

American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

The 10th International Scientific Conference Under the Title

"Geophysical, Social, Human and Natural Challenges in a Changing Environment"

تحت عنوان "التحديات الجيوفيزيائية والاجتماعية والانسانية والطبيعية في بيئة متغيرة"

25 - 26 يوليو - تموز 2019 - اسطنبول - تركيا

http://kmshare.net/isac2019/

Science Fiction and Technological Advancement as Soft Powers to Control Human Genes in Aldous Huxley's *Brave*

New World

Asst. Prof. Aseel Hatif Jassam^a , Asst. Prof. Hadeel Hatif Jassam^b

^aEnglish Department, College of Arts, Mustansiriyah University

E-mail: asselhjassam@gmail.com

^bEnglish Department, College of Education for Humanities, Diyala University

E-mail: ins.hadeel@gmail

Abstract: The research discusses the significance of science fiction as an effective literary genre and a soft power, promoting the imagination and intellect of readers and enhancing their desire to go to cinemas for it deals with futuristic and imaginative pictures and events that seem difficult to happen, but with time have become a reality that all of us live. The advent of the Industrial revolution (1760-1840) gives rise to many literary genres like science fiction and avant garde novels, both of which reflect the modern societies' paradoxical and dual perceptions. Therefore, science fiction writers portray the world as either utopian where one feels happy and be able to accomplish one's dreams and hopes or as a dystopian where all layers of evil are present.



American Research Foundation

ISSN 2476-017X

شبكة المؤتمرات العربية

http://arab.kmshare.net/

Available online at http://proceedings.sriweb.org

Filmmakers contribute to present the greatness of several technologically developed worlds by using science fiction, with some either warning of or glorifying such technological change. The emergence of this type of literature and its presentation in cinemas revolutionize and enable some societies to rise economically and have utter control on other societies in all aspects of life. Technologically developed, America manages to impose full domination on other poor nations through its hard power represented by its manufacturing and mass production of highly sophisticated and offensive weapons that are inspired by science fiction.

Science fiction and motion picture industry of this type of literature, in Hollywood or other parts of the world, play a significant role in presenting the greatness of America to the point it is usually being referred to as the dream land culturally and technologically. Filmmaking and more especially that of science fiction enhances the cultural value and supremacy of many technological states and above all America or the New World. Science fiction as a genre attracts readers and the industry of films dealing with science fiction themes prompts people's desire to pursue their dreams which, they think, will be accomplished in a perfect world like America.

The aim of this research is to define science fiction as a literary genre and to show how much cinema industry of such art is connected to the perception of soft power, a clever term that is coined by Joseph S. Nye, an American political scientist, to include all resources, whether cultural or artistic, that a state should make use of to achieve interest and domination on other states without the need to rely on its hard forces, military or economic, which are difficult to use even when available. The research shows how many science fiction authors celebrate technological growth while some others tend to draw a dark and horrifying picture of a highly developed world that shocks both the reader and the writer at the same time. To show the adverse impact of science and why it has become a means to destroy many human and social values especially in highly advanced world as America, Aldous Huxley's novel entitled *Brave New World* (1932) is analyzed. In this world, Huxley has referred to the possibility of depending on test tubes rather than marriage for the sake of engineering bottle-grown babies in a scientific method, instead of engineering them in wombs, and controlling their genes in a way that ensures conformity to the ideals of its social system.

Key words: soft/ hard power, Hollywood, Huxley, science fiction, Brave New World



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

Introduction

Science fiction is the medium for the exploration of the human reception of scientific discoveries. Human imagination has prompted writers to study this genre, to talk about scientific marvels, and to create situations that seek perfection. Science fiction writings display a kind of desire to live in a perfect world, a desire that unfortunately is not fulfilled due to conflicts and evils. Science fiction is connected with human curiosity. It is the awakening of public curiosity about the prospect of more scientific, technological and biological changes, and the arousing of interest in what the future holds that motivate authors and readers to handle science fiction novels. Intellectual and curious minds always seek answers to their questions: what it is like to comprehend a reality beyond the range of normal human perception; what it is like to live in a world controlled by machines. Science fiction deserves serious study since, as an outlet, it provides answers to the questions above. The future world science fiction novels describe might either be utopian or dystopian. Not always perfect and ideal, science fiction novels also offer their readers terrifying future images. This is especially true of the science fiction novels of the late nineteenth and early twentieth centuries that often reflect the preconceptions of scientism, the view that science has now explained away religion and indeed replaced it as the agent of man's salvation.

Science fiction contributes to development of soft power because of the fascinating and horrifying pictures it draws of different nations. More than other types of literature, science fiction, Wang Chunfa, a secretary of the Secretariat Office at the China Association for Science and Technology, states "is conductive to elevating national soft power, enhancing international competitiveness of culture industry, promoting the integration of technology and economy, as well as encouraging the co-development of philanthropy and business."(Yongjie, 2015) Media, filmmaking industry, and cinematic representations of such genre play a very crucial role in cementing the national image and diplomacy of many nations. This research emphasizes the fact that the different ways of implementation of the cultural values of United States of America in cinemas is responsible for the audiences' attraction to and repulsion from USA. In other words, the audiences' as well as readers' perceptions will vary according to the filmmaker's and author's presentation of such values. The uses of cinemas for the purpose of presenting a nation's foreign policy is defined today as "cultural diplomatic outreach"(Peters, 2015) To show how certain dystopian works (in the sense that the values and messages they transmit are negative and destructive), can generate repulsive feelings and attitudes, the researcher has chosen Aldous Huxley's Brave New World. Visiting America and getting shocked by its mass consumerism, Huxley sets his pen to Brave New World which



American Research Foundation

ISSN 2476-017X

شبكة ا لمؤتمرات العربية

http://arab.kmshare.net/

Available online at http://proceedings.sriweb.org

many read and view as offensive due to its depiction of a non-democratic regime that denies its inhabitants individuality, freedom, and any other culturally attractive ideals that ensure prosperity and stability.

