



Contents lists available at ASJP (Algerian Scientific Journal Platform)

Academic Review of social and human studies

journal homepage: www.asjp.cerist.dz/en/PresentationRevue/552



Robert Ranisch's Morality of Transhumanism in Theodore Sturgeon's More than Human

أخلاقيات روبرت رانيش لما بعد الإنسانية في رواية ثيودور ستورجون: أكثر من إنسان

Nacéra BENALI REGUIEG^{1,*}

¹ Hassiba Benbouali University of Chlef, TICELET Laboratory, Algeria.

Article info:

Abstract

Article history:

Received :06-06-2020

Accepted : 26-07-2020

Key words:

Morality

Theodore Sturgeon

More than Human

Transhumanism

Robert Ranisch

Gestalt.

Moral philosophy usually constructs a set of normative assumptions about what is right or wrong. Transhumanism is the new phase that enables the human being to transcend the limits of his imagination and the peak of his intellectual expansion. It helps to make the world limitless through applying science and technological dimensions to answer some of the questions and issues that frustrate humans' life. This paper examines basic ethics in Theodore Sturgeon's novel More than Human focusing on the moral position of the Homo Gestalt characters. Believing that humankind's existence should enhance physiological and mental capacities using science and developing technologies in an ethical framework that serves humanity, Robert Ranisch's morality of Transhumanism was used to explain how Theodore Sturgeon attempted to give a clear and concise characterization of the concept morality. The study concluded that moral assumptions such as consequentialism, morphological freedom, harm principle, rejecting anthropocentrism, progressivism, obligation to support science, and obligation to enhance are found in the novel through the characters' progression, unity, and their idea of being ethically responsible according to their norms.

ملخص

الكلمات المفتاحية:

الأخلاق

ثيودور ستورجون

أكثر من إنسان

ما بعد الإنسانية

روبرت رانيش

الجشطات.

عادة ما تبني الفلسفة الأخلاقية مجموعة من الافتراضات المعيارية حول ما هو صواب أو خطأ. تعتبر ما بعد الإنسانية المرحلة الجديدة التي تمكن الإنسان من تجاوز أقصى حدود خياله وقمة توسعه الفكري، حيث انها تساعد على جعل العالم بلا حدود من خلال تطبيق الأبعاد العلمية والتكنولوجية للإجابة على بعض الأسئلة والقضايا التي تحبط حياة البشر. تدرس هذه الورقة البحثية أخلاقيات أساسية في رواية ثيودور ستورجون أكثر من إنسان مع التركيز على الوضع الأخلاقي لشخصيات الشكل الكلي الانساني او ما يسمى بالجشطات الانساني. وبما ان الوجود البشري يتطلب تعزيز القدرات الفسيولوجية والعقلية عن طريق العلم والتكنولوجيات المتقدمة في إطار اخلاقي يخدم الانسانية، استخدم نموذج الاخلاق لما بعد الإنسانية لروبرت رانيش لشرح كيف حاول ثيودور ستورجون إعطاء وصف واضح وموجز لمفهوم الأخلاق. خلصت الدراسة الى أن القواعد الأخلاقية مثل التبعية، الحرية المورفولوجية، مبدأ الضرر، رفض المركزية البشرية، التقدمية، الالتزام بدعم العلم والالتزام بالتحسين موجودة في الرواية من خلال التطور البنيوي للشخصيات، وحدتهم وتفكيرهم في أن يكون كل فرد منهم مسؤولاً أخلاقياً وفقاً لمعاييرهم.

1. Introduction

Theodore Sturgeon's *More than Human* is classified among the Transhumanist literary texts for the reason that it displays most of the fundamental principles of Transhumanism including the extraordinary characters, themes that create a fanciful universe and a plot that integrates different aspects of innovations, progression, enhancement and transcendence. Theodore Sturgeon's novel is a collection of three novellas: 'The Fabulous Idiot', 'Baby is Three' and 'Morality' in which he investigates the questions of power and morality, individuality and belonging. The story is about a group of evolved children with telepathic powers; they can connect together to structure an organism called the Gestalt¹. It grows to become a mature conscious Gestalt called the Homo Gestalt, the next step in the human evolution. The children create a set of values and morals to find out whether they are meant to help humanity or destroy it. The purpose of this research is to discover how Theodore Sturgeon presents *More than Human* as Transhumanist novel through the depiction of morality. The latter is meaningful in the novel for it is the foremost principle of Transhumanism. The qualitative descriptive approach is selected to investigate the theme of morality that is explored via the examination of the authors' structural development of the characters, their ideas and beliefs. This study is based on two research questions: how did Theodore Sturgeon present *More than Human* as a Transhumanist novel apart from the literary elements? And why is the concept of morality significant in the novel?

