions. When TEPCO's sloppy strategy of management was found out, it inspired the public's sympathy for the workers at

Daiichi. For workers who were working inside the plants, TEPCO handed out dosimeters as protection against overexposure to radiation. The dosimeter was a bastion for workers because only dosimeters can sense radiation. Despite the precautions of issuing workers dosimeters, three workers were exposed to radiation on March 24. According to TEPCO's press release (2011), the three workers were using a dosimeter and heard its alarm sound. However, they did not stop working, and two of them stepped into water containing high radiation. As a result, the men got 170 mSv/h which was even beyond the temporarily increased limit for nuclear workers at that time. TEPCO announced that it would prevent the same kind of accident from happening again and would reconfirm that rules were being strictly complied with at the plants. Sankei news (2011) shows that through the exposure of workers, it came out that the number of dosimeters was smaller than the number of workers. Some workers were forced to work without a dosimeter. It is likely that TEPCO was prioritizing the operations over the health of the workers. TEPCO's work environment at the plants reflected how irresponsible TEPCO was. The problem of workers being overexposed to radiation further tarnished TEPCO's image: TEPCO appeared to just be giving orders but did not work inside the plants alongside their subcontracted workers and seemed to regard those workers as disposable.

The fourth action that undermined public trust in the company is the number of contradictions made by TEPCO itself. At any nuclear power plant, cooling down the reactors is the most important step in preventing a hydrogen explosion of reactors or the melt down of fuel rods. After the explosion at the first reactor on March 12, TEPCO stopped pouring sea water into it, which meant that TEPCO stopped cooling it down. This fact was found out on May 22, and TEPCO was criticized by the government. TEPCO explained that they stopped pouring in sea water because Prime Minister Kan was against it. The Asahi news (Kobori, 2011, May 22) reports that Prime Minster Kan was against it because Mr. Madarame, Chairman of the Japan Atomic Energy Commission brought up the possibility of a re-explosion of the reactor. Yet five days later, NHK news (2011, May 26) reported that TEPCO announced that they had not stopped pouring sea water. According to TEPCO's explanation, TEPCO's board members decided to stop pouring sea water based on advice from the government. However, the chief of Fukushima Daiichi NPP ordered workers to continue pouring sea water. The operation of pouring sea water showed that TEPCO did not share information among its members. To further cloud issues of responsibility, while TEPCO said the government had ordered them to cease pouring sea water into the reactors, Prime Minister Kan completely denied that the government had given any such order. This leads to a lack in credibility in not only TEPCO but the government as well.

Finally, the fifth action that has weakened public belief in TEPCO is the delay of disclosure of important information. NHK news (2011, May 28) reports that TEPCO, on May 28, discovered information which had not been released to the public. TEPCO had investigated several points of radiation dose inside the plants, but data from one of them had not been released. The radiation dose has been measured since March 12, so the data was not provided for more than two months from March 11 to May 28. TEPCO's spokesman claimed that the data had been given to the government, and that the level of radiation was not dangerous enough to pose a health risk to the public. Whether it was dangerous for people or not, TEPCO should have provided all the information it had on the situation at Daiichi from the beginning; as TEPCO was not forthcoming with information, the public was left with a sense of distrust and many suspect TEPCO of a lack of transparency regarding the situation at Daiichi. Some even suspect TEPCO of conducting a cover-up operation. People cannot help but feel TEPCO has hidden important data. Information and data, especially information and data concerning the rise in radiation doses, were what people wanted to know because they directly affect people's health.

Furthermore, the government and TEPCO share a common tendency; they have tended to avoid touching unfavorable information. For example, the important information about plutonium was re-imported from foreign media. The New York Times (Sanger & Wald, 2011) reported the danger of leaking plutonium from the reactors at Daiichi NPP on March 13. Japanese media reported that foreign media strongly emphasized plutonium in their news reports. So, the Japanese public realized plutonium was a far more harmful substance than either cesium or iodine. Yet, TEPCO and the government did not touch the possibility of leaking plutonium. The Yomiuri Online (2011, March 29) shows that TEPCO finally announced that plutonium was leaking from Fukushima NPP on March 29. As plutonium is a far more harmful substance than cesium or iodine, the government and TEPCO must have known the danger that leaking plutonium would pose, and the public should have been informed as soon as possible.

Health problems after the accident

The actions of Japan's government and TEPCO caused the public to view both organizations as unreliable. This sense of unreliability has influenced how people receive information from both. More specifically, people's reaction concerning potential health risks has been completely distorted by both. Japan's government has provided the radiation dose every day since the accident. It is surprising that some people living in Tokyo considered leaving for the west. According to the government's information

of radiation dose in Tokyo, the level would not affect people's health. Nevertheless, why did people choose to evacuate? Simply, they did not believe the data which the government and TEPCO provided. As health issues related to the nuclear accident at Daiichi have become a more important issue, the public's sense of distrust of the government and TEPCO has increased people's fears.

If people cannot believe the data from Japan's government and TEPCO is accurate, what are they going to do? After the accident, assertions such as, "children easily get radiation inside their body" and "the effect of radiation will come up in thirty years" were frequently heard. The Ministry of Education, Culture, Sports, Science and Technology-Japan (2011b) has interesting data that shows how the percentage of the onset of thyroid cancer increased after the nuclear meltdown at Chernobyl. Therefore, parents who have young children are especially concerned about radiation doses and have been struggling to protect their children. Concerned parents have reacted in various ways; some have evacuated their families to the western part of Japan, some have asked local governments to measure radiation doses, and some have purchased equipment with which to check the radiation dosages in food, water and soil themselves.

Asahi news (Ishihara & Ogawa, 2011, March 24) tells that some people chose to leave Tokyo. A mother who decided to move to Osaka prefecture said that she was concerned about the radiation dose in water. It was found out that the radiation dose in tap water was beyond the safety limit, so it was banned for use for babies on March 23. The only ordered evacuation of people was for those living within 20km of Fukushima Daiichi NPP. Nevertheless, people far from the plants considered evacuating from their homes. According to a government press release, the radiation dose was not high enough to consider evacuation in the Kanto region, but in reality, many parents did not trust the government's data.

Some residents in the Kanto region asked their local government to examine the radiation levels. The Ministry of Education, Culture, Sports, Science and Technology-Japan measures the radiation levels of each prefecture and provides data. The measurements taken by the Ministry of Education, Culture, Sports, Science and Technology are the most official information on radiation levels in Japan. However, only one monitoring post has been used to measure the radiation level in each prefecture, and, in the case of Tokyo, it was at a height of over 18m. The government of Tokyo got numerous inquiries about examining lower level areas for radiation. Asahi news (2011) shows that the public was concerned about the radiation levels at lower land and surface levels. The government of Tokyo examined 100 places for radiation levels, from areas 5 centimeters high to 1 meter high on June 24. More local governments began to independently measure radiation levels in their areas. According to results of measuring radiation levels at different land heights in Tokyo, Tokyo

Metropolitan Institute of Public Health (2011) reported that the radiation dose at 5cm was higher than that at 18m in Tokyo. When children are playing on the ground, they touch soil, sand, land directly. Parents were surprised by the different results for radiation levels at 18m and 5cm. The result made parents worry over the danger of their children playing outside.

The government of Tokyo measured radiation levels in 100 places, but it was an experimental measurement and carried out only once. It is not realistic to measure the lower level areas of radiation levels every day because of a lack of time, workers and dosimeters. Thus, many parents carry a dosimeter and measure radiation levels on their own today. Some parents purchased Geiger counters (at a cost of over 30,000 yen approximately 367.912 USD per counter) and take them along with them wherever they go with their child. Not only parents living in Fukushima but also parents in the Kanto region have bought Geiger counters.

One strong willed Japanese mother living in Chiba prefecture took radical measures to protect her child from radiation. Initially she fled to Kyoto, but because her daughter was entering the first grade of elementary school in spring, she and her daughter returned to Chiba for the start of the school year. Fearing that the food in school lunches might be contaminated, she informed the school that her daughter would not be eating school lunches. However, the official reason that she gave the school for taking her daughter out of the school lunch system was food allergies. Since then, she has prepared lunch for her daughter to take to school with her every day. On March 21, it rained for the first time after the accident and her daughter got caught out in the down pour, after which, exanthema appeared on her forehead. Her mother suspected a link between exposure to radiation and the outbreak. The mother only buys food produced and grown in Kyushu and Kansai, and she and her daughter no longer eat out. They use bottled water for washing dishes and drinking. She purchased a Geiger counter for 60,000 yen (approximately 735.510 USD) at an online shop. She said that the only thing she can believe is the Geiger counter (Kobayashi & Yamane, 2011).

Although this mother's reaction seems very radical, this mother is nonetheless, a good example of the many parents in Japan that have a deep distrust of the information that both Japan's government and TEPCO have been providing the public in relation to the nuclear accident at Daiichi NPP and the resulting risks of radiation contamination of products as well as of land and water.

This tendency for the public to distrust the information that the government and TEPCO are releasing is having a negative impact on the publics' health fears. Both TEPCO's and the Japanese government's response to the accident has caused an increase in the public's distrust of both organizations. Japan's government is responsible

for protecting Japanese people's health, and TEPCO has a responsibility for the accident as the operator of the plants. If people cannot believe the government, where can they turn for reliable information? Although the government and TEPCO may provide correct information, the public is not able to trust that information. In the aftermath of the Daiichi NPP accident, the public have increasingly begun to rely on their local governments in conjunction with grass roots movements with citizens taking safety measures into their own hands, such as checking radiation levels with privately purchased Geiger counters. Clearly, as a result of the way in which both organizations dealt with the crisis at Daiichi NPP, both have come out of this crisis tarnished in the public eye. The Japanese government has lost credibility and TEPCO has lost its reputation as a first-class company. Both organizations cannot work properly to protect people's health today.

Conclusion

The earthquake has had a huge impact on Japan, both physically and psychologically. Japan's government and TEPCO tried to deal with the crisis, but their actions have not worked well. The government set the individual safety limit but did not clearly state the period. The announcement of Chief Cabinet Secretary Edano was too vague because of his use of the word, "immediately" which caused distrust to take root. Prime Minister Kan's resignation problem clearly shows the different political interests between Tokyo and the affected area. On the other hand, TEPCO has lacked leadership as the operator of Fukushima Daiichi. TEPCO's CEO suddenly disappeared from the public eye, press releases sounded vague, and TEPCO allowed workers to work without dosimeters. People were terrified because they had never directly experienced a nuclear accident before. Thus, it is understandable that people became anxious. The government and TEPCO should have taken actions to reduce the public's fear but their lack of transparency in the release of information instead, caused an increase in public anxiety.