Science Fiction

No one has ever managed to come up with a truly satisfactory definition of science fiction. A great confusion rises over this problem. Many writers disagree about and reject the term science fiction altogether in favor of speculative fiction. Speculative fiction comes to be an all-encompassing term or an umbrella category that includes science fiction, horror, and fantasy literature.

Over the years, there have been many attempts at a definition but the most accurate, and most comprehensive one, as Mark R. Hillegas argues, remains that of Kingsley Amis in *New Maps of Hell* (1961). Amis' viewpoint is that science fiction is not necessarily fiction about science or scientists, nor is science necessarily important in it. Defining it, Amis writes that "science fiction is that class of prose narrative treating of a situation that could not arise in the world we know, but which is hypothesized on the basis of some innovation in science or technology or pseudo-science or pseudo-technology whether human or extra-terrestrial in origin." (Amis, 1976) Such works are most often connected with the impact of these innovations - or of change in general - on humanity.

To understand that science fiction is a romance form is perhaps a necessary prerequisite to a serious analysis of the genre for science fiction has its roots in such romance tradition. The discovery of science fiction can be understood as part of a change in the literary sensibility and taste that has led to the renewal of interest in romance forms (Rose, 1976) Darko Suvin defines science fiction as "a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition and whose main formal device is an imaginative framework alternative to the authors' empirical environment." (Suvin,1976) By "cognition" Suvin appears to mean the seeking of rational understanding and by "estrangement" something akin to Bertolt Brecht's attitude "Verfremdungseffekt," defined in his Short Organum for the Theatre (1948) "A re-presentation which estranges is one which allows us to recognize its subject, but at the same time makes it seem unfamiliar." (Ibid.) He goes further saying "for somebody to see all normal happening in a dubious light, he would need to develop the detached eye with which the great Galileo observed a swinging chandelier." (Ibid.)

The mirror that science fiction offers is not only reflecting one but it is also transforming one. In science fiction, the concern with a domestication of the amazing is so strong. Such a concern implies a



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

curiosity about the unknown. Science fiction, as a literary genre," has always been wedded to a hope of finding in the unknown the ideal environment, state, or to a fear of and revulsion from its contrary." (Ibid.)

The rapid change in technology and society that defined the Industrial Revolution of the nineteenth century created a ripe environment for futuristic projection put either in utopian or dystopian traditions. Sometimes utopian and dystopian literature is also considered as science fiction which is true in so far as sociology also is a science. It is due to this sense, that many satirical novels that have speculative components are distinguished as part of the genre. A key feature shared by the socialist utopia, and more especially in the nineteenth century, is the linking of the future with technology. Utopias, whether fantastical or not, originated and developed before science fiction. However, since the scientific revolution, utopian and science fiction literature have become increasingly intermingled. Their association comes from a dystopian story: Western culture has been taught, due to the effects of Industrial Revolution, a dreadful lesson. Misapplied, the very forces, that are employed, supposedly in the hope of making an earthly paradise, established, instead, a nightmarish world (Lawler, 1978)

Among the themes that science fiction comes with is modern man's attempt, through science, to come to terms with or conquer the cosmos he inhabits, a theme that has something to do with religion. The scientific world-view, which underpins modern civilization, has dispensed with religion: what, if anything, can replace it? One of the implicit arguments behind scientism is that science or the machine has genuinely granted the saving benefits that old religions could not bring. The more usual perspective for the critique of a science that is trying to dislodge religion is that of Christian orthodoxy (Woodman, 1979). An archetype that challenges the scientific optimism about the future, showing man's faith in science and his mockery of religion is Huxley's Brave New World where Ford who introduces mass production with the Model T car, comes to be worshipped instead of Christ.

Modern science fiction is a primarily American phenomenon and much of the genre is written either by Americans or by authors who adopt the American idiom. It develops most strongly in the United State and then in England due to various related factors. In the first place, English is a world language of literature, a matter that brings American publishers, with modern promotion and distribution of techniques and soft policies, to access to the world market with books of all kinds. Secondly, the process of dynamic social change, within which science fiction thrives, moves through American society earlier and more dramatically than it does elsewhere. Thirdly, there was and is geographical concentration of writers in America, a society that enjoys novelty for embracing and welcoming new technologies, change, and



American Research Foundation

ISSN 2476-017X

شبكة المؤتمرات العربية

http://arab.kmshare.net/

Available online at http://proceedings.sriweb.org

expansion (Priest, 1979). It is due to all these three factors that British science fiction magazines have usually been copies of the American original. Up to the second War, there were a few titles published. After the war, however, the British science fiction magazine, New Worlds is edited for more than seventeen years by E.J. Carnell. Along with it, two other British magazines were edited during the period 1950s and 1960s. These are Science Fantasy and Science Fiction Adventures (Ibid.)

Soft Power

To define soft power isn't that easy task. At first glance, it seems easy for it usually stands for any kind of "rational strategy pursued under the conditions of completion" (Patalakh,2016) and is in opposition to hard power, namely military and economic coercion. The difficulty behind giving an exact definition is that soft power often extends "far beyond the academic field." (Angey-Sentuc and Molho, 2016)

It was in 1990, when the Cold War (1947-1991) was coming to an end that the term soft power was introduced by the American and political scientist, Joseph Nye, who has been assigned different outstanding academic and political works to serve from 1964 to 2004, in his book entitled *Bound to Lead:* The Changing Nature of American Power and an article that he published in the same year in the journal, Foreign Policy. In both of these published works, Nye emphasizes that the United States of America will keep its position, geopolitically speaking, as the world's leading superpower if it does not retrench behind its frontiers and accounts for "an ambitious foreign policy through the use of soft power"(Ibid.) Even after end of the Cold War and the collapse of the Soviet empire, the United States of America continues to be a unipolar power, having prescribed soft power as its effective policy to exercise its cultural, economic, and even military influence on other societies. For Nye, in an increasing interdependent world like USA, soft power as a generalized strategy has to be followed by the government to lessen conflicts among its states and enable it to be the leading power of the universe. Of the importance of soft power and what it really is, Nye writes:

Soft cooptive power is just as important as hard command power. If a state can make its power seem legitimate in the eyes of others, it will encounter less resistance to its wishes. If its culture and ideology are attractive, others will more willingly follow. If it can establish international norms consistent with its society, it is less likely to have to change. If