2. The Origin of Transhumanism

According to some Transhumanists, the concept Transhumanism is not a modern philosophy. It is traced back to the 1930s and might even predate the 20th century (Dard & Moatti, 2016). However, some detective works by the historian Peter Harrison and one of his students argued that the term Transhumanism was initially used by the English biologist and philosopher Julian Huxley in 1951. It is believed that Huxley might have borrowed the word and the general idea from another writer (Harrison & Wolyniak, 2015). In ancient times, the term Transhumanism

was related to social and cultural experiences, which were considered as the main notions that reformed and improved human species' conditions. Today, the definition of Transhumanism has changed throughout the evolution of technology and science.

The concept has been adopted by the Transhumanist associations that integrated technology and science. Consequently, human beings' conditions have been developed by technological devices and scientific experiments. In his book, *The Law of Cosmic Evolutionary Adaptation: an Interpretation of Recent Thought* published in 1940, the Canadian intellectual, Lighthall stated that the term Transhumanism represents an inevitable evolution and progress in the universe, human genetics, and cultural aspects (Lighthall, 1940). Recently, many debates have emerged tackling the theme of Transhumanism. The advocates of Transhumanism have encouraged positive and rapid growth in science and technology in attempt to overcome and surpass all the possible humanity's limitations.

3. Elements of Transhumanism

Transhumanism is a multifaceted organism in which complex and different portions such as humans and technological factors are set up to be combined and united. It is important to adjust a number of regulations to identify exactly what to produce and what to bring into being. Transhumanists deem that humans will have power over their own morphology by approaching progressed technologies called the NBIC:

We imagine posthumans as humans made superhumanly intelligent or resilient by future advance in nanotechnology, biotechnology, information technology, and cognitive science. Many argue that these enhanced people might live better lives; others fear that tinkering with our nature will undermine our sense of our own humanity. (Roden, 2015)

Roden stated that evolving human beings' conditions and eradicating limitations in natural life would be doing well for humankind and it would be a successful achievement to one's own welfare. Developing human cognitive capacities is a moral concern that is linked to using nanotechnology, biotechnology,

¹ something that is made of many parts and yet is somehow more than or different from the combination of its parts((Merriam-Webster, 2020)

information technology, and cognitive science (NBIC) (Roden, 2015).

Nanotechnology: One of the most important objectives of Transhumanism is improving humankind conditions, be it in terms of culture, social issues or medicine. Technology plays an important role in making changes to enhance human bodies' capacities. Nanotechnology is considered as an element in Transhumanism that can improve humans' physique by using small machines to abolish diseases, strengthen immunity and speed up healing (Drexler, 2000).

Biotechnology: According to an essay written by Shayma Abukar, biotechnology was introduced to medicine and it was about manipulating the composition of our genetics throughout inserting, deleting or replacing areas of DNA within an organism's genome. Besides, other functions of biotechnology that contained gene therapies and genetic screening were launched to resolve some medical issues (Abukar, 2017). In 2003, a collaborative group of international scientists completed what is known as the Human Genome Project. Consequently, new genetic technologies and techniques have been developed (Holde & Zlatanova, 2018).

Information Technology (Artificial Intelligence): Artificial intelligence is 'the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience' (Osipov, 2019, p. 30).

Cognitive Science: Cognitive science arose as a discipline in the mid-twentieth century (Boden, 2006); (Gardner, 1998); (Miller, 2003). It is 'understanding the architecture and implementation details of human and nonhuman minds (Cognitive Enhancement, Mind-Uploading)' (Roden, 2015, p. 04).

