FILM REVIEW:

Learning peace and coexistence with nature through animation: Nausicaä of the Valley of the Wind

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Abstract

This paper discusses the potential educational use of Director Hayao Miyazaki's animation film, *Nausicaa* of the Valley of the Wind (1984) with an emphasis on the peace vs. war aspect of the film as well as the nuclear image of a post-apocalyptic world. There is a narrative on how the main film character, *Nausica*, resolves conflicts and confrontations between humans and with nature (insects). The nuclear image of the film, including nuclear war, nuclear winter, and nuclear meltdown, can be analyzed in the context of the Cold War politics, and the implications for peace education may be explored on the basis of the film's message for peaceful coexistence and harmony between humans and nature.

Keywords: Conflict resolution, Human versus nature, Nuclear war, Nuclear winter, Peace and war.

Introduction

This paper is based on a review of "Nausica of the Valley of the Wind" (Kaze no Tani no Naushika) an animation film by Hayao Miyazaki, the Director of Studio Ghibli, that was released on 11 March 1984. The full-length movie (116 minutes) was based on Miyazaki's animated cartoons first serialized in 1982, though only the first and second volumes of the cartoon were relevant to the film (dubbed into English as "Nausicaä of the Valley of the Wind, Perfect Collection 1" in 1995) and the rest of the five volumes included additional story different from the film (Miyazaki 2013). At any rate, the film reflects Miyazaki's philosophical metaphors regarding peace and war as well as environmental destruction and has had a major impact on the history of Japanese animation (Tsugata 2004: 47).

In the creation of the story, Director Miyazaki was inspired by a Japanese classic written by an unknown author, "Princess That Loved Insects" (Mushi Mezuru Himekimi), an episode from "The Tales of the Past and Present" (Konjaku Monogatari) as well as a Greek epic, "The Odyssey", by Homer (Miyazaki 1995: 262-263, Studio Ghibli and Bunshun Bunko 2013: 242). Miyazaki noted that: "Unconsciously, Nausicaä and this Japanese princess became one person in my mind" (Miyazaki 1995: 263). The princess in "Princess that Loved Insects" and the heroine of "Nausica of the Valley of the Wind" both cherish insects. In Odyssey, Princess Nausica saves the life of Odysseus like Princess Nausica of the Valley of the Wind helps her master Yupa.

There are a number of earlier studies that deal with this film in terms of literature, film studies, ecology, religion and cultural studies (e.g. Nakamura 2003; Kano 2006; DeWeese-Boyd 2009; Masaki 2011; Chida 2013). Some have observed that the film is related to 'nuclear war' and 'radioactive contamination' despite the fact that the film director himself has not mentioned nuclear issues in the creation of the film (e.g. Sato 1992: 283-286; Kano 2006: 70; Kawamura 2011: 136; Masaki 2011: 233-236; Sato 2013: 233-243). Building up on earlier research, this review provides an analysis and interpretation in terms of peace research in relation with violence, conflict resolution, ecological peace, and a nuclear world. Finally, this paper explores

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the implication of the film for peace education on the basis of Director Miyazaki's message for peaceful coexistence and harmony with nature.

Methodology

This review is based on peace research methodology, and attempts to correlate the metaphors in the animation film "Nausica of the Valley of the Wind" with real world events to criticize and warn of the danger of nuclear weapons, nuclear war, and nuclear winter, as well as other nuclear threats (e.g. Pim 2010: 450-451; International Christian University Peace Research Institute, ed. 2013). Therefore, it is important to briefly refer to some critical points as well as nuclear threats during the Cold War as a historical and political background for this film.

This paper uses research methodology commonly applied in peace research to focus on war vs. peace, conflict resolution, and nuclear issues in an attempt to clarify the implied messages of the animation film regarding the evils of war, the significance of conflict resolution and ecological peace.

Findings and Discussion

The film "Nausica of the Valley of the Wind" was released in March 1984, in the midst of the Cold War during which the United States and the Soviet Union were competing in the development of nuclear weapons, followed by the United Kingdom, France, and China. Table 1 lists the timeline of some critical points and nuclear threats in the Cold War era and represents the historical and political background of the period; the threat of nuclear weapons and the possibility of a nuclear war could have influenced the creation of the film "Nausica of the Valley of the Wind".

