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Technological Prospects in Avatar 2: Merely Imagination or Realism

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Abstract:

Since the beginning of civilizations and literature human beings have curiosity to find out the inspiration for issues, creatures, characters, scientific views, technological aspects, settings and themes projected in the literary texts or movies are realistic or merely imaginative views of the writer. In various literary texts the projected things are realistic, occasionally we found these texts are merely imaginative creations by the author. Number of science fiction fantasy and horror movies or novels are the best examples of imaginary literature. Even though the imaginary literature is merely based on the unrealistic imagination by the author, such works have inspirational sources in the realistic world and concrete ideas. In the contemporary period science-fiction movies and novels are well received all across the globe. The readers and audience have special affection to words such literary genre, recently released movie Avatar-2 is not an exception to this case. The use of graphics and animations have credited such grand success to the movie. As usually the question pops up in the mind of audience that they presented issues, technology, creatures, marine life, humanlike creatures and the theme of the movie is realistic or imaginative. Hence the present research work is an attempt to show the resemblance between imaginative creation of the director and the real-life things.

Keywords: Realism, imaginary, monopoly, imperialism, colonization, bioluminescent, etc.

The recent film released by James Cameron, Avatar 2 has created sensation in the history of box office. It has collected the highest revenue that no any other movie has collected in the history. The collection of this movie in India was much more than any other movie has collected in all over the world theatres. The movie has collected 3.6 billion (360 Cr.) just within few days of its released date. It was assumed that this movie will earn 2 billion all over the world. As we analyze the collection at the box office we can understand the appreciation of audience to this movie. The people are really enjoying the movies. The reason for this huge appreciation and grand success of this movie was the use of spectacular visual effects. The visual effects and animation used in the movie (Avatar 2) is very realistic and projects the novelistic life on Pandora. As a common audience those who enjoy each and every movie in the theatre, it's obvious that one may think that everything projected in the movie is imaginary and merely the fanciful creation of writer and the director of the movie. But the life, technology, animals, aquatic life, sea mammals, majestic sea creatures projected in the movie have the inspiration from the realistic aspects and things in the life. It clearly means that the movie has a concrete connection with an actual world. But we cannot say that Pandora- the world projected in the movie is not the actual planet which exists in the universe. But the inspiration to build such an appreciable graphics and animation in the movie has come from the realistic life. It is nothing else but the reflection of our concrete world. If we carefully interpret the projected issues, animals, life in the movie, we can conclude that it's the reflection of issues on the earth. Instead of mere imagination it's projected with the help of minute observations.

The present film has projected the issues pertinent to Imperialism and Crony Capitalism. (Lenin) "Imperialism is the actions of a powerful state that takes over the management of other countries, often with the use of military force (Gudova). Thus, Imperialism is attacking the non-native lands and forcefully displacing people or brutal execution of them. The system was practiced all over the globe during 1500 to 1800 A. D. England's East India Company has started the imperialism and established their colonies in various countries. Initially the company was established for the trade purposes only but after the establishment of colonies it has started the exploitation of the natural resources at their colonies. Even though East India Company was a trading company the most unique aspect of the company was that it had its own army. The same aspects about the issues of Imperialism and crony capitalism are projected in the movie Avatar 2. The movie also projected the issues of the monopoly system. It also shows the resemblance between these two companies which had the monopoly rights to all products that were shipped, derived, or developed in Pandora or in any place in their respected dominated areas. Thus, the inspirational sources for the projection of this company has found in the roots of East India Company.

James Cameron is very famous environmentalist. In one of his interviews, he said that he took 13 years to release the second part of the movie Avatar 2 after its first part. He also decided to give up the film direction, he didn't do it. He has very close affection towards environment, the wild life and plants. Thus, he took inspiration from the earth to build the Pandora's world. The floating rocks shown in the Pandora, compare these to the hill in China's ZHANGJIAJIE NATIONAL FOREST PARK, and it became the inspiration for the floating



rock in Pandora. The floating 'Hallelujah Mountains' you saw on the movie Avatar were inspired by a real place on Earth. (Yeong Ji Hwang) The Zhangjiajie National Forest Park in the Chinese province of Hunan features gigantic pillar-like rocks, the kind you see throughout the movie. The only difference is they aren't floating. We can observe 'Wisteria tree' in Japan's ASHIKAGA FLOWERS PARK which is older than 150 years. (Michael Caron) When this tree bears flowers during spring, it looks beautiful in hues of pink and purple. The trees of souls from Avatar, they are similar in Avatar 1. Each and every organism on the Pandora have bioluminescent properties thus it radiates a shiny, bluish-green lights. As already said these bioluminescent properties are not merely imagination but the same bioluminescent lagoon in Jamaica is observed. There Microorganisms in the water light up in the blue colour. We find four bioluminescent lagoons on the earth. Out of these four microorganisms Bahamas is found in Indonesia, Puerto Rico and Jamaica. Apart from these, in New Zealand caves lit up by glow worms. Fireflies in Delhi as well.