4. Principles of Transhumanism

Any theory demands particular principles to draw the scope of its ideology, Likewise, Transhumanism needed to stand upon certain standards to make out T I

X 2005 principles and objectives of all what is beyond the humanist perspectives. Among the main values that Transhumanism is based on are:

Transcendence: Transhumanism attempts to improve human physical and mental capacities through integrating science and technology. Thus, humans expect to transcend and go beyond all the limitations eliminating the confines of human species (Hughes, 2010).

Morality and Humanity Protection: Since Though Transhumanism believes in the absolute enhancement and empowerment of humankind conditions, it does not mean for the Transhumanists to own the entire right and play with the human body under the name of science and technological progress. Some forms of improvement, such as doping in sport or the pharmaceutical improvement of memory and attention span, are already feasible. Others might be available in the near future, such as genetic engineering to increase cognitive capacities. The ethical debates around Transhumanism include whether specific enhancements are permissible, obligatory, or unsafe for individuals or society (Giubilini & Sagar, 2015). Transhumanists have always questioned the matter of whether particular progress in humans' conditions is allowable or mandatory. Hence, the main and solely reasons for the human development should serve the individual's needs and demands. As an example, specific improvement is supposed to be obligatory in the sense that it protects humanity as Giubilini and Sanyal clarified:

some proponents make a case that specific projected enhancement are obligatory. Persson and Savulescu. For example, suggest that moral enhancement is morally obligatory, at least if we want to protect the human species from those behaviors--such as attacks or depletion of natural resources --that put at risk its very existence (Giubilini & Sagar, 2015, p. 235).

Transhumanists should preserve the dignity of men as human beings and avoid treating the human body as laboratory mice.

Singularity: Transhumanism aims to boost scientific research and technological development in the fields of life extension by diving in medicine, biotechnology,

nanotechnology, computer science and artificial intelligence; A goal which, according to Paura, 'will be reached by 2040, when the machines will surpass human intelligence, paving the way for a new era, that of technological Singularity' (Paura, 2016, p. 25).

5. Robert Ranisch's Morality of Transhumanism in *More than Human*

More than Human is a novel that demonstrates the next step of humanity evolution. The characters evolved into an innovative posthuman named Homo Gestalt, which is presented to be powerful, great and superior. In this study, the moral dimensions are analyzed through the investigation of Theodore Sturgeon's ideas and beliefs of morality in his novel *More than Human* using Robert Ranisch's Morality of Transhumanism. Ranisch argued that within Transhumanist campground, there is no specific and consistent moral dogma; there is rather a strong disagreement among Transhumanists regarding moral assumptions (Ranisch, 2014).

5.1. Consequentialism

Transhumanists could get into an agreement setting up some of Transhumanism morality principles. The majority of Transhumanists have largely looked after a consequentialist theory of morality. They argue that 'The rightness of actions depends on the goodness of consequences' (Ranisch, 2014, p. 05). Accordingly, most Transhumanists believe that as long as the consequences are satisfying, the actions and the means do not really matter. Moreover, Transhumanists' consequentialism studies the division between actions and omissions. That is to say, no matter how much progress technologies make, if they do not lead to any pleasing results and do not serve the human transcending, they are considered to be a devastating failure and they could be even a harm that can sometimes lead to distraction (Savulescu, 2009).

In *More than Human*, Sturgeon shows evidence of the consequentialist theory. The protagonist Gerry commits murder only to keep his Gestalt in unity. He proclaims that it is necessary to kill Miss Kew though it is something illegal and comes into contrast to life's principles, however, the Gestalt will be united after her death. Miss Kew was killed for being the main

reason that separated the Gestalt, so Gerry had to get rid of her to keep the Gestalt safe from collapse:

We ran into the problem of what it was I valued more than the security Miss Kew gave us. Can't you see now what it was? My Gestalt organism was at the point of death from that security. I figured she had to be killed or it—I—would be. [...] 'Sure, she had to be killed. It was self-preservation for the Gestalt. (Sturgeon, 2011, p. 120)

One important thing for the Gestalt to do is to stay together no matter what happens, because in the characters' unity lies their strength and Miss Kew did a mistake when she tried to segregate them 'What went right was our success. What went wrong was her mistake [...] So I killed her' (Sturgeon, 2011, p. 100).