The image of nuclear war and nuclear winter: Tadao Sato (1992: 283-286) observed that the film Nausica deals with social and global problems such as nuclear weapons, nuclear war, and environmental destruction in an artistic way. The story of the film is about a fictionalized world 1,000 years after the end of the industrial civilization destroyed by the final war in "Seven Days of Fire" (hi no nanokakan). The world is ruled by gigantic mutated insects, and descendants of humans cannot live without a mask because of the poisonous air, or miasma $(sh\bar{o}ki)$ released in "Sea of Decay", or "Toxic Jungle" (fukai). Nausica in the beginning of the film describes the "Toxic Jungle" as a "forest of death" and explains that lungs are rotten in five minutes without a mask. Human beings are thus depicted powerless in relation to the nature (insects and toxic jungle).

Masaru Sato (2013: 233-243) pointed to the relationship between the "Toxic Jungle" in the film and the world affected by the so-called 'nuclear winter' where it might be difficult for humans to stay alive. According to Encyclopaedia Britannica (2014), nuclear winter is a form of environmental devastation that scientists contend "would probably result from the hundreds of nuclear explosions in a nuclear war." The impact of nuclear war and nuclear winter was calculated by several scientists including an astrophysicist, Carl Sagan:

"... in simulated explosions of several thousand megatons, dust and smoke are generated and encircle the earth within 1 to 2 weeks so that average light levels may be reduced to very low levels while land temperatures can reach -15° C to -25° C." (Turco et al. 1983: 1283)

Table 1: Sequence of historical events, including nuclear threats, in the Cold War era

Year	Month	Historical Events
1945	July	The US tested an A-bomb/Potsdam Conference (Truman, Attlee, Stalin)
	Aug	A-bombs dropped on Hiroshima and Nagasaki
1946	Mar	Churchill's 'Iron Curtain' speech
1947	Mar/Jun	Truman Doctrine announced/Marshal Plan announced
1948	Mar	Partial blockade of Berlin began
1949	Apr	The North Atlantic Treaty Organization (NATO) signed in Washington
	Aug	The Soviet Union exploded its first A-bomb
1950	Jun	The outbreak of Korean War
1952	Oct	The UK detonated its first A-bomb (in Western Australia)
	Nov	The US exploded its first H-bomb
1953	Aug	The Soviet Union exploded its first H-bomb
1955	May	West Germany admitted to NATO, Warsaw Pact signed
1957	Aug/Oct	The Soviet Union launched ICBM/Soviet launched Sputnik Satellite
1960	Feb	France exploded its first A-bomb
	Dec	The 'Vietnam War' broke out
1962	Oct	The Cuban missile crisis
1964	Nov	China exploded its first A-bomb
1967	Jun	China exploded its first H-bomb
1979	Mar	Three Mile Island Nuclear Reactor Accident (US)
	Dec	The Soviet Union invaded Afghanistan
1983	Mar	US President Reagan proposed the Strategic Defence Initiative (SDI)
	Nov	The US began deploying INF Pershing II missiles in West Germany

Note: The chronology by Nye and Welch (2011: 173-177) modified by the author.

A research team composed of 20 scientists including Sagan furthermore warned:

"Subfreezing temperatures, low light levels, and high doses of ionizing and ultraviolet radiation extending for many months after a large-scale nuclear war could destroy the biochemical support systems of civilization... Postwar survivors would face starvation as well as freezing conditions in the dark and be exposed to near lethal-doses of radiation... Extinction of a large fraction of the Earth's animals, plants, and microorganisms seems possible. The population size of *Homo sapience* conceivably could be reduced to prehistoric levels or less, and the extinction of the human species itself cannot be excluded" (Ehrlich et al. 1983: 1293).