In Pandora there are the Northern Lights. In Nordic countries like Finland, Iceland such lights can be seen in the sky at times. This happens when the energetic particles emitted by the Sun, orient based on the magnetic field around the Earth (Bente Heimtun). A truly measuring view, red, green, purple, and many other colours can be seen then. In Avatar second film, a new tribe of aliens are projected in the Pandora. These people are entitled as The Metkayina Reef People (Brody). The Metkayina look different from the Na'vi. Their skin colour is more greenish than bluish in the skin tone. They are larger, and have a fin-like structure on their forearms and legs. And their tails are more broadened like paddle. The tails of Na'vi have hair at the end this is because it is shown that the evolution of the Metkayina people is different from the Na'vi people. They have adapted to living near the water Whereas Na'vi adapted to live in the Forest.

James Cameron was inspired from the things found on the earth as he himself has revealed by that the island shows in the second film inspired by the Pacific island such as Micronesia and Polynesia. The Metkayina people projected in the movie was inspired by the Sama-Bajau tribal folk (Maglana). Sama-Bajau people are found on some islands of Indonesia and the Philippines. They are known as Sea Gypsies or sea nomads. The most amazing fact about them is that they have evolved better to survive near water. These people have amazing ability of freediving, they spend a lot of time underwater. Youth children of Bajau tribes get lacerations in their eardrums from all the diving. But the negative impact of this extraordinary skill is that when they get old, they develop hearing problems but the advantage is that they can dive more freely underwater. They can go to greater depth of the ocean. As per the research conducted it is found that in a day, they spend more than five hours underwater. In a study from 2018 it was shown how the spleen of the Bajau-People is 50% larger than the normal people and their blood contains higher level of haemoglobin. With its help they can hold their breaths longer when they dive in to the water and in several cases it has been found that genetically they can see better underwater the Metkayina people on Pandora are said to that they have nictitating membranes, kind of like Crocodiles and Owls to protect their eyes when they are entering the water at high speed as they are riding, nictitating membranes that found in numerous animals, normally it is transparent or translucent and this third membrane is for the protection of the eyes, so that nothing gets in to the eyes while swimming and the eyes are moisturised and having better visibility, this is found in polar bears as well, where they protect the eyes of polar bears from ultraviolet rays, so that they do not get snow-blindness. In the film you can see big RSA Ships on the water used by humans for transportation these vessels hover over the water. This might seem like futuristic technology.

They are inspired by the Ekranoplan, Ekranoplans were vessels developed by the Soviet Union in the 1960's they hover over the water look like the plain (Taylor). And the biggest advantage of using it is that neither can they be detected by radars, since they do not fly high like airplanes nor can they be detected by sonar. Since they aren't contact with water, due to not being contact with the water the friction is greatly reduced, which helps it to fly at high speed; built by the Soviet Union the biggest Ekranoplan was the KM, with 10 jet engines at front with the help of these jet engines, it could be lift up over the water. But now you'll wonder why this isn't seen nowadays, because this technology has many loopholes in the Ekranoplans needed a large radius to turn the sea water corroded the engine and it was very complicated to operate this plane.

By 1980's the Soviet government realised that wasn't worth it to spend more money on this technology. That their funds were being wasted and it was wiser to use the funds for something else and then another such technology is shown in the first Avatar film as well. A large mining machine used by humans to mine for unobtainium on Pandora (Martínez-Falquina). Unobtainium is said to be a rare mineral that has a high value and in the first Avatar film it is said to be the reason why human went to Pandora to mine and make money well not humans, the RDA this large corporation is said to be blamed for this, the ginormous machine that they used to mine is available on Earth.

A bucket wheel excavator known as the Bagger 293 (Todd). It is the largest construction machine made by humans found in a coal mine in Germany. This machine is so big it is 96m tall. It is 225m long and it weighs



14,000 tonnes. It is a movable machine a vehicle of sorts it can be moved from one place to another but it can be moved at the speed of 0.1km per hour. Currently people in Germany protested against this machine being used for coal mining. If we talk about the animals on Pandora, they are inspired by the animals present on Earth. A creature shown repeatedly in the second movie looks like a Pokémon. But in actual plesiosaur an Ancient marine reptile that lived on Earth about 200 million years ago they have the same features, another Pandorean creature that played a major role in Avatar-2. Tulkun can be equated with the whales present on Earth. Dolphins and Whales are believed to be more intelligent than dogs as they have huge brains their brains. In the film Tulkuns are shown to be intelligent that the people in Pandora can communicate with them on Earth the brains of whales have a kind of specialised brain cells known as spindle Neurons with their help it is believed that they can recognise things, remembers them can reason and communicate in fact the part of the brain that process emotions known as the Limbic system. In Dolphins and whales the limbic lobe is much more complex than in humans. A mirror test is often used. A mirror is placed in front of the animal can identify its reflection that they are seeing their own reflection in the mirror, not some other animal. This is a rare skill in animal other than humans, Bottlenose dolphins, chimpanzees, elephants and magpies are some of the animals who can pass the mirror test. Human children can pass the mirror test after they are above 12 months old. But dolphins' calves pass the mirror test at around 7 months.