5.2. Morphological Freedom

Freedom is important in the continuum of Transhumanism morality. Human beings are free to decide upon the kind of life they prefer. They are gratis in making their own decisions in choosing their ideal lifestyle. Transhumanists call for morphological freedom. People are allowed to make certain modifications concerning their biological organism according to their desires. They have 'the right to modify oneself according to one's desire' (Sandberg, 2013, p. 56). They may use the most developed enhancement technologies to construct a particular adjustment to their biological traits only for the purpose to transform themselves into Transhumans (Ranisch, 2014, p. 06). Ranisch has a sturdy claim about morphological freedom; 'The strong emphasis on (morphological) freedom, which is frequently brought forward to argue for the permissibility of enhancement technologies, has neglected implication' (Ranisch, 2014, p. 06). That is to say, not all people accept and have an agreement on the idea of modifying and enhancing themselves morphologically using technologies and science. There are people who have the absolute freedom to refuse and refrain from the Transhumanist project.

Transhumanists have been free for their endeavor of living the way they want. All the characters in *More than Human* are different; they are mentally and physically enhanced and developed. They chose the

life of the forest; isolated and detached. Janie and the twins had quitted their lives and ran into the forest to find a house far away where they could feel relieved:

And this house was just the happiest thing of all. It was miles and miles away from anything or anybody and no one ever came here. It was a big house on a hill, in forest so thick you hardly knew it was there. (Sturgeon, 2011, p. 42)

After having spent eight years in the farmhouse with the prods, Lone finally decided to build up his house by his own; he thought he would be alone starting his life away from people even though he used to live in the town:

At one time it had not mattered in the least to Lone whether he was near men or not. Now, he wanted only to be able to be what he knew he was—alone. He needed shelter. And the more he looked at this hidden place, [...] the more shelter like it seemed (Sturgeon, 2011, p. 43)

More than Human speculates a new period of evolution that may not strictly be realistic under what we now comprehend from science. Sturgeon gave the characters a morphological freedom to produce the Homo Gestalt.

5.3. Harm Principle

Morphological freedom is permissible and is not limited by any constraints in Transhumanist morality since it serves human beings enhancement and transcending biological limitations. However, freedom must be limited if it causes any kind of harm (Ranisch, 2014, p. 07). In *More than Human*, Gerry, the head of the Gestalt, had been through different situations that complicated the existence of the whole Gestalt. At the beginning, he was interested in everything including people, books, machines and history. As a result, the Gestalt was getting powerful because all the members of the Gestalt were integrated. However, as Gerry started to realize that he did not need to prove anything to anyone as Janie said ‘He quit studying. He quit playing the oboe. He gradually quit everything. Finally he slowed down and practically stopped for a year’ (Sturgeon, 2011, p. 172), the Gestalt declined and caused profound harm

to its members; ‘Well, when Gerry took over it was a new, strong, growing thing. But when this happened to him, it was in retreat like what used to be called a manic-depressive’ (ibid).

Miss Kew practiced some kind of racism on the children. She often tried to segregate the twins Bonnie and Beanie from the other children. Gerry and Janie noticed that there was such a big gap for not being closed enough:

‘We began to notice that we almost never got to see Bonnie and Beanie. It was like that house was two houses, one part for Miss Kew and Janie and me, and the other part for Miriam and the twins’ (Sturgeon, 2011, p. 94).

Therefore, Gerry and Janie started asking questions for the reason why she was trying to separate them: Janie requested ‘Why don’t the twins eat with us?’ (ibid). Miss Kew’s answer was racist. She asserted the reason that pushed her to do that was the color of the twins’ skin; ‘They’re little colored girls, Jane. Now eat your lunch’ (ibid). This act evoked destruction because they were meant to stay together as Lone had told them: ‘Do everything she tells you, only stay together. Don’t you ever let any one of you get away from the others, hear’ (ibid, 87). Being a part and detached caused serious troubles for the Gestalt. If they were not together, they would not be unified and blesh. Gerry thought ‘God!’ I said. I thought for a while. ‘We didn’t blesh’ (ibid, 102).