What the government and TEPCO should have done was to release important information to the public in as timely a manner as possible, and both organizations should have avoided offering vague explanations. A crowning example of the kind of vagueness that was perpetrated during the crisis is Chief Cabinet Secretary Edano's use of the term "immediately." The anxiety and fear that his use of the term caused, continues to worry a large percent of the population of Japan today. He should have explained as honestly as possible: no one has experienced such an incident as the one that occurred at Fukushima Daiichi NPP before, so there is no data on how the resulting radiation will affect humans. He did not disclose everything, so the public suspects

he might have been hiding something important behind his words. What we hear about influences of radiation today is all based on assumptions which are mostly based on Hiroshima and Nagasaki. The case of Fukushima is different from Hiroshima and Nagasaki, but the public has gotten confused. The government's job is to avoid placing people under unnecessary fear and to maintain authority to solve the issue. TEPCO also has the responsibility to solve the problem as an operator. TEPCO must learn from what they did: vague actions resulted in creating an image of unreliability. What is important is to release accurate information quickly. To end the problem as soon as possible, TEPCO needs to work towards reducing the public's fear. TEPCO should prioritize resolving the problem instead of concerning itself about the company's survival or the company's board members' compensation. I believe Japan can overcome the Fukushima Daiichi accident and health hysteria caused by the radiation, but sad to say, I cannot confidently put my trust in the idea that the reactors will be shut down peacefully in forty years.

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Christianity and Korean Society

Chiaki Sagayama

Abstract

The reason South Korea's Christian population today is so large dates back to the early 18th century when Korea was in a difficult position. Due to the threat from Imperial Japan, China and Western countries, well-educated Koreans at that time realized modernization was needed in their society and eagerly promoted good education as a means to achieve Korea's independence. Churches were the only place which could offer such education to the Korean people, and thus Christianity expanded rapidly.

Introduction

Human history and religion are closely related to each other. Thus, it is important to understand religion in order to get along with people in other societies. When I studied in South Korea, I realized South Korean society is influenced by Christianity as well as Confucianism and Buddhism. I was shocked as I did not expect to encounter so many Christians during my stay in South Korea. As a result, a question arose in my mind: why are there so many Christians in South Korea?

Today, South Korea has more than 14 million Christians (34.5% Protestant and 10.9% Catholic). Compared to the number of Buddhists, the total numbers of Protestants and Catholics surpass that of Buddhists (Ministry of foreign affairs of Japan, 2011). South Korea is also active in regards to missionary work and they dispatch one of the largest numbers of protestant missionaries all over the world, coming in second only to the United States. This is an interesting phenomenon when we compare the situation in South Korea to the Christian situation in neighboring countries such as China and Japan, where Christianity is still a minority religion in society.

In this paper, I will analyze the reasons why Christianity, especially the Protestant church, became popular and expanded in such a short time in Korea. I will discuss the reasons of expansion of Christianity in Korea under Japanese colonial rule by analyzing four early Christians who lived in the same era during 1864-1965 in which the Christianity explosion took place: the first president of South Korea, Rhee Syng-man; an early reformer, So Chae-p'il (Phillip Jaisohn); North Korea's first dictator and Kim Il-sung's parents, Kim Hyong-jik and Kang Bang-suk. These four

individuals were also famous revolutionaries that contributed to Korea's independence. Through the analysis of these four lives, I was able to find that Christianity spread quickly throughout Korea at that time because readily available education encouraged these famous revolutionaries as well as many others to become Christians.

Christianity in Korea

The history of Christianity on the Korean peninsula dates back to the early 18th century (Clark, 1986, p. 5). Shortly after the arrival of Catholics, a Japanese Christian from the National Bible Society of Scotland in Tokyo brought Protestantism into the Korean peninsula in 1883 (Paik, as cited in Kim, 2011). Actual missionary work started after American missionaries reached Korea in 1884 and missionaries found the possibilities of propagation. Missionaries focused on three major strategies: education, medical work, and evangelism. They built churches, schools and hospitals in the region and offered these services for free. In those days Korea did not have a well-organized educational system and their medical knowledge was far behind the current level in other countries. Missionary schools were recognized as the only modern schools in those days and they offered many modern subjects which are known as liberal arts subjects now other than bible study (Clark, 1986, p. 8). As a result, many people became interested in Christianity not because of the beautiful western style buildings but because of the Christian schools' attractive and beneficial offers.

Another important aspect of Christian schools was their acceptance of Korean female students. Until then, girls had no opportunities to receive an education and the only thing they could do was stay home and learn how to perform domestic chores from their mothers. Therefore the missionaries' actions were astonishing to women, and Korean women largely accepted missionaries' offers without hesitation. Many women willingly became "bible women", who carried Christianity to cities or villages as assistants to missionaries, and played a role in spreading Christianity to other areas (Clark, 2010, p. 245).

Since Protestant missionaries reached the northern area of Korea, they tried to spread Christianity to the South. Missionaries chose the northern part of Korea as the first place for their mission because of the people's characters, political situation, social background and religious condition at that time (Clark, 2010, p. 236). Park Nakchun, the former president of Yonsei University once mentioned that, "Not many of the northerners held high offices in the government, but were rather subject to the oppression and extortion of the officials sent from Seoul... People espoused Confucian social norms but these were less formal and less religious, than in southern Korea... When the country was opened to the West, the energetic people of the north

soon caught the spirit of the times" (Park, as quoted in Clark, 2010, p. 236). Most northern Koreans were equally poor and had no class distinctions so they were curious about the missionaries' services which were offered for free. Thus, the northern part of Korea, especially P'yongan and Hwanghae, became the heartland of Korean Christianity before World War II. A few decades after the first arrival of Protestantism, the great revival occurred in 1907 because of the spiritual crisis which was led by the threat from the Japanese, and finally Christianity broadly spread in southern Korea (Clark, 2010, p. 241).

Rhee Syng-man

There were many influential Christians between the years 1864 and 1965, but Rhee Syng-man is the most well-known man in that era not only because of his political success as the first president of South Korea but also because he was a devout Christian and contributed to the expansion of Christianity in South Korea. However, from the beginning, his interests did not lie in Christianity. He grew up under a Buddhist influence due to his mother's beliefs and it wasn't until after his harsh life in prison that he converted to Christianity. It is not too much to say that his conversion and recognition of Christianity changed both his political and spiritual life.

Early life

Rhee was born in 1875 as the only son of a poor family. His mother was an enthusiastic Buddhist and she taught her son Chinese characters and calligraphy. He wrote:

My mother taught me the elementary principles of Confucianism and at the same time she sent me to a Buddhist temple to offer sacrifice on my birthday, every year. My first impression in a beautiful monastery up in isolated Pook Han Mountain could never be effaced. In this spiritual atmosphere and ascetic environment everything appeared so different that I felt as if I were in the Lotus Heaven, the 500 La Hans--idols with various pictures of heaven and hell gorgeously painted on the walls. (Rhee, as quoted in Lee, 2001, p. 9)

Obviously, Rhee respected Buddhism at the beginning of his life. As the Yi dynasty gradually lost its power, the civil service examination system became corrupted, and finally the system was abolished in 1894, after the break out of the Sino-Japanese war. Rhee, who, to get a better life, had tried to pass the exam many times since he turned 13 years old, had to change his goal and focus on getting a useful education in order to get a high ranking job instead of passing the civil service exam. Consequently

he decided to attend a school and this decision lead to a big turning point in his life.

Encounter with Christianity

Rhee entered Paejae School which was a Christian school run by Christian missionaries. Rhee chose this school because he was interested in Western medicine after having his blindness cured by it when he was 6 years old. However, at that point, he did not care at all about Christianity. He even told his mother not to worry about his conversion to Christianity (Lee, 2001, p. 9). In school, his main focuses were western subjects, English, democracy and the bible, which served only to benefit his future, not change his religious ideas.

One important event that took place during his time at school was his encounter with So Chae-p'il (Phillip Jaisohn) at Paejae School who strongly influenced Rhee's life politically. So had just come back from the United States at that time and delivered weekly lectures at the school. Young Rhee was really impressed by So's experiences and thoughts, and started to follow in So's footsteps. Rhee joined the debate club and the Independent Club which were established by So. Students could discuss political issues at debate club and Rhee became a main member. For his club activities, he started to publish a weekly magazine for the debate club and wrote many articles criticizing the Korean government for their decisions on foreign affairs and the government's internal system. Rhee gained his critical views of the government and political ideas from studying under So.

Arrest and conversion to Christianity

Rhee was arrested in December 1898 due to the Independent Club's activities which criticized the Korean government. He tried to break out of prison but failed and as a result spent 5 years and 7 months in prison despite his missionary efforts. During his years in prison, he read many western books brought to him by missionaries and his religious ideas began to shift. Due to those books and his survival of a cholera epidemic in prison, he began to think Christianity was the religion of liberty and could change Korean people and society in a positive way. Rhee especially favored reading a weekly magazine called "The Outlook", issued by Lyman Abbott¹ and became impressed by Abbott's perspective on Christianity. Abbott discussed the New Kingdom and explained the importance of self-government in each individual in the Kingdom when people seek permanent foundation of the government (Lee, 2001, p. 58-60). In addition, Abbott did not take into account the myths or mythology of Christianity such as virgin birth. Thus Rhee got the idea Christianity was "a religion

¹Lyman Abbott (1835-1922) was a pastor until 1869 and became a chief editor of the weekly magazine The Outlook from 1881. He was also a religious figure.

of liberty" (Rhee, as cited in Lee, 2001, p. 63). He believed that Korean people should gain more knowledge about the outside world and change the way they thought to live prosperously in the current time period. For that reason Christianity was needed in Korea because it required self-government of individuals to behave well in the society and to sacrifice themselves for others or the nation under the name of love (Lee, 2001, p. 62). Rhee realized that Christianity's principles could unite people in the common goal for independence against foreign superpowers and thus Rhee did not recognize it as purely a spiritual religion. He also recognized Christianity as a symbol of Western countries which succeeded in their modernization and hence built churches which became the base of his national movement. Clearly, Rhee believed that Christian education was essential for Korean society. Even though there were conflicts between Rhee and missionaries who thought Rhee's Christianity was too political and not spiritual, Rhee did not doubt his beliefs and used Christianity as a political strategy to make Korean people united for independence. He converted more than 40 prisoners to Christianity and continued his efforts to expand Christianity throughout the rest of his life by establishing Christian schools (Lee, 2001, p. 63).