American Research Foundation

ISSN 2476-017X

شبكة المؤتمرات العربية

http://arab.kmshare.net/

Available online at http://proceedings.sriweb.org

it can support institutions that make other states wish to channel or limit their activities in ways the dominant state prefers, it may be spared the costly exercise of coercive or hard power. (Nye cited in Angey-Sentuc and Molho, 2016)

Nye, in his following works especially in his book entitled *Soft Power: the Means to Success in World Politics*, in 2004, has analyzed profoundly the three main resources of a country's soft power, namely its culture, political values, and foreign policies (Ibid) This research shows how some nations adopt soft tools to increase its attractiveness and enhance its power accordingly. The more a country's tools are appealing, the more powerful and influential its national power will be. Extending beyond the historical, geographical, and political context of its emergence, soft power has become mobilized and diffused to include some other diverse contexts and countries that manage to have a rising influence and power on others.

The status of soft power with its emphasis on values, culture, and strategies rises gradually as the world's information technology evolves. With this increasing evolution, the status of hard power with its emphasis on using military and economic resources regresses relatively. The national image, for example, of United States of America has propelled by Hollywood industry. Such industry, especially of science fiction for as mentioned before it is different from other genres in the sense that it has something to do with people's curiosity and imagination and this can be a source of attraction, contributes to the boosting of the United States of America's soft power for Hollywood movies have never failed to present American values and ideology to the world in positive way. These movies usually celebrate the American spirit or Americanism, the idea that Aldous Huxley has lamented in his science fiction novel, Brave New World by pointing to the destruction of human values that technological growth has brought. Rather than appreciating the future American world, Huxley's novel presents all the distorted perceptions that Americans consider valuable and without an adverse effect on humanity.

As a soft power, literature and filmmaking industry plays a vital role in celebrating or criticizing such influence through the exposition they make of a country's values and culture. Historically, immigration to United States of America motivates many literary authors and filmmakers to present it as the greatest leading power of the world in assimilating people of different ethnicities and religions. Showing their American experience globally and praising the United States of America as a melting pot



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

that welcomes diversity, immigrants help in promoting the cultural asset of America in the eyes of different people whose goal is to leave for America and be looked as its citizens. Some view such kind of diversity positively as being responsible for the boom of Hollywood filmmaking industry as a soft power, to use Michael Goldfarb's words:

The secret of Hollywood's success has a lot to do with it having been founded by immigrants- Goldwyn, Mayer, Warner were all just off the boat. Their cultural frame of reference was a synthesis of new world optimism and old world culture. The stories their studies told and the way they told them meant the films appealed well beyond America's shores (Goldfarb, 2014)

Such optimistic view is replaced by Aldous Huxley with a pessimistic one through presenting technology as the means that not necessarily enables humans to realize perfection on earth. Hollywood filmmaking industry attracts foreigners to migrate to the United States of America because of its forceful and frequent representations of America as the embodiment of democracy and freedom-the very idea that finds no place in Huxley's world due to the conformist and totalitarian system that leaders impose on society and which ironically is made possible by mass production and conditioning of its people.

With the end of the Cold War in 1991, other countries emerge and rise into power due to cultural interest. Like Hollywood in America, some other cultural interests, in the twentieth century, cause commercial success and national power to some other nations: manga culture, for example, in Japan_graphic novels and modern Japanese cartoons which develop into different genres and gain a significant worldwide audience for being "less expensive than books and magazines,"(Fusanosuke, 2003)Bollywood in India which grows "to become one of India's most financially lucrative industries and the world leader in both the number of films produced each year as well as audience attendance" (Grant, 2018) and the Confucius Institutes in China which is founded in 2004 with the aim of spreading, promoting, and supporting Chinese teaching, culture, and language around the world.

Brave New World: A Venomous Satire of an Americanized Future World

Brave New World was first published in 1932. Totally opposed to the spirit of the twentieth century in general and critical of Western civilization in the 1930s in particular, Aldous Huxley's Brave



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

New World is read as a bitter satire of many philosophies, trends and attitudes inherent at that time (Heiney,1954). Confronted with the problem of moral vacuum and doubtful of scientific progress, Charles J. Rolo says that when Huxley was writing his novel, "it seemed to him that science and technology were leading mankind toward the soulless, mass – produced contentment – the 'death- without- tears of a wholly materials Utopia." (Rolo, 1950)

Huxley's novel is set in the year 632 After Ford, i.e. the twenty sixth century. It opens with the Director of the Central London Hatchery, leading his student on a tour to a human factory where the citizens of brave new world are created, not viviparously, but by means of mass production method on an endless conveyor belt (Watts, 1969) With the principle of mass production applied to biology, human beings, not only manufactured and decanted, come to be genetically engineered and socially divided into different classes; each biologically manipulated to fulfill a given role in society. Huxley, in portraying his utopia as having a rigid class structure even stronger than England's of his time, is trying to voice out his opposition to the idea of class division. In this utopian world, Huxley shows how different castes of human beings are supposed to do, by means of genetic engineering and psychological conditioning, various works, ranging from the intellectual Alphas who, left to grow to a high level of development, are assigned all positions of power and intellectual works to Betas who do also professional and administrative tasks but without the leadership responsibilities of Alphas, and finally to the lower castes, namely Gammas, Deltas and Epsilons who are stunted deliberately both mentally and physically only to perform the society's most menial jobs (West, 1975). Not only predestined prior to their hatching to emigrate to the tropics to be miners there, these three lower orders are further subjected to the Bokanovsky process, which much like Fordian assembly line production technique that changed the economy and the culture of the United States, is meant by brave new world totalitarian World State to achieve, ironically speaking, social stability, supreme control over any threat of over-population, and to ensure more importantly an overwhelming sense of conformity.