Of course, it is not certain whether nuclear winter will occur after the outbreak of a nuclear war. It depends on how many nuclear weapons and where they are used; some analysts predict that the result of nuclear war is a 'nuclear autumn' rather than a nuclear winter (Nye and Welch 2011: 162). Nonetheless, as Joseph Nye Jr. and David Welch noted: "The certainty is that a large-scale nuclear war would destroy civilization as we know it, at least in the Northern Hemisphere" (Ibid). In this sense, the contaminated world in the film is consistent with a situation of destroyed civilization as a result of nuclear war and nuclear winter.

From the outset of the film, *Lord Yupa* finds out that a village was contaminated to the extent that the place became completely unlivable and its people died. This is a vivid image of 'nuclear winter'. Moreover, *Nausica* comes across lots of spores falling like snow in the "Toxic Jungle" just like a 'nuclear winter' caused by the "Seven Days of Fire". Thus, although Director Miyazaki did not explicitly mention nuclear issues, the film reminds the audience of the image of nuclear war and nuclear winter.

Nausica's stance in respect to violence, and conflict resolution: The film can be analyzed from the perspective of peace research, especially the peace-loving nature of the heroine, the depiction of violence and conflict resolution. The main character, Nausica, is a princess of the "Valley of the Wind" (kaze no tani) located in the periphery and protected from poisonous air by the wind. As a charismatic and messianic heroine, Nausica attempts to harmonize the confrontation between human beings and nature (insects), resolve a conflict between two countries (Tolmekia and Pejite) and to explore a solution to purify the contaminated world. In a way, Nausica's attractiveness represents the 'feminist' aspect of the film as an antithesis of masculinity, with the 'female principle' along the lines of anti-war/anti-nuclear philosophy as well as environmental protectionism (Yokota 2013: 190-191; Kano 2006: 70).

Nausica uses civilian equipment rather than military or fighting weapons. She prefers riding a civilian glider to a military gunship. In air battle scenes, she consistently ducks enemy's attacks rather than fighting back. Also she uses an everyday ceramic knife and a civilian pyrotechnic gun instead of deadly force (Animage 2010: 36-37). Likewise, she uses a flash bomb and an insect whistle to stop opponents' violence in a non-violent way.

From the beginning of the film, *Nausica* shows her unique, mysterious, and inquisitive nature. The people of the valley are afraid of going to the "Toxic Jungle", but *Nausica* takes pleasure in exploring the toxic areas in an attempt to discover something beneficial for the Valley. She carries a ceramic knife in her field work to collect useful materials, but not for harming or killing insects and animals.

Nausica's attempts to resolve conflicts in a peaceful way is shown in the scene in which she tries to rescue an old traveler, chased by a gigantic monster, *Ohmu*, the king of insects in the "Toxic Jungle". First, *Nausica* attempts to stop *Ohmu* by talking to it, but *Ohmu* is so furious that it would not listen to her. Then, she decides to use a flash bomb in order to stop it from attacking the traveler. Finally, *Nausica* uses an insect whistle, or a bullroarer (*mushibue*), to make *Ohmu* go home. This scene indicates *Nausica*'s personality and tendency for peaceful conflict resolution as well as her charm with soft power, as opposed to hard power (e.g. Nye 2004). It turns out that the traveler is the valley's sword master and *Nausica*'s teacher, *Lord Yupa*.

Nausica shows her self-sacrifice and non-violence pacifist characteristic in making friends with a wild animal, fox-squirrel (kitsunerisu). Yupa had confused the fox-squirrel as a human baby taken by a gigantic mutated insect and therefore discharged a gun at the insect and inadvertently agitated Ohmu. This can be interpreted as Yupa getting accidentally involved in a conflict with Ohmu, and therefore, trying to escape from it. The fox-squirrel captured by Yupa is small but aggressive, so Yupa advised Nausica not to touch it. Yet, Nausica kept trying to make friends with the fox-squirrel, even though it bit her finger. In seeing Nausica's blood, the fox-squirrel's aggressiveness suddenly disappeared and it licked her finger trying to heal the wound. Nausica's self-sacrifice is another example of non-violent conflict resolution using soft power.