Thus, Rhee's conversion and realization of Christianity during his prison time greatly affected his later political views and life. His contributions in expanding Christianity throughout the entire country by establishing schools were widely valued by both intellectuals and missionaries.

So Chae-p'il (Phillip Jaisohn)

As I mentioned above, So influenced young Rhee at Paejae school and Rhee thought of So as his role model. Also So is an important person throughout Korean history as the most prominent leader in Korea's era of turmoil before Japanese occupation (Choy, 2011). He was educated in the United States and became the first Korean who earned a doctorate in the medical field from an American university. He spent many years in the United States because the Korean government did not allow him to enter Korea due to his political ambitions, and his time in the Unites States influenced his religious views.

Failed first attempt and refugee period

In 1883, So had the opportunity to study abroad in Japan and received an education at Keio University and Toyama Army Academy. He saw all modernized streets and buildings in Japan and was impressed with the success of modernization in Japanese society and realized the urgent need of modernization in his country. He believed he needed to reform Korea's government and social system and inform people

to prepare for the future. After his return to Korea in 1884, he attempted to overthrow the regime with the followers of Kim Ok-kyun but failed because of their lack of public support. The government executed most of the members and their families. So did not have any choice other than to escape to Japan and afterwards moved to the United States as a refugee.

His political goal and Christianity

So arrived in San Francisco in 1885 and "found comfort in the San Francisco Christian community and rooted himself in the teachings of Jesus Christ" (Kim, 2006, p. 8). He got help from Christians there, and "he was able to settle down in Pennsylvania and receive education" (Kim, 2006, p. 8). Thanks to the support from a Christian industrialist from Pennsylvania, J.W. Hollenback², So studied medicine at Columbian College (now George Washington University) and earned a medical degree. He spent 10 years in the United States and then decided to go back to Korea. The purpose of his return was to awaken Korean citizens to the need for independence. So believed education for citizens was the most important thing for modernization and independence and he started publishing a newspaper to spread democracy through his writing. He used Hungul, the Korean alphabet in his paper. A publication presented entirely in Hungul was a revolutionary concept to citizens because other papers were written in a mix of Chinese and Hungul at that time. So's strategy worked well for people who were not well-educated and could not read Chinese. By using only one language, people began to focus on their own culture and thus their nationalistic pride for Korea grew. He revealed past and current events in foreign countries and warned Korean citizens about the world situation. Moreover, he created the Independent Club which young Rhee belonged to and encouraged active debate among students. So believed discussing political issues was really important to awaken and stir public criticism and the exchange of opinions, and the club activity expanded their influence as I mentioned above in Rhee's section. However, the government, who supported So's activity against foreign countries at first, began to think So's political criticism could pose a danger to the Korean government itself, so the government abolished the newspaper and executed independent club members. Again, So needed to leave the country and headed to the United States in 1898 and did not return to his country until 1945.

Lee Chiman (2010, p. 66-95), a doctor of history of Christianity, argues that So connected his goal in creating Korean independence from Japan to Christianity. After the collapse of the Yi dynasty and encountering Western ideas, the Korean people be-

²J.W. Hollenback gave So Chae-p'il financial aid for his education at high school and college. However, Hollenback stopped supporting So when he chose medicine, not religion for his study.

came unsure of their Confucian worldview. Therefore, Christian ideology which is similar to modern democracy in many aspects attracted educated people. Christians from San Francisco and Philadelphia greatly lent So their support and as a result he fell under Christianity's influence. From there So began to connect Christian ideas with his political goal to unite people and accomplish Korea's independence.

Kim Il-sung's Parents

If we define Rhee and So as the two most powerful figures of Christianity in South Korea, we can say Kim Il-sung's parents were counterparts to them in North Korea. According to many articles, the parents of North Korea's "great leader" Kim Il-sung, were devout Christians. They were actually widely known Christians in northern Korea in the 1940s (Yun, 2011). Kim Il-sung's father, Kim Hyong-jik received an education at a missionary school and his mother, Kang Bang-suk was a daughter of a Christian family. Thus Kim Il-sung also was influenced by Christianity by his Christian parents. Since the northern part of Korea was a center for Christian missionaries as I mentioned above, there was more Christian influence in the area compared to the South.

Kim Hyong-jik (Father)

Kim had been a Christian since he was young and later became an enthusiastic leader for the anti-Japanese national liberation movement. He entered Sungsil Academy, one of the western style schools built by American missionaries. According to Cho'e, "Kim Hyong-Jik was a Christian when he entered Sungsil Academy and studied the Bible under American teachers" because students had to prove they were Christians to gain approval and entrance to the school (Ch'oe, 1986, p. 1082-1091). Kim wanted to study modern subjects at the school because he realized knowledge was important for Korea's future and himself. Also Sungsil Academy was known as "the den of anti-Japanese rebels" (Kim, 2003, p. 19) because there were many students who had ambitions similar to Kim's, and he made connections with other nationalists there. As he studied at the school, he began to think that educating village people was his obligation.

He quit Sungsil Academy in 1913 to concentrate on a nationalistic mission against Japan and started to teach at Sunhwa School in Mangyong-dae, his hometown, and at Myongsin School in Gangdong about nationalism. He wanted to educate young people and recruit them as patriots to fight for their country's independence. He also spent his time doing revolutionary work. He traveled to Shanghai and met Sun Yat-

sen. After he returned to Korea, he established the Korean People's Association in 1917 and organized anti-Japanese groups. Most of the members were Christians, whom he had met at Sungsil Academy. Consequently, he was arrested as a result of the association's actions later the same year and was released from prison in 1918 after enduring harsh torture at the hands of Japanese prison guards. Similar to Rhee Syngman, Kim also spent much of his prison time reading books, and he became interested in medicine.

After he got out from prison, he started to rebuild the Korean People's Association again by using his Christian connections but unfortunately died in 1926 due to the injuries he had suffered from the torture he had been subjected to in prison. Today, he is known as a great anti-Japanese fighter but one of the reasons for his success in uniting people was his personal Christian connections.

Kang Bang-suk (Mother)

Similar to her husband, Kang, who is generally known as the leader of the anti-Japanese Woman's Association, was an ardent Christian herself who was born a daughter of a Christian family (Cho'e, 1986, p. 1087) and often went to church in Songsan with her son (Kim, 2003, p. 63). Her son, Kim II-sung examined the reason for her frequent visits to church and found out Kang wanted to go to heaven after death while she was suffering constantly during her life (Kim, 2003, p. 63). I believe she did not have many choices other than Christianity because her father, Kang Tonuk was an influential leader of a church (Cho'e, 1986, p. 1088) and most likely was strict in how he raised her. She was always a Christian throughout her life and helped other revolutionaries who visited her house for her husband or son with Christian spirit.

Christian Impact on Kim Il-sung

Kim Il-sung was brought up under Christian parents and saw them using Christian connections for their nationalistic activities. In addition, he went to a Christian school which was run by his maternal grandfather, Kang Ton-uk, and even after he moved to Manchuria in 1925, some people saw him attending church regularly (Cho'e, 1986, p. 1089). However, Kim Il-sung did not choose Christianity and founded his own cult "Juche" instead. He even claimed his parents were actually not Christians in his memoir (Kim, 2003, p. 63). Kim Il-sung thought back on his Christian experience and wrote:

I found church services boring and attended them only occasionally... I thought

³ Kim Il-sung founded Juche, a nationalistic, socialism political guideline to centralize his authority in North Korea.

Christian doctrines were too far off mark to suit our misery and problems; even though Christianity had many things to offer as far as humanitarianism was concerned, it had little to offer for Korean independence. (Kim, 2003, p. 63)

Thus, the one element of crossroads for South and North Korea was whether the leaders thought Christianity was a useful strategy for their political purposes or not. Rhee Syng-man recognized Christianity as a political strategy to achieve modernization. On the other hand, Kim Il-sung did not connect Christianity to his political goals and thought of Christianity as a symbol of imperial powers, his enemies, such as the United States.

Due to Kim Il-sung's practice of Juche, Christians in northern Korea moved to the southern area to seek a safe place to escape from religious persecution. That is why there are only a few Christians in North Korea while there are a lot of Christians in South Korea today.

Conclusion

There was one common reason Rhee Syng-man, So Chae-p'il (Phillip Jaisohn) and Kim Hyong-jik became interested in Christianity: education. Education was the key factor at that time in Korea in causing an explosion of Christianity. Every well-educated revolutionary noticed that more information and knowledge of the liberal arts was needed to fight for Korea's future and survival among Korea's powerful neighboring countries. These revolutionaries also tried to expand education to commoners. As there was no support from the government, the missionaries' offer of education was the only way to get a modern education for poor Koreans.

Another reason why Korean revolutionaries sought education was because their purpose was the same--Korea's independence. Under the harsh situation, in which they were being exploited by imperial powers such as Japan, Koreans were eager to rule themselves. As data shows, church was the place revolutionaries gathered and shared their thoughts with one another. Moreover, Western ideas such as democracy or Puritanism, which were taught at church, contributed to building the people's fire burning in their hearts and helped them connect and achieve their goals.

Therefore, Christianity expanded during 1864-1965 because missionary churches in Korea were the only place that could offer everything Korean revolutionists wanted such as education, overseas information and places to gather. Korean people's passion and nationalism for their independence made them seek education to achieve their independence from Japan.

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Taiwan's Anti-Nuclear Politics

Tomomi Tsuchiya

Abstract

The Fukushima Crisis which happened after the earthquake on March 11, 2011 has affected the society of Taiwan. Policy toward nuclear power plants has become one of the people's main concerns as well as the cross-strait relationship. Therefore, the policy will influence Taiwan's presidential election in 2012. This paper chiefly focuses on politics in terms of the nuclear power policy by discussing two candidates' points of view: Ma Ying-jeou's and Tsai Ing-wen's. If Tsai wins in the next election, Taiwan will take a step towards becoming a nuclear free nation. Taiwan's change might push Japan along the same road with Taiwan in the near future.