Such technique is intended by Huxley so as to show how his utopian society technologically goes to the extreme. The Bokanovsky process, in fact, is turned to be one of the triumphant devices of the people of brave new world whereby up to ninety- six identical twins are created from one fertilized egg (Magill, 1952) In praise of the progressive mechanism of the Bokanovsky process, the Director of Hatchery and Conditioning Center states:



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

But a bokanovskified egg will bud, will proliferate, will divide, from eight to ninety six buds, and every bud will grow into a perfectly formed embryo, and every embryo into a full- sized adult. Making ninety- six human beings grow where only one grew before progress (BNW, Ch. 1, p. 17)

He further goes on saying:

Identical twins – but not in piddling twos and threes, as in old viviparous days, when an egg would sometime accidentally divide; actually by dozens, by scores at a time (Ibid., p. 17-18)

Doubtful of scientific and social progress, Huxley challenges Galton's optimistic view concerning genetic cloning. Rather than supporting the notion of eugenics, Huxley's novel sends a deeply pessimistic warning against all forms of genetic engineering. As a challenge to his idea, Huxley provides his readers with so many evidences in his novel. In the first place, genetic split, he shows, is intended by brave new world's predestinators only to secure a global caste society, with no social mobility. In the second place, Huxley believes that in order for human cloning to be achieved, many things should be sacrificed, namely, man's humanity, individuality, free will, and freedom (Bedford, 1973)In the third place Huxley is of the opinion that each technological invention must be subject to flaws, an idea he conveys through Bernard, who as an Alpha is supposed to be perfect both physically and mentally, yet due to alcohol damage during his embryonic formation, is deemed to be an example of human imperfection.

Huxley's second evidence recalls his concern with the individual. *Brave New World* focuses constantly on the question of whether technology requires a sacrifice of human individuality. Going to the extreme in technological advancement, the supposedly utopian society, Huxley thinks, becomes a prisoner of the very technology it hopes would save it. Huxley's interest in what the individual would be in a society overly reliant on technology is once reflected in his forward to the 1946 edition of the novel when he says "the theme of Brave New World is not the advancement of science as such; it is the advancement of science as it affects human individuals (Cited in Coughlin, 1997)

This utter dehumanization of human individuals is best exposed in the novel through the Bokanovsky process. The threat this process poses to society is that life is not highly valued. This is shown when Henry Forster, the director of hatcheries and conditioning, as he points his finger at the row of



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

microscopes, the test- tubes and the incubators, says "Murder kills only the individual and, after all what an individual?" (Ch. 10, p. 120). Human life, as it appears, comes to hold no values because it can "with the greatest ease" be replaced through technology.

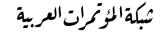
In fact, the novel with its depiction of wholly regimented conformist society within which the individual has become a puppet or even anonymous turns to conform with Scott Sanders's argument that twentieth century science fiction is a genre centrally about the disappearance of character. Sander attributes this to the new movement, namely Modernization. The faith in the individual as a true unit of value, as an autonomous individual capable of determining his own destiny, he argues, has been progressively eroded by the growth of industrial cities, which dwarf him, by the impact of technology, by the acceleration of social change and even by wars(Sanders, 1979) Sandres' prediction is tacitly true of *Brave New World*. According to Huxley, advances in technology can also be a threat to society, a threat that can eliminate the need for man's creativity and imagination. In his novel, he warns people against mechanization, arguing that the machine dehumanizes men by demanding the mechanical efficiency of them.

Indeed, this overarching idea of dehumanization due to technological industrialization haunts many of Huxley's novels. In this novel, Do What You Will, he comes to consider the machine as one the most dangerous diseases that the world has to face and eliminate. The machine, he believes, is a menace because it robes man of his creativity and makes him merely a passively efficient robot (Birnbaum, 1974) Such a hostile anti-Fordian attitude towards modern industrialization accounts for Huxley's satiric image of brave new world as a factory- like society where human beings (machines) are mass-produced(Meckier, 1979) However, beside the Bokanovsky process, the totalitarian World State uses two other strong psychological methods such as Behavourism and Hypnopaedia, to manipulate people's minds and prevent them from having free will to decide. Attacking not only the industrialist Ford, the novel is also read as a parody of unattractive philosophies of many scientists, namely John B. Watson, Ivan Pavlov, Freud and many others, showing how a dreadful the future world, would be if it is to be constructed in accordance with their theories (Ibid.) In this tightly planned world, children are subjected to incentive stimuli such as electric shocks or loud voices in order to have instinctive reactions of loathing to books, such as the Bible or Shakespeare's works, natural landscape and anything undesirable according to the world's new standards. The justification behind conditioning people to have negative reflexes towards flowers is shown by the Director's following speech: Primroses and landscape have one grave defect: they are gratuitous. A love of nature keeps no factories busy. It was decided to abolish the love of nature, at any rate among the lower



American Research Foundation

ISSN 2476-017X



http://arab.kmshare.net/

Available online at http://proceedings.sriweb.org

classes; to abolish the love of nature, but not the tendency to consume transport. For of course it was essential that they should keep on going to the country, even though they hated it. The problem was to find an economically sounder reason for consuming transport than a mere affection for primroses and land-scape (BNW, Ch. 2, p.29)

Such experiments in the conditioning rooms with babies being conditioned to dislike books and flowers is analogous to the famous experiment of Pavlov, the Russian psychologist who, through the process of mental association, manages to train dogs to salivate at the sound of a bell rather than at the "natural presence" of food(Watts, 1969) Indeed, through such experiments, Huxley also tries to satirize Behaviorism, a philosophy devised by John Watson which deems human personality as "the end products of habit systems" or a product of an established stimulus response connection. This philosophy is quite clear in Watson's following speech " I hope some time to try out the experiment of having a table top electrically wired in such a way that if a child reaches for a glass or a delicate vase, it will be punished, whereas if it reaches for its toys or other things it is allowed to play with, it can get them without being electrically shocked. "(West, 1975)

In addition to Watson and Pavlov, Huxley also attacks Claude A. Helvetius, a nineteenth century French philosopher whose philosophy's cornerstone is the assertion that education is everything, the very notion that *Brave New World* seconds. Denying free will, he argues that all human minds are equal and void at birth and that subsequent differences in intellectual achievement must therefore be attributed to external environment(Meckier,1979) Going to the extreme, Helve'tius, like Golton, comes to believe that any man could be made into a genius for intellectually superior individuals are made not born. Refuting Helve'tius unfounded idealism, Huxley reports that "the dream of Helve'tius and modern Behaviorists" is not likely to be realized. It is improbable, he continues, that "every child" can be "turned, according to taste and social necessity, into a Newton, a Shakespeare, a Napoleon, a Mozart, a St. Francis, a Samuel Smiles." (Ibid.)