Based on an animated cartoon (manga) the first volume of which was published in 1982, the film Nausica reflects the image of the Cold War politics (1945-1989) in the confrontation between the two countries of Tolmekia and Pejite (Tachibana 2013: 22); the original model of the confrontation in the story was the war between Germany and Soviet Union (Uchida 2013: 122). The kingdom of Tolmekia is a powerful militarist state that attempts to maximize its military power by attaining a Giant Warrior (kyoshinhei) that nearly devastated human civilization in the "Seven Days of Fire".

Meanwhile, after the clash of the aircraft of *Tolmekia*, *Lastelle*, princess of *Pejite* in hostage, asked Nausica to burn down the embryo of a giant warrior. Given the political background of the Cold War, the "Giant Warrior" may be the metaphor of a nuclear weapon that could also devastate human civilization

(Tachibana 2013: 22). In the scene that narrates the "Seven Days of Fire", fire giant warriors destruct the world, which could be a reference to the five nuclear weapons states at the time (the United States, the Soviet Union, the United Kingdom, France, and China).

Basically, *Nausica* prefers not to harm or kill in conflict resolution, but she is not an 'absolute pacifist' and the people of the valley also do not adopt a policy of 'unarmed neutrality' (Sato 2013: 235). For instance, *Nausica* lost her temper and killed several *Tolmekian* soldiers because they murdered her father, king of the valley. In terms of peace research, her reaction is an act of retaliation rather than legally justifiable self-defense to prevent aggressors from attacking. Therefore, *Lord Yupa* intervened in the fighting between *Nausica* and one of the *Tolmekian* soldiers with a non-lethal method. As a result, *Nausica* harmed *Yupa* with a sword, yet it put an end to the battle scene.

There are four stages of conflict resolution (preventive diplomacy, peacemaking or peace-enforcement, peacekeeping, and peacebuilding) as suggested by the former United Nations Secretary General Boutros Ghali (1992). In this perspective, as opposed to *Nausica*'s emotional response, *Yupa*'s action can be regarded as 'non-lethal peace-enforcement' to block the violence of conflicting parties. *Yupa* admonishes *Nausica* not to fight in order to save other people of the valley in hostage. Although *Nausica* uses violence to revenge, the film stresses on the importance of 'non-killing' through the act of *Yupa* who lets *Nausica* hurt his arm but stops the violence. The scene illustrates how human beings, even a peace-loving person like *Nausica*, may become insane and violent once involved in war. Later, *Nausica*'s non-violent methods turn out to be successful.

Human vs. nature and its implication for ecological peace: The implications of this film for 'ecological peace' have been highly recognized. The film was recommended by the World Wildlife Fund (WWF), the world's largest non-governmental organization for endangered species conservation, established in Switzerland in 1961 (Kano 2006: 64, 330). In the year of the release of Nausica, the WWF set up a nationwide campaign, "Pennies for Pandas" which collected some US\$ 50,000 in the United States (WWF 2013). Panda dolls and posters to appeal for conservation of endangered species were placed at theaters in Tokyo. Just before the start of the film, a monochrome panda's picture, the symbol of the WWF, appeared to convey the ecological message of the film to the audience (Kano 2006: 64). Indeed, if nuclear winter is brought about by nuclear war, "the extinction of a large fraction of the Earth's animals, plants, and microorganisms seems possible" (Ehrlich et al. 1983: 1293). The recommendation made by the WWF implies that the film was expected to contribute to spreading the message for ecological peace.

In the film, *Nausica* realizes that the plants underground purify the air indicating that nature recovers itself even though humans pollute the soil and air. She also attempts to prevent war between humans and animals that would cause further environmental destruction. *Nasusica*'s use of soft power is also shown to help win opponents to her side.

In the end, *Nausica* sacrifices her life to make *Ohmu* realize that Nausica was helping a baby *Ohmu*, and they stop running. Without *Nausica*'s self-sacrifice, it might be impossible to calm down the army of *Ohmu*, so her non-violent method turns out to be effective in saving the valley and its people. Sato (2013: 236) analogized the self-sacrifice and resurrection of *Nausica* with that of Jesus. Moreover, Ian Deweese-Boyd (2009) described *Nausica*'s self-sacrifice in the film as 'ecological pacifism' and 'green gospel'.