Morality is depicted when the characters tried to stop the anti-gravity to get out to the world for the reason that they considered it a total damage for the whole world. The ethics of the Homo Gestalt basically consisted of humanity protection as Janie explained when Lone asked Baby about the possible effect of such inventions:

He said it would turn the whole world upside down, worse than the industrial revolution. Worse than anything that ever happened. He said if things went one way we’d have such a war, you wouldn’t believe it. If they went the other way, science would go too far, too fast. Seems that gravitics is the key to everything. It would lead to the addition of one more item to the Unified Field—what we now call psychic energy, or

'psionics' (ibid, 173).

5.4. Promoting Well-being and Reducing Suffering

Since Transhumanism is mainly concerned with enhancing humans' conditions and transcending their limitations seeking for better state of being, Transhumanists often make a much positive moral claim. Transhumanism work towards one goal, which is to avoid harm and provide well-being (Ranisch, 2014, p. 08). The characters in *More than Human* think that the well-being consist of being all together since no one can live and progress with the absence of the others. Janie clarified the way they complete each other: 'Now listen, if you want to know something you tell me and I'll tell Baby and he'll get the answer and tell the twins and they'll tell me and I'll tell you, now what do you want to know?' (Sturgeon, 2011, p. 55). The unity of the Gestalt offered the characters the feeling of belonging and the power of blessing:

I didn't do a thing that the others couldn't do, but they all did things I couldn't do [...] It didn't keep us from blessing. Blessing, that was Janie's word. She said Baby told it to her. She said it meant everyone all together being something, even if they all did different things. Two arms, two legs, one body, one head, all working together, although a head can't walk and arms can't think. Lone said maybe it was a mixture of 'blending' and 'meshing', but I don't think he believed that himself. It was a lot more than that (ibid, 75).

The characters have the belief that their unity provides security of their belonging which eventually will lead to decrease sufferance and prompt the well-being. For instance, they did not feel the true belonging in their previous lives. Gerry had run away from the orphanage when he was seven until Lone picked him up (ibid, 172). Janie had also escaped from her mother to end up in Lone's house (ibid, 48). The twins fled from their father, too. Lone got astonished when he found 'a small naked infant about four years old squatting in front of his door [...] 'Ho-ho.' He looked down, and there were two little girls' (ibid, 46). The characters used their power to reduce suffering and prompting the well-being. They built up the anti-gravity, which was supposed to be beneficial for daily life use:

[...] the device was the practical solution of flight without wings, the simple key to a new era in transportation, in materials handling, and in interplanetary travel. Made by an idiot, harnessed idiotically to replace a spavined horse, stupidly left, numbly forgotten... Earth's first anti-gravity generator (ibid, 58).

When Miss Kew sent Baby away, she thought she was doing the right thing for him and for the Gestalt. Since Baby has never been like the other normal kids, she thought that he had to live with other children that were different like him. Thus, it would be good for both Baby and the Gestalt because Janie and Gerry could not handle the responsibility of a child with complicated impediment:

You and Jane here and even the twins are all normal, healthy children and you'll grow up to be fine men and women. But poor Baby's—different. He's not going to grow very much more, and he'll never walk and play like other children. (Sturgeon, 2011, p. 97)

However, that act harmed both of them; the Baby and the Gestalt. Gerry explained 'You better get him back here,' I said. 'You don't know what you're fooling with. I told you 'We wasn't ever to break up' (ibid).

5.5. Rejecting Anthropocentrism

Transhumanists make all of their efforts to provide the well-being of human beings and reduce suffering; however, they should never neglect and put aside the other nonhuman animals' conditions. Since morphological freedom is limited when it causes any kind of harm and 'anthropocentrism, to a great extent the posthuman realm is imagined as an extension of the human realm of values' (Ranisch, 2014, p. 09), it is compulsory to preserve the rights of all human beings including the nonhuman. There is a clear example in the novel that illustrates the idea. Hip tried to steal the anti-gravity because it was all what he hoped for and he believed that it would serve him without limits since it was:

[...] skyward architecture no artist had yet dared to paint; [it is] wingless flight and escape to the planets, to the stars, perhaps.[it is] a new era in transportation, logistics, even the dance, even medicine. And oh, the

research... and it was all his. (Sturgeon, 2011, p. 164)

The Gestalt prevented him from doing that because it was harmful for the other human beings. Anti-gravity was ‘a fantasy, a dream. Anti-gravity, which would change the face of the earth in ways which would make the effects of steam, electricity, even nuclear power, mere sproutings of technology in the orchard this device would grow’ (ibid).