Unlike Helve'tius and many optimistic believers in eugenics, Huxley does not expect the scientific production of exceptional individuals. Eugenics, he believes, is in the opposite direction, not towards improvement of the human race. While utopians and wishful thinkers, Huxley pessimistically says, talk highly about eugenics, the approaching dystopias will be founded on a scheme of dysgenics, a scheme which is shown, he says, through the revolution that takes place not in the external world, but in the souls and flesh of human beings (Ibid.). As parody of Helve'tius concept of genius production, Huxley gives the



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

"Cyprus Experiment," an experiment which proves that a society of Alphas, a community of geniuses, will always be a disaster. To John's question 'what was that [Cyprus experiment]', Mustapha Mond, one of the ten world controllers explains:

It began in A.F. 473. The controllers had the island of Cyprus cleared of all its existing inhabitants and re-colonized with a specially prepared batch of twenty – two thousand Alphas. All agricultural and industrial equipment was handed over to them and they were left to manage their own affairs. The result exactly fulfilled all the theoretical predictions. The land wasn't properly worked; there were set at naught, orders disobeyed; all the people detailed for a spell of low-grade work were perpetually intriguing for high-grade jobs. Within six years they were having a first-class civil war. When nineteen out of twenty-two thousand had been killed. And that was the end of the only society of Alphas that world has ever seen. (BNW, Ch. 16, p.175)

Seeking an alternative world structure, brave new world consequently decides that its "optimum population" should be "modeled on the iceberg – eight- ninths below the water line, one- ninth above," a substitute model Huxley fears that future geneticists and behaviorists would work with (Meckier, 1979)

Suspicious of man's capacity to benefit from education, *Brave New World* is also seen as a straight forward parody of *Men Like Gods*, an optimistic vision about the future written by H. G. Wells and published in 1928 only three years before Huxley published his novel. In a letter of May 1931, he wrote: 'I am writing a novel about the future - on the horror of the Wellsian Utopia and a revolt against it '. It appears that in his novel, Wells, unlike Huxley, foresees an ideal world - a Utopia- where education is capable of solving all the pressing problems of mankind (Spenser, 1983(Another form of conditioning utilized in brave new world is hypnopaedia, a psychological technique whereby all members of every class, while a sleep, are conditioned to loud speakers repeating moralizing slogans which by the time one wakes up, are going to be memorized. In this utopian-dystpian society, human minds, as it appears, are overpowered by technology. Citizens of this new world, instead of using their minds, come easily to accept the recording



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

messages taught to them. Among the dangerous phrases taught to brave new world inhabitants that keep recurring in the novel are "everyone belongs to everyone else", "A gramme is better than a damm!" referring to soma, and "Ending is better than mending."

In Huxley's dystopia, sex is dehumanized; it becomes a mere technique, based on the hypnopaedic phrase, "everyone belongs to everyone else." Sexual relationships have become mechanical, devoid of human passion and merely reduced to physical satisfaction, to pleasure. As an object for others, the individual turns to be unable to differentiate himself or assert his identity through his passion (Swingewood, 1975) In this world, sexual promiscuity is encouraged by the World State so that anxiety, frustration and tensions be eliminated. With these undesirable emotions eradicated, the state manages to have full control over the world and achieve stability.

It is here, Joseph Needham states, that one can feel the influence of Dr. Money Kyrle's paper, "A Psychologists' Utopia" on Huxley. In this paper, it seems that Dr. Kyrle Needham states, "social discontent, which has always been the driving force in social change, is a manifestation of the Oedipus complexes of the members of society, and cannot be removed by economic means. With the decrease of sexual taboos, there would be a decrease of frustration and hence of the aggression which finds its outlet in religion, socialism, or more violent forms of demand for social change."(Needham, 1975). In Brave New World, Freud, like other scientists and psychologists, has also a share in Huxley's attack. Behind the utopian society sexual promiscuity, there is a background of Freudian influence. Freud attributes all human problems and psychic conflicts to sexual frustration. Man, he maintains, is a machine driven by a strong sex urge, a willing pursuit of pleasure principle. Freud, like Kyrle, theorizes that man's sexual urge has to be satisfied; otherwise, happiness and tranquility would be unlikely(Meckier, 1979) Huxley is critical of the negative aspects of the modernist movement, first triggered by the Fordist system of mass production whose ideals he manages to transport into philosophical thoughts through his questing novel of ideas.

In fact, the three phrases that the citizens of brave new world catch while they are sleep-taught also show that Huxley's Fordist utopia is based on production and consumption. The consumer society is a theme that appears frequently in his writings as it does not only apply to the time in which the novel is set but also to the time in which it is written. Even though the path the future world is on will bring it to prosperity, Huxley warns, it will not lead it to happiness. Stability in this prefect world is economic stability; clothes are not to be mended, instead new ones are to be purchased to support economic stability and growth. Similarity, the consumption of sex, sports, and soma, a narcotic used to create pleasant



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

sensations without any after- effects, is also reinforced by the World State. In this strange world, it turns out that it is socially unacceptable to spend a time alone, to be monogamous, to refuse to take soma and to express opinions which conflict with those taught during conditioning. In a letter to his father late in August, 1931, Huxley sighed with relief at having "got rid of" a "satirical novel" of ideas "about the future." This letter describes *Brave New World* as:

a comic, or at least satirical novel about the future, showing the appallingness (at any rate by our standards) of Utopia and adumbrating the effects on thought and feeling of such quite possible biological inventions as the production of children in bottles (with consequent abolitions of family and all the Freudian "complexes" for which family relationships are responsible), the prolongation of youth, the devising of some harmless but effective substitute for alcohol, cocaine, opium etc., and also the effects of such sociological reforms as Pavlovian conditioning of all children from birth and before, universal peace, security and stability. (Meckier, 2002)