Introduction

Taiwan is a relatively small island that is also called Formosa which means "a beautiful island" in Portuguese. The main island of Taiwan is one-tenth of the size of Japan, and it has a population of 23,138,381 (Government Information Office, Republic of China (Taiwan), 2010). The main focus of this paper is the nuclear power plant issue in Taiwan. This issue could affect Japan's future decision about nuclear power.

The entire world was greatly shocked by the huge earthquakes and tsunami in March in 2011 and the resulting Fukushima Crisis: the explosion of the nuclear power plants in Fukushima Dai-ichi added insult to injury. After this disaster, the nuclear power plants became a target of criticism all over the world, and particularly in Taiwan. The debate heated up even at the political level. The main objective of this paper is to figure out how the Fukushima Crisis affected Taiwan's politics and society and also how this is going to affect Japan's future in return.

Nuclear power plants in Taiwan

Nuclear power has been controversial in Taiwan (Tanman, Casselman & Mozur, 2011). In Taiwan, the electricity is provided by Taiwan Power Company (Taiwan Power Company, 2011), and they provide service to 12.58 million customers on the island of Taiwan and the Kinmen and Matsu islets. Taipower has six nuclear units

installed in three stations and two units in a new station are under construction. Those four nuclear power plants are usually called as "the first" which is in Chinshan, "the second" which is in Kuosheng, "the third" which is in Maanshan (as figure 1 shows) and "the fourth" which is in Longmen (as figure 2 shows). Other detailed information of those units is as follows. Also as the map shows, there are three units in the northernmost tip of Taiwan and one unit at the southernmost tip of it.

Operating Taiwan nuclear power reactors Units Type Installed MWe gross MWe net each Start up* Licensee						
Office	Турс	mstalled Wivve gross	wive het each	Otart up	Licerised to	
Chinshan 1	BWR	636	604	1987	2037	
Chinshan 2	BWR	636	604	1979	2038	
Kuosheng1	BWR	985	948	1981	2021	
Kuosheng2	BWT	985	948	1983	2023	
Maanshan1	PWR	951	900	1984	2024	
Maanshan2	PWR	951	923	1985	2025	
Total (6)						

dates are for start of confiniercial operatio

4927 MWe net

Figure 1: Operating Taiwan nuclear reactors (World Nuclear Association, 2010)

Taiwan nuclear reactors under construction				
	type	MWe net	Start-up	
Longmen 1	ABWR	1300	early 2011	
Longmen 2	ABWR	1300	2012	
Total (2)		2600		
also known as Taipei County plant, each unit 1350 MWe gross				

Figure 2: Taiwan nuclear reactors under construction

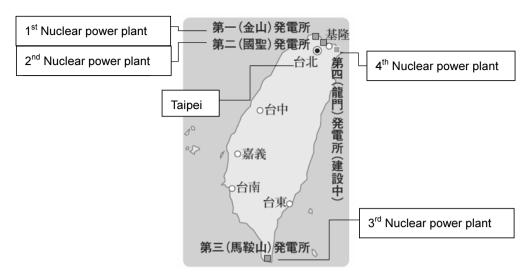


Figure 3: A map of Taiwan's nuclear power plants (ICCN, 2011)

The construction of nuclear power plants in Taiwan started in the late 1970s (World Nuclear Association, 2010). Three of them are now generating electricity and the fourth one, which is under construction in Longmen village new Taipei city, has been commissioned since March in 1999 under the Chinese Nationalist Party (KMT)'s administration (Xie, 2003).

However, according to Xie, on March 2000, Chen Shui-bian of the Democratic Progressive Party (DPP) became president. Chen Shui-bian came into office with a history of being Anti-nuclear power plants, and in May of the same year while the discussion on the construction of the fourth plant started, in October the construction itself temporary was stopped until February in 2001. Even though the administrative court proposed a bill of referendum about the fourth plant, it was strongly opposed in legislative courts by the opposition party, which is mainly KMT. An uphill battle from hostile opposition parties still continues. Under the DPP's administration, Taiwan held the "10th No Nuke Asia Forum" in 2002. In July 2003, there was a demonstration to push the referendum about the Longmen nuclear power plant in Taipei (Xie, 2003).

Similarities between Taiwan and Japan

The situation surrounding nuclear power plants in Taiwan bears a resemblance to Japan's. First, both countries are similar in their roots of energy resources, dependency on nuclear power plants and also geographic characteristics. Both are importing most of their energy resources. Japan and Taiwan import more than 95% of their energy resources from other countries: 96% (including Uranium) (Ministry of Economy, Trade

and Industry, 2007), and 99.3% (Kuomingtang Official Website, 2011) respectively. This data shows that energy resources of both counties depend on foreign countries.

Second, Japan depends on nuclear power plants to generate almost 30% of its total electricity and Taiwan's nuclear power plants generate about 20% of its total electricity (Women in Nuclear Taiwan, 2010). Their dependency rates on nuclear power for their electricity are close. Rates of 20% or 30% are relatively a large portion of the total electric generating capacity. Therefore, for both of them, nuclear power is necessary for the stable distribution of electricity and also economic development, as well as being a serious matter of national security.

However, there is another noteworthy similarity between them, i.e. these two countries are in the same quake zones, which means, that there are "scores of reactors in quake zones" (Tanman, Casselman & Mozur, 2011). According to the Wall Street journal, "dozens of nuclear reactors operate in earthquake-prone regions around the world. Among them, at least 14 are in high-hazard areas." The map below shows that all of Taiwan's nuclear power plants are in this zone. "Most of those plants are in just two places: Japan and Taiwan, both islands with limited natural resources that have chosen the risks of nuclear calamity over complete dependence on foreign sources of energy." (Tanman, Classelman & Mozur, 2011). Taiwan's four nuclear power plants are all in these quake zones.

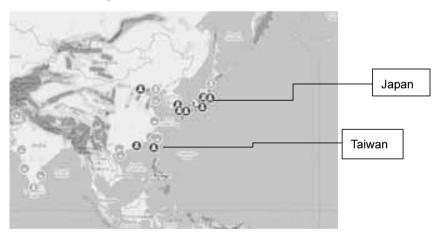


Figure 4: Threat by Land and Sea (Tanman, Casselman & Mozur, 2011)

Thus, the situation surrounding nuclear power plants in Taiwan and Japan has many similarities. Even though, so far, both of the counties have depended on nuclear power, especially after the Fukushima crisis, it is a huge risk for Taiwan to keep running the nuclear power plants. Now, Taiwan is impaled on the horns of a dilemma.

The role of the Nuclear Power Issue in Taiwan's politics

The nuclear power issue in Taiwan had an inauspicious start due to conflict between the KMT and the DPP, conflict which continues today. Because of the future presidential election in 2012, lately, Taiwan's politics have been engaged in internal battles.

Now, Taiwan's government is run by the KMT. There are two major political parties in Taiwan, one is the KMT and its opposition party is the DPP. Usually the KMT gets more support from people who are living in big cities in the north, such as Taipei. The DPP gets more support from people who are in the south, especially in rural areas. There are two candidates for the presidential election now, one is President Ma Ying-jeou of the KMT and the other one is Tsai Ing-wen of the DPP. Tsai is the chairman of the DPP. She gained a higher approval rating within the DPP (*Taipei Times*, 2011).

According to the Taipei Times (2011), Tsai Ing-wen was nominated as the DPP's candidate for the 2012 presidential election this April. If she is elected as president next year, she is going to be the first woman president in Taiwan's history. Tsai has a pragmatic point of view on the cross-strait relations, but has a strict position on Taiwan's sovereignty status, which means Taiwan is an independent sovereign state and does not belong to Mainland China (*Taipei Times*, 2011).

		Frequency	Percent
Valid	Ma ying-jeou(KMT)	493	38.9
	Tsai ing-wen(DPP)	490	38.6
	Won't vote\Will cast invalid ballot	63	4.9
	Don't know/ No answer	224	17.6
	Total	1270	100.0

Figure 5: KMT nominated Ma Ying-jeou and DPP nominated Tsai Ing-wen for the upcoming presidential election. If you had to vote today, for whom would you vote? (GVSRC, May 9-10, 2011)

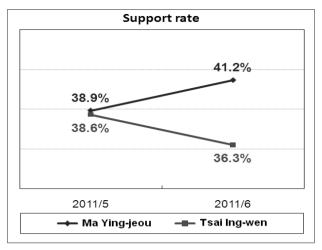


Figure 6: Support rate of presidential candidates in 2012 ("Campaign Indicator" with estimated vote shares excluded) (GVSRC, 2011)

As figures 5 and 6 show, currently Tsai is grappling with a set of severe present conditions.

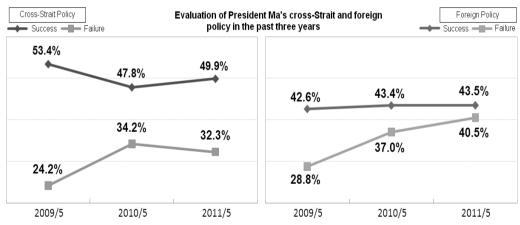


Figure 7: Survey on President Ma Ying-jeou's Performance (GVSRC, May 24, 2011).

2011/6	Better than	Worse than	Almost the	Don't know
	now	now	same	
Ma Ying-jeou	31.7 %	9.3 %	45.0 %	14.1 %
Tsai Ing-wen	7.7 %	30.4 %	43.6 %	18.3 %

Figure 8: Respondents' evaluations on possible changes in the cross-Strait relations if either candidate wins the presidency in 2012 (GVSRC, 2011, June)

Based on figure 7, which is a survey conducted by the Global View Survey Research Center (GVSRC) of Taiwan (2011), President Ma is getting more approval

from the public in terms of the cross-strait relations, which is one of the biggest and longest assignments for Taiwan. Furthermore, as figure 8 shows, people in Taiwan obviously have a negative image of Tsai when it comes to the cross-Strait relations. According to the Taipei Times translated from Liberty times, "She has spearheaded the DPP's "10-year master plan," a paper on how the party plans to tackle future challenges, such as an aging population, environmental degradation and the cross-strait policy, which is expected to play a key part in her campaign" (*Taipei Times*, 2011). Therefore, the environmental degradation, especially the non-nuclear politics would become a political trump card for her.