David R. Loy and Linda Goodhew (2004: 67) conducted a conflict analysis of the film by focusing on a spiritual dimension and a spiritual image in terms of 'hatred/violence/evil and selfless compassion' (Ibid: 68).

Conflicting groups in the human world are illustrated by various characters in the film. Humans are also confronted with nature (lethal air in the "Toxic Jungle" and mutated giant insects, especially *Ohmu*). *Nausica* can be regarded as a conflict mediator for conflict resolution through peaceful, non-violent and self-sacrifice methods. Loy and Goodhew (Ibid: 74) observed that the film tries to emphasize the 'ancient law' that: "hatred is never overcome by hatred" just as the teachings of Christianity and Buddhism. Chida (2013: 87) has argued that the self-sacrifice of *Nausica* is related to that of a suicide mission ($tokk\bar{o}$) in the Asia Pacific War. Yet the two types of self-sacrifice are different in that the former is based on 'non-violence' and the latter resorted to violence.

Wind vs. fire, and its implication for nuclear meltdown: Director Miyazaki created this film in response to Minamata disease, a neurological syndrome caused by mercury poisoning, which affected not only human body but also fishing in the area (Miyazaki and Callenbach 2013: 290). Still, as discussed in earlier research and in this review, the film has implications not only for nuclear war and nuclear winter, but also for nuclear reactor accidents (Kawamura 2011: 136; Masaki 2011: 233-236, 239-240). In fact, it can be argued that an actual incident (Fukushima nuclear disaster) has followed on the pattern seen in the "Toxic Jungle" at the film, and consequently, "Japanese people's reception of the film has shifted according to the change of the social context" (Furukawa 2012).

Indeed, Miyazaki is opposed to nuclear weapons and nuclear power plants and has consistently warned on the danger of nuclear accidents. For instance, in another work, "On Your Mark" (1995), Miyazaki pointed to the danger of atomic civilization and depicted the environment contaminated by radiation which reminds the audience of the 1986 nuclear reactor accident in Chernobyl (Kano 2006: 182). Whereas "Nausica of the Valley of the Wind" (1984) was created before the Chernobyl nuclear accident, "On Your Mark" (1995) is more closely related to the situation of a nuclear meltdown and the following radioactive contamination (Gossin and Hairston 1999).

Although the film *Nausica* was not meant to be an anti-nuclear power plant work, the "Toxic Jungle" where human beings cannot live without a gasmask resembles the world affected by nuclear winter after nuclear war or contaminated with radioactive materials possibly due to nuclear accidents. From the perspective of metaphors, Minato Kawamura (2011: 136) has compared *Nausica*'s world in which 'wind' needs to be blown in order to purify the toxic air, to the 'water' that is needed to cool a nuclear reactor in order to prevent a meltdown and an accident from happening. Kawamura moreover analyzed that it is likely that Miyazaki does not support using nuclear power/energy (Ibid: 138). Miyazaki has warned about the fragility of nuclear reactors, which eventually underwent 'the world's first earthquake-tsunami-nuclear disaster' (Hirose 2011). After the 2011 Fukushima nuclear incident, Miyazaki explicitly stated that he wants to create animation films without using nuclear-generated electricity (Okada 2013: 155). In international conferences of Animation Studies, it has been critically pointed out that Japan could not prevent the Fukushima nuclear accident despite the fact that many nuclear-related films, like *Nausicaa*, were made and widely distributed in the country (Studio Ghibli and Bunshun Bunko 2013: 310).

The poisonous spore discharged by toxic plants in the film is similar to plutonium which is toxic and takes some 100,000 years to detoxify its harmful radiation. Thus, this film values 'wind' over 'fire' of nuclear power plants and nuclear weapons (Masaki 2011: 233-236). Although the film and animated cartoons in general are not necessarily designed to point out the risk of nuclear reactors, but the implication for ecological peace is clear, and therefore, it is possible to argue that the film has a significant implication on the use of atomic power/energy for educational purposes. The anti-nuclear message of this film, and also the

implication of the film for peace education need to be considered.