One of the questions that the novel addresses is the importance of family structure. With the abolition of viviparous reproduction, substituted by the asexual procedures of bottling and decanting, the concept of motherhood has become an obscene, revolting animal process to be left to animals and savages. It also turns out that the easiest way to insult someone is to ask him who his mother is. Furthermore, with live -birth no longer acceptable, women since youth, are trained to use mandatory pills. The only god that Huxley's dystopian society knows and whose name is used in the same way as God is Ford, the symbol of industrialization. The world's spiritual bankruptcy is evident when Mustapha Mond once says that his people can be "independent of God" as they can have "youth and prosperity" until the very end, an utterance which is highlighted in his description of soma as "Christianity without tears" and the world's "Solidarity Service", a religious ritual similar to the Eucharist in Christianity in which twelve persons are gathered around a circular table to drink soma and practice sex so that they can spiritually sit unified with Ford.In this brave world, there is no God, and there are no worries since there are no ultimate morals except those made by the state and included by hypnopaedia. The world's secularism is again apparent in Mond's



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

following speech" God isn't compatible with machinery and scientific medicine and universal happiness. You [John] must make you choice. Our civilization has chosen machinery and medicine and happiness (BNW, Ch. 17, p.183)

Another sacrifice made by the totalitarian world state is history. People in brave new world don't know their history before Ford's era. All historical information have been banned for them to the point that people come to believe that they don't exist. They don't know or haven't heard anything about wars, rebellions, politics, literature, art or anything like this. Along with the hypnopaedic slogans taught to them is "history is bunk", a quotation that has something to do with Ford. Ford says that history is only useful when it helps progress to develop. Viewing history only as a chain of technological progress, the World State brings brave new worlders, by means of conditioning, to dislike anything that has to do with the past and the habits of the former times. Residing in a world fully dependent on technology, they accordingly, get disgusted by the intimate relationship between the numbers of a family and the way children were born in the past, an attitude very similar to that they held towards John the savage, an illegitimate son who, born to a former civilized woman named Linda, and reared in an Indian reservation in New Mexico, is brought with his mother to the utopian society where he becomes a scientific curiosity for the world controller, Mustapha Mond.

Structurally speaking, the introduction of John the savage to a highly technological environment is intended by Huxley as a touchstone whereby the faults of his dystopian society can be exposed. Opposite to brave new worlder's expectation, John gets appalled by the lifestyle and defective ideas of civilized people. Chained by the Elizabethan morality he has learnt from the works of Shakespeare, John is upset at Lenine, a virtuous girl according to the Fordian standards, when she tries to offer herself to him. What disturbs him most is the death conditioning that takes place while his mother is dying. In this anti-utopian society, people are given ice-creams and chocolate in order not to fear, when exposed to death. Outraged by the sight of his mother in the middle of a group of Bokanovsky children perfecting their death conditioning, John exclaims: 'O brave new world!', an exclamation taken from Shakespeare's The Tempest and used ironically by Huxley to indicate that the utopian world presented in his novel is more a hell than a paradise on earth.

Having left the Dying hospital, John unfortunately comes across a Delta group which awaits their daily soma ration. Seized with the urge to change what he now sees as a corrupt society, John first tries to dissuade them from taking the drug. Failing in his mission, he starts to throw the drug away, causing, with



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

the help of the socially misfit, Bernard and the nonconformist writer of hypnopaedic slogans, Helmholtz Watson, a riot. Arrested, the three men are taken to Mustapha Mond. Whereas Bernard and Helmholtz are judged to be exiled to an island for misfits, John is ordered to stay in the utopian society whereby Mond's experiment – an experiment by which Mond tries to see if John is going to adjust or reconcile to brave new world's standards – is to be continued.

Huxley uses John the savage as an important device for delineating contrast between the dystopian society in question and what he arguably perceives as being a more ideal society. The clash between these two cultures is shown through the John – Mond argument that forms the novel's climax and in which Mond asks John about his opinion of the new civilization. Instead of a revolution, the two philosophies (primitivism vs. Fordism – that is, Malpais vs. the world State, life in a pueblo in the American Southwest vs. life in an enormous factory) collide, neither able to defeat or accommodate the other (Meckier, 2002) Presented as an opposition to the Utopian ideals, the nonconformist John the Savage prefers the individual freedom which he sees rooted in literature and religion(Sanders, 1994). Arguing that sacrificing art and God is too high a price to pay for what Mond falsely claims is happiness, John, instead, claims the right to be unhappy, to grow old, to suffer, to be able to experience the full range of a human's "natural" emotional potential: "But I don't want comfort. I want God, I want poetry, I want real danger, I want freedom, I want goodness, I want sin" (BNW, Ch. 17, p. 87)

Disgusted and disillusioned with the regulated utopia, John runs away and sets himself up in an abandoned lighthouse on the outskirts of London. Overcome with guilt for his mother's death, he whips himself. Soon after this, reporters arrive and John's self-punishment is seen on the media. Seeing him on TV, Lenina rushes to him only to be attacked with his whip. To calm him down, the crowd chants 'orgy – porgy' – a sensual hymn, used to generate a feeling of oneness. Joining the crowd in their sexual rite, John is overwhelmed with guilt and self – hatred at the betrayal of his principle and commits suicide.

In this utopian world, one thus can see that there is no place for the individual. It is a world where all forms of individuality are stamped out and instead a uniform collective identity is imposed. Furthermore, in such a world based on total domination, any possibility of rebellion is rendered futile (Swingewood, 1975) To John the savage, it seems that the only way out is to commit suicide: he can neither feel at home at the savage reservation, a conventional world based on marriage, live – birth, family life and religions, nor at the utopian society which is based on sexual liberation, child – reproduction and secularism. He is neither able to forget his naturalness, and his mother's amoral relationships with her



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

numerous lovers, nor is he able to tolerate the horrors of brave new world and the possibility of reconciliation with them. Huxley's prophecy, Charles J. Rolo says, dramatizes the choice between this 'death without tears' and a return to 'noble savagery' – a choice between 'insanity' on the one hand and 'lunacy' on the other hand(Rolo, 1975) and this is the defect that Huxley, in his forward to the 1946 edition of his novel, admits:

Today I feel no wish to demonstrate that sanity is impossible. On the contrary, thought I remain no less sadly certain than in the past that sanity is a rather rare phenomenon, I am convinced that it can be achieved and would like to see more of it ..., If I were now to rewrite the book, I would offer the Savage a third alternative. Between the utopian and primitive horns of his dilemma would lie the possibility of sanity, a possibility already actualized to some extent, in a community of exiles and refugees from *Brave New World*, living within the borders of reservation (Huxley, Forward, 1955)

Conclusion: After profuse reading in science fiction and soft power, one can come up with the findings that both terms are modern, mobile, and open for variant interpretations. Soft power can take different forms and in this research it has something to do with scientific advancement as represented in science fiction writings. Some people think that science is found for the betterment of mankind, others will have another eye view. Likewise, science fiction writings are interpreted differently. One of the many serious questions asked by science fiction writers and met with varying answers is what science and technology can offer to mankind. Optimists, on the one hand, believe that science is given to people as a new tool with which they can mark miracles. Science and technology, they furthermore view, have become such indispensable ingredients of the development process that nothing can be built for the future without making the best of them. Today, however, this quest of mobilizing science and technology for progress appears more uncertain. Taking into consideration the adverse effects of nuclear weapons, the cost of change resulting from scientific and technical advances, and the damage to the environment from industrial activity, pessimists, on the other hand, think that progress should no longer be taken for granted. Faced with the double-edged question: How to modernize without sacrificing tradition? How to preserve tradition without compromising modernization?, science fiction writers accordingly come to recognize the fact that



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

the scientific quest is uncertain because it raises questions about the price of modernity: the benefits that a society can expect to derive from it in economic, political, social and cultural terms, as well as the sacrifices.

Media, in all its forms, audible and visual, has its impact on the audience and is responsible for the evolution (due to attraction) and devolution (due to repulsion) of nations. The audience (readers, listeners, and viewers) need to be careful not to be swept by media for it does not always reflect attractive images. Attractive images may be twisted by the use and implementation of imagination and other tools .Put like this, one can come to the conclusion that science fiction can be an effective tool to persuade or dissuade the audience of a state's image. In addition, the apocalyptic nature of many stories of science fiction motivates the audience to come across literary works, attend cinemas, and thus be a source of soft power of nations where such a type of literature thrives. Furthermore, the images films present may be appealing or they may cause the audience to have repulsive feelings as does Aldous Huxley's Brave New World. Though many are tempted by the Americanized world Huxley has presented, many others distrust, and will have revulsion from it due to its technological advancement that comes at the expense of the death of spiritual values and the replacement of good ideals crucial for leading a happy and stable life. Huxley warns readers against the inhuman and improper use of science. Through his satirical novel, he voices his opposition to many scientific as well as social problems that the inhabitants of brave new world adopt, namely the fertilization of human eggs in laboratories, the placing of human beings according to their intelligence, the conditioning programs of children at a very early age to like what the controllers want them to like, and dislike what they want them to dislike, the destruction of religion, the use of drugs, and sexual freedom _ the problems, he predicts, would be far more immediate now than they did years ago when they were first written about.

References

Amis, Kingsley (1976). "Starting Point" in *Science Fiction: A Collection of Critical Essays*, ed. Mark Rose. New Jersey: Prentice Hall, p. 11.



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

- Angey-Sentuc, Gabrielle and Molho, Je'remie. "A Critical Approach to Soft Power: Grasping Contemporary Turkey's Influence in the World". European Journal of Turkish Studies [online], 21/2015. URL:http://ejts.revues-org/5287.
- Bedford, Sybille(1973). Aldous Huxley: A Biography. Collins: Chatto & Windus Ltd. P. 246.
- Birnbaum, Milton(1974). "Aldous Huxley's Quest for Values: A Study in Religious Syncretism" in *Aldous Huxley: A Collection of Critical Essays*, ed. Robert Kuehn. Englewood Cliffs, NJ: Prentice Hall, Inc. p. 48.
- Coughin, John (1997). "Shadows of an Invisible Man: The Role of Individuality in Invisible Man and Brave New World. URL:http://www.oakland.edu/NScoughli/distopia.hrm. on 3/19/2019.
- Fusanosuke, Natsume(2003). "Japanese Manga: Its Expression and Popularity". URL:http://accu.or.jp . on 3/22/2019.p. 1.
- Goldfarb, Michael (2014). "Soft Power: How American Culture Rules the World". URL:https://www.racounteur.net. on 2/23/2019. P.3.
- Grant, Andrew(2018)." Bollywood? A Brief History of Indian Cinema from 1913 to the Present". URL:http://www.thoughtco.com . on 3/14/2019, p. 1.
- Heiney, Donald W. (1954). *Essentials of Contemporary Literature*. Great Neck: Barron's Educational Series, Inc. p.329.
- Huxley, Aldous (1955). *Brave New World*. Harmondsworth: Penguin Books.p.17. Subsequent references will appear in my text.
- Lawler, Donald (1978). Approaches to Science Fiction .Boston: Houghton Mifflin Company. P. 423.
- Magill, Frank N. (1952). *Masterpieces of World Literature in Digest Form*. New York: Harper and Row Publishers, Inc. p. 80.
- Meckier, Jerome. "Aldous Huxley's Americanization of *Brave New World* typescript- Critical Essays" in Twentieth Century Literature: A Scholarly and Critical Journal. Vol.48, N.4 (Winter 2002) p. 427-460.
 - ."A Neglected Huxley Preface: His Earliest Synopsis of *Brave New World*" in Twentieth Century Literature: A Scholarly and Critical Journal. Vol. 25, No.1 (Spring1979) p. 1-20.
- Needham, Joseph (1975). "Biology and Mr. Huxley" in *Aldous Huxley: The Critical Heritage*, ed. Donald Watt. London: Rout ledge and Keg an Paul.p.203.



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

- Patalakh, Artem (2016). "Assessment of Soft Power Strategies: Towards an Aggregative Analytical Model for Country-Focused Case Study Research" in Croatian International Relations Review. Vol.XXII. N.76 .p. 85-112.
- Peters, Jessica J. (2015). "American Cinema as Cultural Diplomacy: Seeking International Understanding One Film at a Time. UCLA Electronic Theses and Dissertations.