Comparison of stances: Tsai and Ma

According to the official websites of the KMT (2011) and the DPP (2011), it's not too much to say that they are taking opposite stances on the nuclear power plants, especially on the fourth one. In the following two sections, each party's stance and its supporters' opinions will be discussed.

Tsai's Anti-Nuclear campaign and its supporters

On March 25th, right after the Fukushima crisis, Tsai proposed the campaign pledge: "Nuclear-free nation": to abolish all the nuclear power plants in Taiwan by 2025. She said that it is impossible to stop all the nuclear power plants right now. The reason why she set 2025 as a goal is because 2025 is the end year of the duration life of the third power plant. That is, if the fourth plant is not built, by 2025 Taiwan's nuclear power plants will all be expired. Tsai Ing-wen mentioned that the risks and disadvantages of having the nuclear power plants are too huge in Taiwan. (*The Epoch USA*, 2011).

According to the Taiwan Environmental Protection Union (TEPU) (2011), all of Taipei, the capital city would be within a 30-kilometer radius of the plants. The first and the second plants are already within a 30-kilometer radius of Taipei, but if the fourth plant is completed and starts to be used, the whole northern part of Taiwan would be in danger if they exploded. The establishment of the fourth nuclear power plant means that 6,000,000 people in the northern part of Taiwan would be included within 30km of the main influential areas.

On her blog, Tsai Ing-wen insisted that the government and citizens of Taiwan should try to conserve energy in daily life. She also said that during this period Taiwan can find a lot of alternative energy sources such as tidal, solar, and wind electrical power. In addition, she suggested that people in Taiwan have to change their industrial structure, so that industry can be compatible with the environment. At the same time, they should get out from the high-energy and high water consuming life style and then turn Taiwan industry into an industrial structure with high knowledge, high technology and high humanities (Tsai, 2011).

The 2025 nuclear-free program of Taiwan is a complete set of ideas. This movement is also planning that in 2025, Taiwan will be able to secede from its dependence on nuclear energy, change the industrial structure and way of life, and even succeed in finding more alternative solutions to producing energy which are more efficient and clean (Democratic Progressive Party Official Website, 2011).

Moreover, Tsai mentioned that there is a stipulated policy in the environmental fundamental law which was enacted in 2002 which states that Taiwan is going to be a "Nuclear-free nation" gradually. The storage of the electricity of last year has achieved 23% already. The necessary electricity storage is only 15% (Tsai, 2011). Even if all the nuclear power plants were stopped, there would still be 10% of storage. Thus, what they have to do is to think about how to fill in a gap of about 5%. Some scholars such as Professor Shi Xin-min in the department of Chemical and Materials Engineering in National Taiwan University have also expressed the same point of view (*Liberty Times*, 2011, March 25).

Tsai's plan on how to replace nuclear power plants is as follows (Tsai, 2011). The methods that Tsai has offered to tackle this assignment are as follows:

- a. To improve the renewable energy resources: According to the governmental rule, it should be increased by 6.5% by 2025.
- b. To improve the efficiency of thermal electric power generation. By investing money into thermal electric power generation, it is possible to increase 5.8% of the total electricity generated. By doing this, it would also cut CO2 emissions.
- c. To prioritize the building of new natural gas electric power generators rather than building the fourth nuclear power plant. By using the two previous methods, electricity will already have increased by more than 10%. If more electricity is needed, building new natural gas electric power generators would be cleaner and quicker.

Ong Jin-zhu of the DPP says that Taiwan's renewable energy equipment already can produce 6% of the electricity the country needs. He says that it's possible to

replace nuclear power with renewable energy and natural gas generators (*Liberty Times*, 2011, March 22). Against the KMT and Taipower's opinions that such renewable energy is expensive, he insists that if a disaster as big as that of Japan happened in Taiwan, the prime cost would be higher.

Asian Week criticized that Taipower is not doing well, and it is hard to trust them (2011). They also wrote that the fourth plant has many problems. For example, since the construction was stopped and postponed under Chen's administration, the materials such as steel have eroded. There were some serious flaws in the first generator's design in the fourth plant, and what they have done to fix it was to take some parts away from the second generator and put them in the first one. Tsai Ing-wen and her supporters have cited such problems with the plants construction as mentioned above and have used them to emphasize how risky it is to continue relying on nuclear power plants in Taiwan.

Ma Ying-jeou's stance and anti-Tsai's opinion

Against Tsai's campaign pledge, Ma Ying-jeou, the active president and chairman of the KMT, and other supporters such as officers of Taipower and members of the Ministry of Economic Affairs have been making strong appeals to the public stressing the risks and disadvantages of not having nuclear power plants in Taiwan. They are mainly emphasizing the economical disadvantage such as the fact that products made in Taiwan might lose their competitiveness if Taiwan stops using nuclear power plants.

Ma said that "I love Taiwan, I want Nuclear power plant safety, no safety no Taiwan" (Kuomingtang Official Website, 2011). His stance toward the nuclear power plants is very clear. He thinks that it would be better for Taiwan's economical development to keep building the fourth plant and to try to improve security against the possibility of natural disasters (World Nuclear Association, 2010). According to the World Nuclear Association, "Nuclear power is considerably cheaper than alternatives" (2010). Lin Sheng-zhong, a vice-minister of administration of the Ministry of Economic Affairs, R.O.C. also said that the alternatives' prime cost is too high (*Liberty times*, 2011, March 22). Also, Ma emphasized that 99.3% of Taiwan's energy resources are imported (Kuomingtang Official Website, 2011). Therefore, Nuclear power plants are important for Taiwan in terms the national security. Nuclear power plants will provide stable and cheaper energy to the people in Taiwan.

Chen Gui-ming, the CEO of Taipower emphasized that the fourth plant has no problem so far (*Liberty Times*, 2011, March 22). Huang Xian-zhang, the Vice president of Taipower said that stopping the fourth plant means losing 260 billion NT dollars (*Liberty Times*, 2011, March 26), which is almost nine billion US dollars. If they

don't continue to use the nuclear power plants in Taiwan, people will suffer from a lack of electricity within 8 years. Moreover, the Ministry of Economic Affairs, R.O.C. said that by abolishing the nuclear power plants, CO2 emissions will be higher (*Liberty Times*, 2011, March 26).

Shutting down all the nuclear power plants would have a huge negative impact on industries. Chen Zhao-yi, State-operated meeting vice-committee chairman said that almost 65% of electricity would be insufficient. He also said that there would be no way to make up for the lack of electricity without nuclear power plants (*Liberty Times*, 2011, March 22). Thus, Ma Ying-jeou and nuclear power supporters are expressing strong concern, mainly about the negative impact on economy that going nuclear power plant free would have.

Public Reactions

What about the public opinion toward this issue then? According to TVBS TV Network, Poll Center, 60% of people in Taiwan expect a "Nuclear-free nation" (2011). However, as figure 10 shows, 52% of people are not supporting the idea of "stopping the fourth plant".

According to the poll, 29% said that they highly support Tsai's idea (TVBS TV Network, Poll Center, 2011). The reason why 52% of people said they don't support Tsai's idea is because they worry about the possible negative impact on the development of Taiwan's economy.

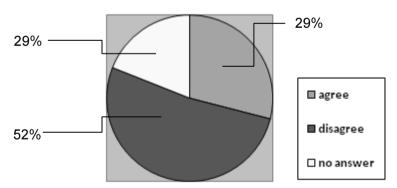


Figure 10: Do you agree with Tsai's idea of "stopping the fourth plant"? (TVBS TV Network, Poll Center, 2011)

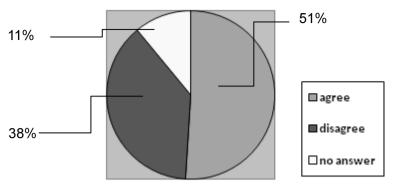


Figure 11: If the electricity fee increased 1.5 higher than now, would you agree or not? (TVBS TV Network, Poll Center, 2011)

In response to the question "if the electricity fee increased more than 1.5 higher than now, would you agree or not?" 51% people said they would agree, and 38% said they would disagree.

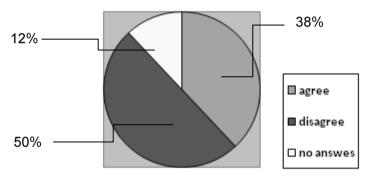


Figure 12: Concerning some impacts on the economy, do you still agree with Tsai's idea of "stopping the fourth plant"? (TVBS TV Network, Poll Center, 2011)

However, interestingly if there would be a negative influence on the economy, then 50% of people would not agree with the idea of stopping all the nuclear power plants while 38% said they would agree.

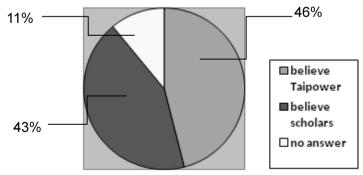


Figure 13: Which one do you believe: Taipower or Scholars? (TVBS TV Network, Poll Center, 2011)

Of those polled, 46% of the people believe Taipower's allegation that there wouldn't be enough electricity a few years later if all the nuclear power plants were abolished. On the other hand, 43% believe the scholars' opinion that even if they closed all the nuclear power plants, Taiwan still has enough electricity storage.

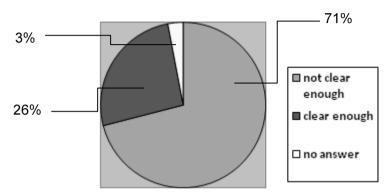


Figure 14: Is Tsai's Anti-nuclear campaign clear enough for you? (TVBS TV Network, Poll Center, 2011)

Of those polled, 71% of people answered that Tsai's campaign is not clear enough and 26% said that it is very clear. This data shows that it is difficult for Tsai to get more support from the public due to a lack of understanding. As the TVBS TV Network, Poll Center's survey data shows, the main concern of the public is the economic disadvantage. Even though Tsai offered plans to deal with the lack of electricity, it seems that her campaign is still not clear enough for the ordinary people in Taiwan.

Conclusion

There have been many anti-nuclear movements in Taiwan for a long time, but especially after the Fukushima crisis, this nuclear power issue has become one of the main concerns for people in Taiwan followed by the cross-strait relations. Through this research, it is obvious that this issue is being used as a political strategy for the presidential election by the two parties. Thus, all the information has been controlled by them. Therefore, even though the two parties' opinions are contradictory, it will be hard for ordinary people to decide which one is right and which one is wrong. It is impossible to abolish all the nuclear power plants right now in Taiwan. The future direction of Taiwan's nuclear power plants is heavily dependent on the two major political parties. The presidential election in 2012 will be central in offering a new direction on this issue.