In a research, experts found that there are some species of dolphins that can identify various members with their names; they have created signature whistles for other dolphins. Each whistle represents the name of a member, and the young dolphins learn their names from their mothers and they carry the name throughout their lives. The significance of dolphins and whales is being depicted by James Cameron in the film Avatar-2. The film is also inspired by real life a whale and how important it is to protect these whales has been presented in the film. In the 1600's commercial whaling was made popular by the British and the Dutch. A sperm whale was caught in 1712 by humans it was very essential because normally sperm whales are found in deep-ocean. So, one has to make a long journey to catch them, humans hunted down whales to extract whale oil. It had a high demand in the 18th and 19th centuries because it was used as a lubricant in the factories and to illuminate homes. It was only in 1879 when petroleum was discovered in Pennsylvania and the demand for sperm whale oil went down. But after decades, the demand for whaling went up again when the fat supplies for making soaps were running down. At the beginning of the 1900's each year 2,000-20,000 whales were hunted by the humans.

Norway had become influential in whaling by Svalbard, a Norwegian was the one to invent the first Steam-powered whale catcher ship. He patented the harpoon canon on the ship. The harpoon was headed by a grenade to kill the whale, the dangerous harpoon gun in Avatar similar equipment is shown to kill the Tulkuns in Pandora. After World war-II whale oil had become very significant to Europe and whale meat was in high demand in countries like Russia, Japan, British and Norwegian countries controlled more than 80% of the trade and their success fascinated more countries here. In 1946 the international whaling commission imposed a limit on the number of whales that can be killed in a year it was very hard to impose the limit. The limit was decided at 15,000 blue whales in 1962. But soon they understood that the population of whales was dwindling and they were on the verge of becoming extinct. In 1963, humpback whales were protected but blue whales were protected in 1965. And in 1982, commercial whaling was banned by the international whaling commission. With help of the bam some whales' species have recovered less than 500 in the 1950's today their individual numbers exceed 25,000. The whales have been moved from the endangered category to the list concern category and their original population has been recovered up to 93%. Unfortunately the same did not happen to all whale species, blue whales are still endangered. Iceland poses the least concern because it is expected to ban commercial whaling starting next year. On the other hand Norway supports the hunting of the Minke whales for their meat, and Japan allows commercial whaling for "Scientific purposes". Between 2010 to 2020 numerous times Japanese ships encroached on Antarctica's conservation group known as sea shepherd sent their ships to stop the whaling ships to literally and physically block them. If there was a Japanese ship hunting whales there, they placed their ship in front of the other ship to stop it and protect the whale.

Founder Paul Watson expressed how Japan has declared it, an act of terrorism to get within a 500m radius of their whaling ships. This changed in 2018 when Japan left the international whaling commission in 2019. On the other hand, Japan claims that IWC didn't do enough to promote sustainable commercial whaling. According to them protecting the whales should not be the single purpose and that we need to allow hunting for whales to some extent.

The RDA ships that hunt Tulkuns with harpoons on Pandora the name of harpoon company is written in Japanese and the colours of Japanese flag are used James Cameron points out how Japan is the only country to still support whales hunting and the scene of Tulkun hunting in Avatar is shown in such detail because of this. So that people knew how whales are killed. James Cameron has dived in the deep Ocean in a Submarine in 2012 in the



submarine deepsea challenger. The Marina Trench, he is the first person to go this deep alone in a submarine to the deepest part of the world. His love for the ocean and Earth's biodiversity cannot be doubted. Saving the Earth is the message that he wants to convey in his films.

Conclusion:

To sum up, the inclusion of realistic elements in futuristic literature helps to ground the story in reality, making it more appealing, believable, and enduring for readers. It adds credibility to the story: If the future world depicted in the story is rooted in real-world scientific and technological advancements, it makes the story more credible and believable for the reader. It enhances the reader's experience: When a futuristic story incorporates familiar and relatable elements, it allows the reader to better imagine and immerse themselves in the world being depicted. It facilitates social commentary: Futuristic literature often serves as a platform for authors to comment on current social and political issues. By including realistic elements, the author can more effectively make their commentary relevant and relatable to the reader. It makes the story timeless: Futuristic stories that rely too heavily on technology and futuristic concepts may become dated as technology advances. By including realistic elements, the author can ensure that the story remains relevant and enduring even as the future unfolds differently than was anticipated.

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