

Rediscovering The Past and Technology as in James Blish's "Surface Tension"

V. Suganthi

Abstract: James Blish's short story "Surface Tension" is about the humans who colonize the universe. The story is spun around a fantastic concept and set in an extremely exotic locale. It is about a society gone to the primitive times and now rediscovering the wonders of technology. Humans from Earth travel to distant planets that have similar earth-like qualities, including an atmosphere, and they create humans who can survive there. They colonize them by sending a "seedship" and create new life forms adapted to live there. The spaceship they travel crashes on a water planet. Though the crew survives in the crash, all the forms of communication are broken. The germ cell bank also is no longer with them and they have to manage with whatever they are left with. So they create genetically changed seeds in the form of water adapted humanoids who have to fight their way in the antagonist environment under water in order that human race survives on earth even after they become extinct. Those humanoids develop a spaceship which enables them to pierce the previously impenetrable surface tension of the water and travel through the hostile space to other worlds in other puddles of water breaking the barriers between water and the air above it. The concept of ancestral memory, Noam Chomsky's theory of genetic semantic memory and T.S. Eliot's theory on tradition and individual talent form the basis for this short story.

Key words: rediscovering the past, technology, humanoids, ancestral memory, genetic semantic memory, tradition and individual talent.

I. INTRODUCTION

James Blish was an acclaimed science fiction writer from America in the twentieth century. He was an author of fantasy and science fiction. He wrote literary criticism of science fiction too in the pen name William Atheling Jr. His science fiction short story "Surface Tension" was originally published in the Galaxy Science Fiction of August 1952. This short story is about the humans who colonize the universe. The story is spun around a fantastic concept and set in an extremely exotic locale. It is about a society gone to the primitive times and now rediscovering the wonders of technology. Humans from Earth travel to distant planets that have similar earth-like qualities, including an atmosphere, and on each planet they create humans who can survive. In this era of faster than light travel, humans have been colonizing space by a rather exotic means: send a "seedship" to an earth-like world, create new life forms adapted to live in that world. They travel in a spaceship and the spaceship crashes on a water planet Hydrot of Tau Ceti system. Though the crew survives in the crash, all the forms of communication are broken. The germ cell bank also is no longer with them and they have to manage with whatever they are left with.

So, they create genetically changed seeds in the form of water adapted humanoids who have to fight their way in the antagonist environment under water in order that human race survives on earth even after they become extinct. The tiny aquatic humanoids develop a spaceship, or rather airship, which enables them to pierce the previously impenetrable surface tension of the water and travel through what is, to them, hostile space - open air - to other worlds in other puddles of water, breaking the barriers between water and the air above it and hence the eponymous title "Surface Tension". The ship that carries humans who colonize distant planets crashes in an earth-like planet. Though the planet is earth-like, it is just a landmass or rather watermass covered by shallow puddles of water and microscopic life forms. This land is not fit for human survival. So, the humans in the ship want to colonize the planet by creating new life forms, genetically engineered - reengineering only the body and not the thought process or thinking ability - descendants who can adapt themselves to live in that world, but still essentially humans and can survive even in hostile environment and can survive even after the life of the present generation is extinct. They create a race of microscopic aquatic humanoids to achieve their mission of colonizing the planet. They ensure that these adapted humans will survive and the ship goes off to repeat the process in another planet. Blish refers to this concept as Panthropology. The ship has just landed, or rather crashed, on the world called Hydrot, in Tau Ceti system. The place where the ship comes to is a waterworld - "only one small, triangular continent, set amid endless ocean; and even the continent was mostly swamp" (Quoted in <http://variety-sf.blogspot.com/2008/03/james-blish-surface-tension-novelette.html>). The people in the crew are la Ventura, Chatvieux, Philip Stravogel, Saltonstall, Eunice Wagner, Eleftherios Venezuelos, and Joan Heath - five men and two women are left to colonize a planet and they know they are doomed. They can do nothing as the communications gear is gone and they have lost the germ cell bank too in the crash. So, now, they cannot seed the planet in the way as they always do, using the cells in the germ cell bank. They are sure that they cannot survive even a month due to the hostile environment. The air is poisonous. They know that they will "be able to populate this world with men, but ... won't live to see it" (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>).

Manuscript published on 30 January 2019.