There is too much complicated information, so any personal visions or

anticipations about the presidential election have not be presented as a conclusion of this paper. However, by observing anti-Tsai's opinions, it seems like their point of argument is always linked to economical disadvantages. Now, a large number of people want a "Nuclear free nation" in Taiwan. However many of them cannot support Tsai's campaign because they are concerned about the influence on the economy. Tsai's opposition is relying on this concern. Therefore, if Tsai could explain the economical concerns and strategies more clearly and communicate with the public sufficiently, her anti-nuclear campaign could be the political bargaining chip for Tsai to win the presidential election in 2012.

Now, the world is more and more swayed by the no-nuke movement. After the Fukushima crisis, Taiwan's anti-nuclear movement took on new importance at the political level. If Tsai wins in the presidential election in 2012 and implements the anti-nuclear policy, Japan will be affected by this movement too. If Taiwan, which has many similarities with Japan, takes a step ahead toward becoming a "Nuclear-free nation", it could be a force of political change to push the Japanese society and government toward the same direction.

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Benefits Resettled Refugees Bring to Japan

Moe Saito

Introduction

Japan should continue hosting refugee resettlement because it helps to raise Japan's international reputation and greatly benefits the country. "Refugee resettlement" is one of the "durable solutions" which the United Nations High Commissioner for Refugees (UNHCR) sets as solutions open to refugees (UNHCR a). When people flee from their home country and enter another country as a refugee, they generally expect to go home after the threads of persecutions are removed in their original country. Yet in many cases, situations do not allow people to go back, so they have no choice but to move to a third country, a host country for refugee resettlement. The program to help those people resettle is called the refugee resettlement program. In Japan, the three-year pilot project to accept refugees to resettle started from 2010 (Aba, 2001). As the project is starting to reach its end, the Japanese government, together with its citizens, are to discuss and decide whether Japan will continue to host refugee resettlement after the end of the pilot project. Being at this crucial moment which determines the future of Japan in the relationship of refugees, I would like to draw attention specifically to the issue of refugee resettlement in Japan. Thus, I will save all other discussions about other types of refugees or issues in other countries etc. for another time. Receiving refugees to resettle is important not only for humanitarian purposes but also for the benefits of Japan. Indeed, accepting resettlement will raise Japan's international reputation by highlighting the image of Japan as a humanitarian country tolerant of multiculturalism. Despite the existing criticisms against refugee acceptance, conducting resettlement actually does more good than bad for the Japanese society. In fact, even in the face of domestic crisis, the Japanese government does have the financial capacity to afford to continue the resettlement program. Besides, resettled refugees would quickly make an economic contribution rather than remain as an economic burden. And the central government, local government, NGOs, and media can improve some supporting systems so that Japan can continue to host refugee resettlement. If Japan improves its support and continuously open the country for refugee resettlement, Japan can be sure to raise its international reputation and receive tremendous benefits.

Basic Information:

International refugee situations

The term "refugee" is officially defined by the 1951 Refugee Convention Relating to the Status of Refugees, which is the first international agreement on refugee issues. According to the convention, a refugee is a person who:

"[has] well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinion," is "outside the country of his nationality," and "is unable or, owing to such fear, is unwilling to return to [their home country]." (UNHCR b)

Subsequently, the 1967 Protocol Relating to the Status of Refugees removed the geographic and temporal restrictions which were stated in the 1951 Convention (UNHCR c).

The definition by the 1951 Convention and the 1967 Protocol are generally understood to exclude people who fled their country because of economic situation, environmental situation, and wars or conflicts from the refugee category. Arguing that the definition by the Convention does not match the current situation and because those were created for the post World War II situation, Africa and Latin America have expanded their legal definition (OHCHR). Nonetheless, the international definition of refugee remains based on the 1951 Convention and the 1967 Protocol.

Today, refugee issues are a huge concern for the international community. In 2010, there were 15.4 million refugees, 27.5 million internally displaced people, those who are still in their country but in refugee-like situations, and 840,000 asylum seekers, who have applied for refugee status and are waiting for the result (The Guardian). Among refugees and others who are under UNHCR concern, 38% originated in Asia, 35% in Africa, 12% in Latin America and the Caribbean, and the remaining in other areas. One of the problems is that countries do not fairly share the responsibilities for accepting refugees. In fact, currently, developing countries host 4/5 of the world refugees (UNHCR d) while some developed countries are reluctant to receive refugees.

Recently, the international community has been putting an emphasis on the refugee resettlement as one of the "durable solutions." Among the twenty-four countries of the Development Assistance Committee (DAC), twelve countries have participated in refugee resettlement (Haddal, 2009). Among those DAC members, the major resettlement countries are Australia, Canada, the United States of America, and so on (Haddal, 2009). Even though Japan is included in the twelve resettlement countries, it did not allow any resettlement from 2002 to 2009 (Haddal, 2009). Also, it is worth noting that only 1 % of total refugees in the world are able to resettle in a host country, which is often called as a third country (Haddal, 2009).

Japanese domestic situations

Japan signed the 1951 Refugee Convention in 1981 and the 1967 Protocol in 1982 (Japanese Ministry of Justice). The definition of "refugee" in Japan is taken from the 1951 Convention, thus its definition is exactly the same as the Convention's word for word. Officially, the definition of refugee is stated in the Immigration Control and Refugee Recognition Act which was implemented in 1951 and amended in 1982 to include the definition of refugee (Japanese Law Translation).

The Japanese Ministry of Justice explains the interpretation of the definition, and it states that in the case that people fled their original country because of war, natural disaster, poverty, starvation, and so forth, then those people are not refugees. In addition, the Japanese Ministry of Foreign Affairs explicitly addresses that "well-founded fear" should not be subjective and has to be proven objectively (Japanese Ministry of Foreign Affairs).

Historically, Japan has been accepting mainly Indochina refugees, who left their country of Cambodia, Laos, or Viet Nam, because of the political shift to the communist system (Aba, 2001). This acceptance was completed in 2005, and from 2006 to 2009, inflow to Japan was only the refugees whose status was recognized under the 1951 Convention and the people who are not recognized as refugees but admitted to stay in Japan for humanitarian concern (Aba, 2001). In 2010, the number admitted to Japan was 39 under 1951 Convention status and 363 under humanitarian concern. Furthermore, even though the number of asylum-seekers is steadily increasing, only 15 % of the asylum-seekers are accepted as refugees on average from 2004 to 2007 (Haddal 2009). By comparing the average acceptance of asylum-seekers to 28% for OECD countries, 24% for Australia, 35% for the U.S.A., and 49% for Canada, Japan does not seem to take a fair share of refugee acceptance (Haddal, 2009).

From 2010, Japan launched a pilot project to participate in the refugee resettlement program. The project is designed for a three-year term, and Japan is to receive approximately 30 refugees each year. In 2010, five households of 27 people in total came to Japan as the first wave. They are all originated from Myanmar and lived in Mae La Refugee Camp in Thailand. They received the Resettlement Support Program for 180 days (Japanese Cabinet Secretariat). Then, two families moved to Chiba prefecture and three families to Mie prefecture (RAFIQ, n.d.). In each prefecture, they receive Life Support for Self-Independence with occupational training and language training (Japanese Cabinet Secretariat).

The research on the first wave revealed that those refugees and the society are facing various challenges. Indeed, life is critically severe for the refugees. One of the refugees takes her 2-year-old son to kindergarten and goes to her work place, and her way from home to the work place via the kindergarten takes two hours. Also, the

refugees receiving training on a farm were obliged to work from 7:00 to 18:00 six days a week, and they only received 120, 000 yen per month. There was even a case in which one person had to feed his whole family of seven members with the 120,000 salary. As a result, the two households in Chiba prefecture decided to leave Chiba to move to other prefectures and find a different job even though the occupational training in the farm land had meant to lead them to a permanent job after the six months training. Some critics say that even taking into account that agriculture is a seasonal job and demands longer work hours in certain seasons, more explanation beforehand is at least necessary to fill the gap between what refugees originally expect and what they can actually expect in reality. In addition, the refugees tend to be left in isolation. Although five households came to Japan at the same time, they were divided into two groups. Also, because of language problems and possibly the nature of the host community, they are left in isolation. Besides, NGOs were in difficulties to support them since the government advised to refrain from contacting them (Watanabe, 2001).

The refugees in the second wave of the pilot project have already come to Japan in 2011, but among the six households which were originally scheduled to come, one family cancelled their resettlement and one postponed. Thus, four families of 18 people in total have started their lives in Japan.

Even though Japan faces various difficulties conducting the refugee resettlement program, Japan should not give up but should try to improve the situation to gain success in this pilot project. According to the head of Mae La refugee camp in Thailand, even though the situation of the first wave people has discouraged some refugees in Thailand from choosing Japan as a third county, many others do want to go to Japan as it is an Asian country with a commonly shared Buddhist background (RAFIQ, 2011). Furthermore, because the international community is paying great attention to Japan's resettlement project, which is the very first project in Asia, people are well aware that ending the project with a failure would degrade the international reputation of Japan badly (RAFIQ, 2008).

Benefits for Japan to continue Refugee Resettlement Program raising International reputation

By successfully concluding the pilot project and continuing to admit refugee resettlement even after the pilot project, Japan can raise its international reputation which is tremendously important for national interests. Higher international reputation is indispensable for Japan's national security and for foreign affairs. Japan cannot survive alone without international interactions because it heavily depends on other countries for food and energies. In Japan, the rate of self-sufficiency for food was 39%

(Japanese Ministry of Agriculture, Forestry and Fisheries) and for energies 18% in 2008 (Shakai Jitsujyo Deta Zuroku). This percentage of energy self-sufficiency includes nuclear energy, and excluding nuclear energy was only 5 % (Shakai Jitsujyo Deta Zuroku). Also, Japan has been interested in becoming a permanent member of the Security Council in the United Nations, and to get support from other countries high international reputation is crucial.

Therefore, Japan does need to raise its international reputation. Traditionally, Japan has kept its good reputation by contributing monetarily. Yet as an officer of the Ministry of Justice of Japan admits, financial contribution alone cannot satisfactorily fulfill the responsibilities expected of Japan (RAFIQ, 2008).