From red to blue, and its implication for peace education: In comparison with other popular animated films created by Director Miyazaki, such as "Laputa: Castle In The Sky" (1986), "My Neighbor Totoro" (1988), "Kiki's Delivery" (1989), and "Spirited Away" (2001), the film "Nausica of the Valley of the Wind" (1984), is difficult to understand for children and even for a mature audience. In fact, the contents of other Miyazaki animation films tend to focus on fantasized worlds with animated adorable animals. However, the content of the film Nausica is too serious for those who desire only entertainment rather than education and enlightenment. Therefore, despite its philosophical and educational implications, this film has been frequently ignored or 'rejected' by some audience (Hirota 2004: 29).

It is paradoxical but being esoteric is one of the reasons that the film needs to be dealt as a teaching material in the field of education. Pam Gossin and Marc Hairston (1999a), for instance, utilized the film and other animated cartoons in a literature course entitled "Nature Wonders" at the University of Texas at Dallas. They dealt with Nausica in Week 1, 2 and 3, and about 60% of their students chose the topic for the final research paper in the course. As teaching materials, they utilized the film version as well as the first and second volumes of the comic version (Nausicaä of the Valley of the Wind: Perfect Collection 1) (Ibid). In Week 1, Gossin and Hairston (1999b, 1999c) offered an introductory class on Miyazaki animations and provided a comparative analysis of the film and manga of Nausica in Week 2. In Week 3, they dealt with the nuclear issue of the story compared to another nuclear-related film by Miyazaki, "On Your Mark" (1995). Although their teaching focused on animation studies, it is clear that the purpose of the education is to enlighten the students for ecological peace.

Likewise, Miyazaki animation films have been utilized as teaching material in Japanese universities (Yonemura 2003: 10). The film can thus be utilized as an educational material in the course of peace education as well. The images of nuclear war, nuclear winter, and nuclear meltdown may be explained in an appropriate context to students to help them comprehend the implications of the story. Whereas Osamu Tezuka's Animation, "Astro Boy" (Tetsuwan Atomu) (1963-1966), was accepted by audience based on a tacit premise of the peaceful use of atomic energy, in the same line with the US President Eisenhower's speech, Atoms for Peace (1953), Miyazaki's "Nausica of the Valley of the Wind" (1984) may be recognized as an anti-nuclear animation film. Given the influence of Tezuka and Miyazaki's animations, such differences need to be clarified for peace education in terms of nuclear-related issues (e.g. tezukaosamu.net 2014; IAEA 2014). Even the implication of the change of the eye color of Ohmu from red (violence, hatred) to blue (peace, love) can be discussed in the class. These minor connotations and details of the film can be examined in lecture or group discussions of peace education not only in colleges but also lower educational levels.

Conclusion

This review has examined the film "Nausica of the Valley of the Wind" in terms of peace research. It was argued that the film visualizes three types of nuclear images: a nuclear war ("Seven Days of Fire"), a nuclear winter ("Toxic Jungle"), and a nuclear meltdown ("Melting Giant Warrior"). Although Director Miyazaki has not claimed that the film was intended to criticize nuclear weapons and/or reactors, given his anti-war/anti-nuclear stance, it is fair to interpret that the film has profound implications on those issues.

The review has also offered an analysis of conflict resolution where *Nausica* was involved either as a conflict party or a third party. It was pointed out that *Nausica* helps illustrate the use of non-violence and self-

sacrifice as a peaceful method for conflict resolution. The film emphasizes the significance of love and non-violence rather than hatred and revenge.

In conclusion, this film is not only entertaining but also has educational and philosophical aspects with profound implications for conflict resolution, the Cold War, the nuclear image, and ecological peace, i.e. harmony between humans and nature. Given the cultural, social and international influences of Miyazaki animation, this film may continue to entertain and enlighten audience in the world. More significantly, this film can be recognized and shared as a warning for humanity as a whole in the aftermath of Fukushima nuclear incident. Based on its message of anti-war/anti-nuclear ecological philosophy and for peaceful coexistence, the film can be referred to and utilized as a teaching material in peace education.

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