5.6. Progressivism

Transhumanism as a theory has a great deal to do with science and technologies. Transhumanists share the belief in the ongoing and accelerating progress of science and technology. Progress is the fundamental condition for the total Transhumanist project and ideas (Bostrom, 2005). In *More than Human*, The Gestalt believes in progressivism. The characters strongly focused on getting knowledge. The novel is full of scenes that give too much importance to the obligation of getting knowledge. Lone often pushed Alicia to read books of different subjects. He made her read books ‘on evolution, on social and cultural organization, on mythology, and ever so much on symbiosis’ (Sturgeon, 2011, p. 110). The only reason that made him to do so was to get the Gestalt progressed. Alicia described the Gestalt as a ‘Group. Like a cure for a lot of diseases with one kind of treatment. Like a lot of thoughts expressed in one phrase. The whole is greater than the sum of the parts’ (ibid). Lone had a conversation with Alicia telling her to read a lot about the Gestalt: ‘Read about that, too. Read a whole lot about that. That’s the most you got to read about. That’s important.’ (ibid). Similarly, Janie explained to Hip that progressivism was one of their most important goals:

Listen,’ she said passionately, ‘we’re not a group of freaks. We’re Homo Gestalt, you understand? We’re a single entity, a new kind of human being. We weren’t invented. We evolved. We’re the next step up. We’re alone; there are no more like us. (ibid 177)

5.7. Obligation to Support Science

Transhumanists believe that appropriate technologies have to be developed hopefully to revolutionize and adjust the humans’ conditions (Ranisch, 2014, p.

10). However, this development does not essentially serve the future of (post)humanity; it may decrease existential risks that threaten life. It had already been mentioned that knowledge had a great importance to the Gestalt enhancement. In addition, the invention of the anti-gravity device was basically composed of scientific elements. Another example that proves the obligation to support science in the novel is Hip’s obsession with science:

He was eight when he built his first radio, a crystal set for which he even wound the coils. He suspended it from the bedsprings so it could not be seen except by lifting the bed itself, and buried an earphone inside the mattress so he could lie awake at night and hear it [...] He was twelve when he won a Science Search engineering scholarship for his secretly designed tubeless oscilloscope. (Sturgeon, 2011, pp. 22-23)

The same goes with Gerry; he was totally ambitious and interested in acquiring all sorts of knowledge and science. He ‘decided to go through college, which he did. [...].. He went through medical school too, and psych’ (ibid 171).

5.8. Obligation to Enhance

Transhumanists do not merely regard human enhancement as ‘being permissible but believe that enhancements [are] obviously good for us’ (Ranisch, 2014, p. 12). They think that it is compulsory to support the notion of improvement since it is a vital principle of Transhumanist scheme. Noticeably, at the beginning of the novel *More than Human*, each of the members of the Gestalt had lived apart from the others. Then, they started to be unified and felt the belonging for being posthumans. However, that was not the end of their progress; they developed mentally and physically. Janie clarified:

[...]we’re not a group of freaks. We’re Homo Gestalt, you understand? We’re a single entity, a new kind of human being. We weren’t invented. We evolved. We’re the next step up. We’re alone; there are no more like us. We don’t live in the kind of world you do, with systems of morals and codes of ethics to guide us. (Sturgeon, 2011, p. 117)

6. Conclusion

This study emphasizes morality of the major Transhumanist writer Robert Ranisch in relation to Theodore Sturgeon's presentation of the concept of morality in his novel *More than Human*. It provides illustrations about the Transhumanist moralities throughout the characters' progression, unity and their ideas of being responsible and ethical according to their norms. Being the first of its kind, new, strong and superior, the Gestalt had created and developed its own moralities, values and standards. Sturgeon brings into being characters that live in unity and share the same goals and interests as they develop themselves to be transcendent their power to become the Homo Gestalt. The latter has a set of values in protecting humanity and making its most effort to improve itself with the intention to avoid and miserable life. The characters understand the value of morality as a need to survive and protect humanity. It has been their duty to find out whether they are meant to help humanity or destroy it. This research does not focus on the other Transhumanism elements; further investigation can be conducted to explore the additional Transhumanist basics in the novel.