In regard to raising Japan's international reputation, conducting refugee resettlement is a very effective strategy because it conveys the message that Japan has a multicultural tolerance. For many years, Japan has occasionally been labelled as a closed society. Refugee acceptance can change such negative images, and people would come to Japan for tourism or for business. Indeed, Japan desperately needs skilled people from outside in order to change the current situation in which the innovation level of Japan is decreasing year by year. Thus, by allowing refugee resettlement, Japan can enhance its image as a country tolerant of multiculturalism which will attract various people including skilled professionals to Japan.

In addition, being an active resettlement country spreads the image of a humanitarian country. Even though there are other ways to raise international reputation, some of them possess the danger of transmitting negative images as a sub-effect. For example, sending the Self-Defence Force for international cooperation conveys a message of not only Japan's contribution to the international community but also an image of militaristic expansion and conflicts with other countries' interests. In contrast, refugee acceptance is usually seen as a humanitarian action which creates no negative impact on other countries. Thus, accepting resettlement can raise the international reputation of Japan without any sub-effect of conveying a militaristic or aggressive image to other nations.

Besides, supporting refugees to resettle is a much more cost-efficient way to raise international reputation than international contribution by sending the Japan Self-Defence Force. For the 29 refugees who came to resettle as the first wave of the pilot project, the total budget was 109 million yen (Tweetou). In contrast, for example the operation of the Japan Maritime Self Defence Force in the Indian Ocean to refuel American and British marine vessels cost 21.6 billion yen for the whole mission which took place from 2001 December to 2007 July. This means that the operation cost on average 3, 879.48 million yen per year (Yomiuri Newspaper). Thus, support for refugees' resettlement is far more cost efficient than some other strategies to raise

international reputation.

Criticisms and refutations

In the discussion over refugee resettlement to Japan, there are some opinions disagreeing with refugee resettlement. However, closer analysis reveals that it is actually clear that resettlement can bring more positive than negative impacts on Japanese society.

Busy with domestic problems?

First, the idea that Japan has too many domestic problems to afford to host refugee resettlement seems somewhat predominant in the society. Besides, since March 2011 Japan is suffering from the aftermath of the Great East Japan Earthquake and the corresponding Fukushima crisis.

In reality however, Japan does have financial capacity to support resettlement. Japan is one of the developed countries, and its GDP based on power parity per capita was \$34,362.07 in 2011 (Material notebook of world economy). Thus, considering the fact that developing countries receive 4/5 of the world refugees at this moment (UNHCR d), it is not so convincing to state that Japan has financial difficulties to host resettlement.

Besides, Japan has already shown its financial capability to conduct refugee resettlement program by the pilot project. The budget of 109 million yen for 29 refugees in the first wave of the pilot project is far greater than the budget for refugee resettlement in, for example, Australia. In Australia, the offshore resettlement, one of the two resettlement programs in Australia, has the budget of approximately 200 million yen equivalent to support 2,000 to 4,000 refugees for six months each (Tweetou). Thus, the problem is not the financial difficulties but the efficiency of the usage of the budget, which is an area in which Japan has room to improve.

Benefits for the national economy

Not only is hosting refugee resettlement financially possible, it stimulates the national economy. Some researchers state that after the short-term cost supporting refugees to adjust to the new environment, refugees quickly turn to contribute to the society culturally, socially, and economically. Especially when refugee families with small children resettle, their children are educated in the host country and later have a positive impact on the labour market. Furthermore, resettled refugees have the potential to expand consumer markets, open new markets, bring new skills, and fill jobs which local people do not take (Refugee Council of Australia). In Japan, where

population decline is severe, gaining a labour force from outside of the country is necessary. In fact, the population of 127.5 million in 2009 is estimated to decrease to 51.1 million in 2025 (Japanese Ministry of Internal Affairs and Communication). Also, since so many villages in the country side are now in danger of disappearing because of severe depopulation, refugee people can contribute to maintaining and reviving those villages.

Benefits for citizens

Even when resettlement benefits the national economy, citizens are concerned about the negative impact on themselves. And some people worry that foreign people including resettled refugees would "steal" jobs. However, "stealing jobs" is in fact a mere myth. Indeed, not only the nation but also its citizens can receive benefits from accepting resettled refugees. In reality, refugees take jobs that are otherwise empty (Refugee Council of Australia). Moreover, citizens will be able to enjoy economic improvement followed by better job opportunities as well as a society enriched by multiculturalism. Therefore, resettled refugees are not the threat but the hope to stimulate society and create more jobs for citizens.

Continue supporting Refugee Resettlement: Steps to take

To receive the benefits which resettled refugees can provide for Japan, Japan needs to continue to host refugee resettlement by improving the current support system for refugees with cooperation among the central government, local governments, NGOs, and the media.

Government

First, it is most important for the central government to make a decision to continue the refugee resettlement program even after the end of the pilot project. With the government decision, all other stakeholders would be able to start improving their support system for refugees and prepare for welcoming refugees.

Prefectural and City Government

Reflecting the central government decision to host resettlement, prefectural and city governments can launch a project to resettle refugees in their communities. Already, Matsumoto city in Nagano prefecture voluntarily showed its willingness to accept refugees to resettle in its community (Japan Association for Refugees). In 2011, Matsumoto Community Refugee Resettlement Support Communication Council (Matsumoto Chiiki Nanmin Teijyuu Shien Renraku Kyogikai) was established by the

initiative of the Council for International Cooperation from Shinshu (Shinshu hatsu Kokusai Kouken no Kai). Likewise, other cities can research the infrastructure necessary to host refugees and form support groups to get prepared for resettlement.

The possibility is that many communities have the potential to benefit from resettlement and have a capacity to host refugees in their communities. For example, refugee resettlement to the Kawabe-Wada area in Akita city, Akita prefecture, will help the social and economic situation of the area. Currently, Kawabe-Wada area faces a population decline. The population growth rate in the area from 2009 to 2010 was -0.7 % (Akita City, Japan a). Besides, Akita city as a whole has been experiencing minus growth for the past five years from 2006 (Akita city, Japan b). Also, the percentage of the population aged 65 or older in Akita prefecture in 2010 was 89.09 % (Akita city, Japan c), which highlights the lack of a younger generation for labour power. Therefore, Kawabe-Wada area in Akita city would gain many benefits from refugee resettlement.

Furthermore, the Kawabe-Wada area has the basic infrastructure to accept refugee resettlement. Around Wada station, there are 2DK (2 rooms, one dinning/kitchen) apartments or bigger. There is a post office and a kindergarten nearby the apartments, as well as an elementary school within a 25-minute-walk, and a junior high school within a 12-minute-walk. Furthermore, Akita International University, a prefectural university which has the potential to provide Japanese language training, is just a 15-minute ride away by bus. A 15-minute trip by train leads to Akita station, which is the center of the city. There people can go to the supermarket, bank, library, and many other places necessary for daily life. Also, just 15 minutes on foot from Akita station, there is a hospital with pediatrics and other major departments (Nakadori Hospital). Thus, the Kawabe-Wada area is most likely to meet the basic requirements to host resettlement.

NGOs

Cooperating with the central government and local government, NGOs can contribute to provide sufficient support for refugees' resettlement in Japan. NGO support is essential to provide satisfactory supports because, by its nature, the central government alone cannot form close communication with local communities. In the case of New Zealand, too, NGOs play a crucial role to offer high quality supports (Refugee Assistance Headquarters). Therefore, in order to give a positive impact more on the society, uniting as one among various related NGOs is indispensable.

Media

At the same time, media can also instigate change in the society to create a

welcoming atmosphere in Japan by covering more refugee issues from various aspects. Currently, media coverage on the topic of refugees is very much limited. In addition, even when refugee coverage is aired, it often conveys only negative images: refugees are poor, helpless, troubled, desperate, etc. However, to provide fair information about refugees and emphasise the positive impacts which refugee people can make to Japan, more balanced coverage which also displays the strength and positive aspects of refugees is required. By presenting a more well-rounded media coverage of refugees, Japanese citizens would come to realize that refugees are people just like them; parents who worry about the future of their children; children who dream of a brighter future.

Conclusion

Hosting refugee resettlement is not only for fulfilling humanitarian responsibilities but also to help raise Japan's international reputation and to meet the interests of Japan. Indeed, refugee resettlement can raise Japan's international reputation by presenting the image of a humanitarian and multicultural nation. Also, among various strategies to raise international reputation, a resettlement program is the most costefficient method, especially compared to sending the Self-Defense Force to foreign countries. Though some people don't want to accept refugees based on Japan's financial difficulties, the Japanese government has the financial power to budget for continuous refugee resettlement support. Moreover, resettled refugees are not an economic burden but a driving force to stimulate the Japanese economy. Besides, because refugee people usually take low-status jobs, resettlement would not lower the unemployment rate of Japanese citizens. Thus, resettled refugees will offer benefits to both the nation and its citizens. In order to have a continuous refugee acceptance, the national government, prefectural and city governments, NGOs, and media need to improve their support system. First of all, the national government needs to decide to open the country to host refugee resettlement and create a fundamental base to pursue refugee acceptance and encourage other stakeholders to take actions. Also, local governments can research their local conditions and prepare for welcoming refugees into their communities. In addition, NGOs can network with each other and create more solid cooperation with other stakeholders to be able to offer a higher quality of support for refugees to overcome the problems that refugees in the pilot program have faced. Lastly, if the media reports more on refugee topics that reflect not only the problems and troubles of refugees but also the triumphs, strengths and positive aspects of refugees, people in Japan would become more aware of the benefits which Japan can gain from resettling refugees. In fact, refugee resettlement is not a burden for Japan but the hope which can lead the country to become a more prosperous society.

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Teaching about Radiation in Akita, Japan

Ayami Ono

Introduction

There is a gap between the Japanese government's guideline for teaching of radiation and the actual education in Japanese high schools. When the release of radiation from Fukushima nuclear power plants was revealed after the 3.11 Great East Japan Earthquake, the Japanese government and mass media provided lots of information about the situation and safety. However, Japanese people had little knowledge about radiation and got confused about which information they should rely on and what was true since they had not been taught so much about radiation in their education. The government and educators in Japanese high schools should realize the importance of teaching about radiation more in depth so that the students have a good understanding of radiation and its affects.