 URL:http://www.escholarship.org. p.1.
- Priest, Christopher (1968). "British Science Fiction" in *Science Fiction: A Critical Guide*, ed. Patrick Parrinder. London. Longman. P.187.
- Rolo, Charles (1950). "Introduction" in *Brave New World* . New York: Harper & Brothers Publishers. pp. VII, XII.
 - (1975). "Review in Atlantic Monthly" in Aldous Huxley: The Critical Heritage. p.371.
- Rose, Mark(1976).. "Introduction" in Science Fiction: A Collection of Critical Essays. pp. 2, 7.
- Sanders, Andrew (1994). *The Short Oxford History of English Literature*. Oxford: Oxford University Press. p. 553.
- Sanders, Scott(1979). "Characterization in Science Fiction: The Disappearance of Character" in *Science Fiction: A Critical Guide*. pp. 131,132.
- Spenser, Mark(1983). "Introduction" in Brave New World. Longman: Longman Studies. P. XI.
- Suvin, Darko (1976). "On the Poetics of the Science Fiction Genre" in *Science Fiction: A Collection of Critical Essays*. pp.61,62.
- Swingewood, Alan(1975). The Novel and Revolution. London: Macmillan Press, Ltd. pp.142,160,163.
- Watts, Harold H. (1969). Aldous Huxley. Boston: Twayne Publishers, Inc. pp. 76,77.
- West, Rebecca(1975). "Aldous Huxley on Man's Appalling Future" in *Aldous Huxley: The Critical Heritage*. pp.198,199.
- Woodman, Tom (1968). "Science Fiction, Religion, and Transcendence" in *Science Fiction: A Critical Guide*. pp. 114,117.
- Yongjie, Li(2015). "Academics Explore Sci-fi's Soft Power Potential" in E-paper.
- URL:http://www.csstoday.com. p.2.



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

التطور التكنولوجي و الخيال العلمي كقوى ناعمة في التحكم بالبشر رواية " عالم جديد شجاع" للروائي ألدوس هكسلي انموذجاً

أ.م أسيل هاتف جسام كلية الآداب/ الجامعة المستنصرية أ.م هديل هاتف جسام كلية التربية للعلوم الانسانية/ جامعة ديالي

الملخص: يناقش البحث أهمية الخيال العلمي كنوع أدبي جاذب ومؤثر، وكقوة ناعمة تستقطب وتنمي خيال وعقلية القرّاء وتُعزز من رغبة الجمهور في حضور دور العرض السينمائي لكونه فنا أدبياً يتناول صور وأحداث خيالية ومستقبلية يَصعب حدوثها إلّا انّها وبمرور الزمن أصبحت واقعا ملموساً يَعيشه الجميع.

أدى اندلاع الثورة الصناعية (1760-1840) الى ظهور انواع أدبية عديدة من بينها روايات الخيال العلمي و الرواية الطليعية. عكست هذه الانواع تناقضات وثنائية الفكر للمجتمعات الحديثة لذلك صَور كُتّاب الخيال العلمي العالم على إنه المدينة الفاضلة (اليوتوبيا) والتي تُحقق لسكانها السعادة وكل ما يبغونه ويطمحون إليه او على إنه المدينة الفاسدة (الديستوبيا) والتي تحمل في ثناياها جميع أشكال الشر.

ساهم صنّناع الأفلام في تجسيد قوة وعظمة بعض البلدان الصناعية المتقدمة تكنولوجيا باستخدام هذا النوع الأدبي ،وقد ذهب البعض الى التحذير منه و البعض الأخر الى تمجيد هذا التغيّر التكنولوجي والمعرفي .

ساعد ظهور هذا النوع الأدبي وعرضه في دور العرض السينمائية في نهضة بعض المجتمعات وذلك لارتفاع منسوب رأس المال وبالتالي تمكنها من فرض سيطرتها المطلقة على بلدان آخرى وعلى مختلف الأصعدة, فعلى سبيل المثال إنّ التقدم التكنولوجي لأمريكا ساعدها في امتلاك قوة ناعمة تتمثل بتمكنها من فرض سيطرتها عسكريا على بلدان فقيرة عن طريق انتاجها لأسلحة متطورة مستوحاة من أفلام الخيال العلمي .

يهدف البحث الى تعريف الخيال العلمي كنوع أدبي وبيان مدى إرتباط الصناعة السينمائية لأفلام الخيال العلمي بمفهوم القوة الناعمة وهو مصطلح ذكي صكه جوزف ناي وهو عالم أمريكي في مجال العلوم السياسية ليشتمل على جميع المقومات الثقافية والحضارية التي على الدولة استخدامها لتحقيق المنفعة، وللتأثير على الدول الأخرى بدون الحاجة الى إستحدام قوتها الصلبة _ العسكرية والمادية والتي يُصعب إستخدامها في جميع الاوقات بالرغم من توفر مقوماتها .

يكشف البحث عن إحتفاء بعض كُتاب الخيال العلمي بالتطور والتغيّر التكنولوجي في حين عَمد البعض في رسم صور مُدهشة و مُرعبة لعالم متطور يَتقُرز منه القارئ والكاتب في ذات الوقت.



American Research Foundation

شبكة المؤتمرات العربية

http://arab.kmshare.net/

ISSN 2476-017X

Available online at http://proceedings.sriweb.org

تناولت الباحثة رواية " عالم جديد شجاع "(1932) للروائي ألدوس هكسلي لتوضيح الأثر السلبي للعلوم وكيف اصبحت وسيلة لهدم الكثير من القيم الانسانية لاسيّما في البلدان المُتقدمة و أولها أمريكا إذ اشار هكسلي في روايته هذه الى إمكانية الاستغناء عن الزواج وتكوين الاجنة في القوارير بطريقة عِلمية بدلاً عن تكوينها في الأرحام و بالتالي الى إمكانية إحكام السيطرة على الأجنة بوسيلة تضمن إمتثال الأفراد لنظام حكم مثالي .