*Correspondence Author(s)

Dr. V. Suganthi, Assistant Professor in English Thiruvalluvar Government Arts College Rasipuram, Namakkal (Tamil Nadu), India

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an open access article under the CC-BY-NC-ND license <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

II. THE MAIN RESULTS

The world has a lot of local life but none of it is intelligent. They plan to create a version of humanity that can survive them and rediscover its past and technology in due course. They will have no knowledge of their past history and will have to begin from the scratches. They must create local versions of humans that can survive, and then rediscover their humanity in due course. They have to give their own germ cells in order to be modified into creature who can survive in any reasonable environment. They expect the result to be humans who are intelligent. The modifications are usually in the morphology and not much in the mind of the reengineered individual and so it usually shows the donor's personality pattern. This reengineered humans should be engineered in such a way that they have the ability to overcome the obstacles and the dangers that they will have to face in the planet with unfriendly environment. They will create them and leave them under water. "Chatvieux turned to Saltonstall, 'Martin, what would you think of our taking to the sea? We came out of it once, long ago; maybe we could come out of it again on Hydrot'" (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>). There goes a heated discussion on whether it can be done and the humanoid can survive and develop in water under those hostile circumstances. They design the humanoid considering all the possibilities of them being attacked and destroyed and the possibility and ability to overcome these obstacles. The present generation will not live to educate them and but have to pass their knowledge to them. The ... adapted man is worse than a child in his new environment. He has no history, no techniques, no precedents, not even a language. ... We'll have to design our colonists with plenty of built in protections and locate them in the most favorable environment possible, so that at least some of them will survive learning by experience alone. (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>)

The situation will be so pathetic that the new generation will have all the traits of the present generation, but will not be able to remember what their ancestors have been like. Lavon says, "... One of the new creatures can have my personality pattern, but it won't be able to remember being me..." (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>). Shar says, "... There may be just the faintest of residuum... we'll leave behind people who behave as we would, think and feel as we would, but who won't remember la Ventura, ... - or Earth" (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>).

They decide or rather choose to create these humans as microscopic shallow fresh-water-inhabiting life forms - each one in the size of about 500 microns. They want to give them the ability to adapt themselves to the puddles and lakes of this swamp land. They will be equipped with limbs that enable and help them to make and use tools. As the title "Surface Tension" implies, they have to have a connection with water and the land - these genetically reengineered humans will eventually have to come out of water and live

their lives on the earth as continuation of the lives of their ancestors.

The crew decides to leave the history of humans to the knowledge of their new creation. So, they leave corrosion resistant metal plates in which they tell them the whole story of the human race and the coming of the new generation into the planet. They hope that the new race will one day come to decipher what is written on the plates and come to know their glorious past and claim their rightful place in the bigger universe. They have to start from the base and rediscover their past and technology in order to achieve what their ancestors want them to be. They have hopes that these microscopic water-borne humans will survive, thrive and rediscover their past and bring in again the technology of their ancestors subduing their native hostile creatures.

What the present generation anticipates does happen. The new generation comes to understand that the plates consist some messages and they try to decipher the writings in the plates. They strive hard and succeed. But by that time, they have lost one of the plates and the sceptics among them doubt the truth of what is said in the plates. Despite all disputes, disagreements and questionings about the truth of the message in the plates, the search and efforts are carried on. The knowledge of their previous history and the technology leads to the discovery of the world above water.

The "Prologue" part of the short story gives the readers the knowledge of what has happened - the crash of the spaceship and the decision to create reengineered humanoids - which is necessary for the proper understanding of this science fiction.

Lavon, the hero of the story, leads the discovery of the world above water and dreams of eventually figuring out if the little lights in the night sky are indeed stars mentioned in the ancient plates. There are the Protos who help them in the discovery. There are the Eaters who are the antagonists whom they have to fight against. There are the cynics whom they have to convince and overcome the obstacles that all these create together. Above all they have to come out of their own mental and physical limitations.

Lavon is stirred up from its long wintery sleep by a Para. Paras help men in their fight against the Eaters. When Lavon asks a Para,

"Para, tell me something. Why do the Protos side with us? With man, I mean? Why do you need us? The Eaters fear you."

There was a short silence. When the Para spoke again, the vibrations of its voice were more blurred than before, more even, more devoid of any understandable feeling.

"We live in this world," the Para said. "We are of it. We rule it. We came to that state long before the coming of men, in long warfare with the Eaters. But we think as the Eaters do, we do not plan, we share our knowledge and we exist. Men plan; men lead; men are different from each other; men want to remake the world. And they hate the Eaters, as we do. We will help."

"And give up your rule?"

"And give it up, if the rule of men is better."

(<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>)

Together, men, the Protos, and the Noc fight the Eaters and form their own kingdom. They have already started to decipher the metal plates, though not thoroughly. But they are sure that they can when they are in a safer position. The question of survival is to be taken care of first. Shar says, "It's a start, Lavon. Just a start. Some day we'll have more. ...Perhaps, when we're safer. We can't afford to worry about that kind of thing now. We've never had that kind of time, not since the First Awakening" (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>). But in their battle with the Eaters, they lose one of those metal plates and now the complete knowledge of their history becomes impossible. Though men emerge victorious in this battle, there are three things that they have to take care of:

And inevitably, the abrupt change in temperature and oxygen concentration had started the spore-building glands again. The spherical amber shell was going up around Lavon now, and there was nothing he could do about it. It was an involuntary process, as dissociated from his control as the beating of his heart. Soon the light-generating oil which filled the spore would come pouring out, expelling and replacing the cold, foul water, and then sleep would come ... And all this had happened just as they had made a real gain, had established themselves in enemy country, had come within reach of the chance to destroy the Eaters wholesale and forever. Now the eggs of the Eaters had been laid, and next year it would have to be done all over again. And there was the loss of the plate; he had hardly begun to reflect upon what that would mean for the future. (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>) But despite all these, Lavon feels a kind of contentment. They have now a castle of their own: the prize of their victory over the Eaters – the abode of the Flosc. And They were safe, after all. They could not be ousted from the castle. And there would be fewer Eaters next year, because of all the eggs that had been destroyed, and the layers of those eggs . . . There was one plate still left... (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>) Seasons pass and so do generations. XV generations have passed and the present Shar belongs to generation XVI. All Shars are referred to as 'old' Shars. Shars become the centre of wisdom where Lavons become the centre of authority. They have developed a lot technically. They attempt to improve the quality of their abode. They no longer eat the passing bacteria. They grow specific fungi and algae for their food. This Shar is able to understand what is written there in the metal plate. But it does not give complete meaning as the first Shar has lost the first metal plate. They do understand that they do not belong to where they are now. The Paras too understand that. But Lavon questions the existence of another universe. He says that they can do away with the metal plate. The Para by his side immediately carries away the metal plate to bury it in the Bottom saying that they had been always afraid that men will leave for where they originally belong to leaving the Paras to live alone in the watery universe. Paras depend upon men, as men are intelligent and have the ability to

think which qualities they themselves lack. So, now the second metal plate too is lost.

Lavon thinks of the possibility of another universe existing to which they may belong. So he attempts to go to explore the other universe. He emerges successful in his attempt, but it is not a complete success. His physical condition is not suitable for a world outside his present universe. He bumps back to his water world and his body takes the temporary absence of oxygen as winter and he slumbers into a winter sleep. He is woken up by the Protas and there a discussion goes on about the techniques and process to explore the ancient man's world. They design a ship considering all the possible hostile situations. At the end of the discussion, a question is raised by Stravol: Where are we going? (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>) The answer Shar gives is: Stravol, I can't answer that yet. I could say that we're going to the stars, but since we still have no idea what a star is, that answer wouldn't do you much good. We're going to make this trip because we've found that some of the fantastic things that the history plate says are really so. We know now that the sky can be passed, and that beyond the sky there's a region where there's no water to breathe, the region our ancients called 'space.' ... At least we can confidently expect to see some clues look at all the information we got from Lavon's trip of a few seconds above the sky. But in the meantime, there's no point in our speculating in a bubble. We think there are other worlds somewhere, and we're devising means to make the trip. (<https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>)

At last, with all the support of the Paras and others, men reach their ancestral place after much struggle and life-claiming efforts. And the writer hints at the possibility of a new generation in this universe.

This short story applies T.S.Eliot's concept of tradition and individual talent. T.S.Eliot talks of historical timelessness, and the presence of past in the present and sense of present temporality. Though T.S.Eliot talks of poets and poetry only, it can be applied to others as well. A creation does not take place in a vacuum and it cannot come out of nowhere. Here in this short story, Lavon and Shar of the humanoids apply the knowledge of their tradition and use their individual talent and whatever discovery they make, it is the fusion of tradition and individual talent. Nothing can be achieved or learnt individually without fidelity to tradition. Past is immortal. This historic sense is basic and essential for any creation. According to Eliot the present should be directed by the past. Lavon and Shar depend on the metal plate for their direction. They need the knowledge of their ancestors to reconstruct their present and future.

III. FINDINGS AND CONCLUSION

The theory of ancestral memory too can be seen as forming the basis for this short story. There is no one to teach the humanoids any action or how to decipher the letters in the metal plate. But they learn everything by themselves. Noam Chomsky's theory of genetic semantic memory can explain this. Chomsky argues that human beings are born with the ability to acquire language. Genetic semantic memories are stored in some form in the neural network in the cerebral cortex - the outer layer of brain - and these help communicate in the future. This may be what the ancient humans did in reengineering the humanoids to help them know their past.

REFERENCES

1. [https://en.wikipedia.org/wiki/Surface_Tension_\(short_story\)](https://en.wikipedia.org/wiki/Surface_Tension_(short_story)). Retrieved on 01.07.2018.
2. <http://variety-sf.blogspot.com/2008/03/james-blish-surface-tension-novelette.html> Retrieved on 01.07.2018.
3. <https://www.goodreads.com/book/show/17828354-surface-tension>. Retrieved on 01.07.2018.
4. <http://variety-sf.blogspot.com/2008/03/james-blish-surface-tension-novelette.html>. Retrieved on 01.07.2018.
5. <https://www.scribd.com/doc/23396343/Blish-James-Surface-Tension>. Retrieved on 01.07.2018.

AUTHORS PROFILE

Dr.V.Suganthi, Assistant Professor in English Thiruvalluvar Government Arts College Rasipuram, Namakkal, Tamilnadu, India.