However, the Japanese government has been saying that the radiation is statistically fine and has not changed its teaching guidelines, while educators in schools have started trying to teach the truth about radiation to their students. The issue of radiation from the Fukushima Daiichi nuclear disaster is complicated since it is related to various fields, but I will focus on education. Also, this paper discusses the education in Akita prefecture, Japan, since I was born and live in Akita. In this paper, I will explore how the view toward education about radiation has changed after the 3.11 Great East Japan Earthquake in both the Japanese government and the high schools in Akita and propose a solution to close the gap between them.

The problem of the Japanese education system regarding teaching about radiation

The Ministry of Education, Culture, Sports, Science and Technology of Japan's (MEXT) guideline for teaching in high school declares "The use and safety of radiation and nuclear power should be taught" (MEXT, 2009). MEXT has legal power and sets the fundamental principles of teaching of each subject in each level of education. The schools in Japan can use only textbooks that are approved for publication by MEXT. Students in high schools learn about radiation in high school, yet MEXT provides as a guideline only one sentence (shown above) and no more explanation is given. According to the guideline, Advanced Physics is generally an elective subject, and students basically choose one elective subject from Basic Science, Comprehensive

Science A and B, and one more from Advanced Physics, Biology, Chemistry and Earth Science. Therefore, students have very little opportunity to study other subjects. In addition to that, the chapter about nuclear power and radiation is also an elective in Advanced Physics. Teachers choose a topic from the chapter about "atom and atomic nucleus" or "material and atom", so even if the students choose Advanced Physics, they do not necessarily study about nuclear power and radiation.

Although students learn about nuclear power in junior high school, what they study in junior high school is that there are various sources to produce energy such as thermal, hydroelectric, and nuclear energy. As the government guideline for teaching for junior high school declares "the students should realize that humans use various energies such as hydroelectric, thermal, and nuclear energy, and it is important to use those energies effectively" (MEXT, 2010). The problem of Japanese education is that the opportunity to acquire enough knowledge about radiation and nuclear power is not provided for all students, and it largely depends on students' choice of subjects.

The changes of teaching about radiation in a high school in Akita

I conducted an interview with Mr. Yamashiro, a teacher of physics at Odate Homei High School in Akita, in order to know how he has changed his class after the Fukushima Daiichi nuclear disaster. According to Mr. Yamashiro, his class has changed after the disaster so that his students can have correct and enough information about radiation. Before the Fukushima Daiichi nuclear disaster, the class was just for examination, and he had taught the terminology and the theory of radiation. He said that it might be because he and the students had not had any sense of danger from radiation and nuclear power. However, after the Fukushima Daiichi nuclear disaster, he realized that it is necessary to tell his students why of radiation is dangerous and how influential radiation is on our health. He started trying to teach radiation by relating it to the situation in Fukushima. For example, when he teaches about the halflife period of radiation, he also explains how long it will take in the case of Fukushima. Also, he demonstrates the influence of radiation on children by explaining how much radiation the children in Fukushima are exposed to and how different the influence of radiation on children is from that on adults. Since the students' demand to know about radiation and the situation in Fukushima has been growing after the Fukushima Daiichi nuclear disaster, they have shown more interest in his class than before, according to Mr. Yamashiro.

He also pointed out the importance of the teachers' knowledge about radiation. Teachers of physics have adequate and accurate knowledge about radiation. He claimed that since there are many students who do not take physics, the teachers of

other subjects need to teach their students about radiation.

He also pointed out the importance of cooperation with the teachers of other subjects since the issue of radiation covers various fields such as biology, chemistry, politics, and so on. For example, he now tries to work with the biology teachers to teach how radiation influences people's health through cell division. By cooperating with the teachers of other subjects, they are able to teach about radiation more in depth. He has been making efforts to improve the education on radiation because he wants all students to have the opportunity to learn about radiation and to understand it more comprehensively.

Overall, what Mr. Yamashiro is doing now is to give enough and correct information about radiation to his students so that they can tell what is safe. He said that the students should become able to have their own opinion about whether they agree or disagree to increasing the number of nuclear power plants because they are the generation who are going to lead Japanese society in the future. Also, Akita is located in the same region as both Miyagi and Fukushima. Mr. Yamashiro thinks that what the teachers should do is just help their students understand radiation correctly. He is just one example of a teacher who has changed his teaching so that students have enough and accurate knowledge about radiation.

The change of the government's point of view of teaching about radiation

How has the government changed its point of view on education about radiation? The government kept insisting on the safety of the nuclear power plants before the Great East Japan Earthquake happened on March 11. Before the Fukushima Daiichi nuclear disaster, MEXT and the Agency for Natural Resources and Energy had annually held poster contests for the promotion of nuclear power. The explanation of the contests said that nuclear power plays an important role in producing electric power in Japan and in solving the problem of global warming, as well as highlighting that radioactivity is used in various fields in Japan (Yomiuri Online, 2011, May 12). The contests were held so that each person could understand and tell the importance of nuclear power and radiation to the younger generation through posters. The posters that were awarded a prize all emphasized that humans enjoy the benefits of nuclear power. However, after the radiation leak was revealed after the Great East Japan Earthquake, MEXT and the Agency for Natural Resources and Energy decided to cancel the poster contest for the moment (MEXT, 2011, May 11). The myth of nuclear power plants' safety collapsed due to the Fukushima Daiichi nuclear disaster.

Moreover, it was found that there are some statements in the MEXT approved textbook that insist on the safety of nuclear power plants without mentioning its

disadvantages clearly. One is the textbook for 3rd and 4th grade students which states that the nuclear power plants are safe and do not need much fuel, although there is a statement in tiny letters that "it is difficult to deal with the waste of fuels" (Asahi Shimbun). A member of the Communist Party in Oita prefecture asked for the change of that description. He argued that education about nuclear plants should be reexamined, and the board of education should be aware of the issue. However, the leader of the board of education of the city responded to the argument by saying that the statements in the textbook are correct and accurately follow the government guidelines for teaching. The board of education rejected the proposal to deal equally with the disadvantages and advantages of nuclear power plants. In another example, found in a subtextbook for elementary and junior high schools published by MEXT and the Agency for Natural Resources and Energy, students see the following description of nuclear power plants, "Nuclear power plants are able to withstand any big earthquake" (Yomiuri Online, 2011, June 27). Despite the fact that the events of 3.11 have clearly called the accuracy of such a statement into question, MEXT and the Agency for Natural Resources and Energy has only ordered that teachers be careful in their use of the book instead of ordering teachers to discontinue using the book.

As the public need for correct information about the safety of radiation and the current situation has been growing, MEXT issued an official booklet "To understand radiation correctly" (MEXT, 2011, April 20) on April 20th, about one month after the earthquake. This is for teachers in schools and for parents who have school children and it aims to provide information about how to deal with radiation to protect children. This booklet says that the radiation that has leaked is statistically fine, and there should be no problem if people wash their hands and do not drink standing water. In addition to that, the booklet emphasizes that what is more dangerous is to worry too much because it might cause mental diseases. Following that booklet, the government published sub-textbooks about radiation for elementary, junior high, and high schools on October 14th (MEXT, 2011, October 14). It had been seven months since the Great East Japan Earthquake. The sub-textbooks were distributed freely at the schools which ordered them. However, it seems that there are some problems with the subtextbook. One is that this sub-textbook contains a lot of technical content such as information about alpha rays and gamma rays, isotopes, and radio waves. Those matters are what the students learn in Advanced Physics, therefore those who do not take Advanced Physics have difficulty understanding them. Another is the basic problem that there is little time to use this sub-textbook in classes other than Advanced Physics. Even if the teachers want to use the sub-textbook to teach about radiation in detail, class time is limited. In Japan, around 56 percent of all students go to university (MIAC). The teachers use class time to teach to the entrance exams so that their students can pass the university entrance examinations. Therefore, it is difficult to have extra class time to teach about subjects which the students do not need for the entrance examination. That is why there remains an inequality to get education about radiation into every high school.

Solution

My proposal for solving the inequality of education about radiation is to make radiation education required. No matter what subject the students choose, all students should learn about radiation because Japan will have to deal with this issue for a long time in the future. Students need to learn the basics of radiation, including both its possibilities and risks. If they take other science subjects, such as biology and physics, later in their school life, they can relate the issue of radiation to those subjects. This approach promotes a comprehensive understanding for students. What the government should do is to set the subject of radiation and regulate the class time. It also needs to create guidelines for teaching which do not just point out the safety about radiation but also the dangers and harmful influences on human health and the environment. Securing enough time for radiation education will make teachers more comfortable to teach in detail and also get the students prepared to have opinions about Japan's future concerning nuclear power.

Conclusion

There is a clear difference between what the government tells educators to teach about radiation and what educators actually teach their students today. The government keeps saying that people do not have to worry about radiation and does not try to tell the truth to students in schools. They want to make people believe that radiation is totally safe. However, teachers have realized problems with previous education about radiation: students were not given enough information to understand radiation fully. Now, teachers have been trying to teach what radiation and nuclear power are really like. Although the government has not mentioned the danger of radiation, teachers are attempting to teach its advantages as well as disadvantages. The government, which should show the direction for education, has not changed its view at all, but the teachers in schools have been trying to change their teaching. However, there is the problem of inequality to get radiation education because of the Japanese education system. In order to solve the problem, I propose to make radiation education required for all students. Japan will continue to face the issue of radiation, which means coming generations will also have to solve the issue of radiation. They need to

understand the issue correctly and have their own opinions based on sufficient information. I hope the government takes action to change the education as soon as possible to improve Japan.

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Information for Contributors

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The Student Journal of International Liberal Arts is the first academic journal to be published by Akita International University (AIU) undergraduate students. The editors are all AIU undergraduate students and the journal showcases undergraduate student work--from AIU and from other institutions across the world. The goal of this journal is to give undergraduate students the opportunity to publish their academic writing and to exchange intellectual ideas with peers. As such, the Student Journal of International Liberal Arts hereby invites you to submit your finest academic writing, written for a course or simply for your own intellectual purposes.

Academic writing from undergraduate students everywhere is welcomed. Students are invited to submit a paper they would like to have considered for publication.

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Liberal arts academic essay topics include: politics, history, education, environment, economics, anthropology, sociology, literature, etc.

Papers of outstanding quality are sought. Please ensure that the essays are:

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- 2. written in American English
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