Conflict of Interest

The author declares she they have no conflict of interest

- References

- Abukar, S. (2017). Transhumanism: Biotechnology and its Role in the Singularity. Récupéré sur Essays.me: <https://essays.me/sciences/78939-transhumanism-biotechnology-and-its-role-in-the-singularity>
- Boden, M. (2006). *Mind as Machine: a History of Cognitive Science*. Clarendon Press.
- Boström, N. (2005). Transhumanist Values. *Journal of Philosophical Research* 30 (Issue Supplement - Ethical Issues for the Twenty-First Century), 3-14.
- Dard, O., & Moatti, A. (2016). Aux origines du mot "transhumanisme". *Futuribles*, 85-94. doi:<https://doi.org/10.1093/notesj/gjv080>
- Drexler, K. E. (2000). *Engines of Creation: the Coming Era of Nanotechnology*. Eric Dresler.
- Gardner, H. (1998). *The Minds New Science: a History of the Cognitive Revolution*. BasicBooks.
- Giubilini, A., & Sagar, S. (2015). The Ethics of Human Enhancement. *Philosophy Compass*, 10(04), 233-243. doi:10.1111/phc3.12208
- Harrison, P., & Wolyniak, J. (2015). The History of 'Transhumanism'. *Notes and Queries*, 465-467. doi:<https://doi.org/10.1093/notesj/gjv080>.
- Holde, K. E., & Zlatanova, J. (2018). Understanding Whole Genomes: Creating. *The Evolution of Molecular Biology*, 165-180. doi:10.1016/

b978-0-12-812917-3.00015-2

- Hughes, J. J. (2010). Contradictions from the Enlightenment Roots of Transhumanism. *Journal of Medicine and Philosophy*, 06(35), 622-640.
- Lighthall, W. D. (1940). *The Law of Cosmic Evolutionary Adaptation: an Interpretation of. Virtue and Transcendence in an Enhanced Future*.
- Merriam-Webster. (2020, April 02). Gestalt. Récupéré sur Merriam-Webster.com dictionary: <https://www.merriam-webster.com/dictionary/gestalt>
- Miller, G. (2003). The Cognitive Revolution: a Historical Perspective. *Trends in Cognitive*, 07(03), 141-144. doi:10.1016/s1364-6613(03)00029-9
- Osipov, G. S. (2019). *Artificial Intelligence: 5th RAAI Summer School, Dolgoprudny, Russia, July 4-*. Springer,.
- Paura, R. (2016). Singularity Believers and The New Utopia of Transhumanism. *Im@go*, 05, 23-35. doi:10.7413/22818138056
- Ranisch, R. (2014). Morality (of Transhumanism and Posthumanism. *Post- and Transhumanism: An Introduction, Edition: Beyond Humanism*, 01, 149-172.
- Roden, D. (2015). *Posthuman Life: Philosophy at the Edge of the Human*. Routledge,.
- Sandberg, A. (2013). Morphological Freedom: Why We Not Just Want It, but Need It. Dans M. More, & N. Vita-More (Éds.), *The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future* (pp. 56-64). Chichester: Wiley-Blackwell.
- Savulescu, J. (2009). Genetic Interventions and The Ethics of Enhancement of Human Beings. (B. Steinbock, Éd.) *The Oxford Handbook of Bioethics*.
- Sturgeon, T. (2011). *More than Human*. Gollancz.

How to cite this article according to the APA method:

Benali Reguieg, N. (2021). Robert Ranisch's Morality of Transhumanism in Theodore Sturgeon's *More*, academic review of social and human studies, vol 13, number 02, Hassiba Ben Bouali University of Chlef, Algeria, pages. pp: 148-155