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Science Fiction in the Arab World: A Genre Still in the Cradle

Abstract

This paper is concerned with the status of science fiction literature in the Arab world; it seeks to examine the major causes and factors that have led the Arab countries to lag far behind the developed nations in the field of science fiction which has gained in the last few decades enormous popularity, and enjoys today a highly respectable academic status in the West with extraordinary amounts of books published in fiction, criticism, anthologies and even encyclopaedias. The paper examines the various conditions of life in the Arab societies related to politics, economy, science and technology, religion and language that have greatly contributed to the lack of interest in science fiction and the rareness of works in this field. After providing various definitions of science fiction, its constituting elements and its basic characteristics, the study also explores the different works of Arabic science fiction written in both earlier times and the modern period, and traces the attempts launched in the last few years to promote and develop science fiction writing in the Arab world.

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ملخص

يتناول هذا البحث وضعية أدب الخيال العلمي في العالم العربي بحيث يسعى إلى دراسة وتحليل العوامل والأسباب التي أدت إلى تخلف الدول العربية مقارنة بنظيرتها المتقدمة في مجال أدب الخيال العلمي الذي اكتسح العالم وأصبح يتمتع بمكانة أكاديمية مميزة في الدول الغربية بفضل كمية الإنتاج الإبداعي الهائلة سواء في مجال القصة، النقد أو الانطولوجيا. فالمقال يغوص في تحليل مختلف ظروف الحياة في المجتمعات العربية السياسية منها والاقتصادية

Introduction

It is an indisputable fact that there is no branch in literature as dynamic and as diversified as science fiction. Although science fiction as an autonomous literary genre and a highly popular and fashionable art form is a twentieth-century creation, it has been granted a prominent position within the literary sphere, and it is now generally recognized as an established literary form with its own history, traditions, and conventions. Since the founding of the genre in the beginning of the twentieth century in the United States, science fiction has always been identified as a Western phenomenon, and more particularly an American one, spreading to almost every part in the world including Europe, its earlier place of origin, Canada, Australia, and even South-

والدينية وخاصة العلمية واللغوية التي أدت إلى انعدام الاهتمام بهذا اللون الأدبي وقلة إنتاجه في العالم العربي. فبعد تعريف لأدب الخيال العلمي وذكر لأهم خصائصه تقوم الدراسة بحصر مختلف الكتابات العربية في هذا المجال منذ العصور القديمة إلى الوقت الحاضر كما ترصد محاولات بعض الاختصاصيين العرب للنهوض بأدب الخيال العلمي العربي و تطويره.

East Asia (Japan), but not to the Arab world where there is almost a complete lack of the notions of speculation and futureness in Arabic literature. Many critics and academics both inside and outside the Arab world have arguably observed the lack of awareness of science fiction and the lack of interest in a literary genre that expresses faith in science and reason and represents the power of knowledge in changing human conditions. The causes of such an absence are manifold, and they are essentially related to various conditions in the Arab world and the characteristics of its culture. Prior to the exploration of the factors that have made the Arab world lag far behind the rest of the world in developing an interest in science fiction and writing futuristic and speculative literature, it is mostly convenient to define science fiction genre and its basic characteristics with a brief overview of the history of the genre and its greatest and most prominent practitioners.

1. Science Fiction: A Literary Genre of the Future

Science fiction is at the intersection of various fields and it is generally regarded as a multidisciplinary branch of literature that draws on popular culture and engages in speculation about science, history, and the conditions of man's life on earth, his ability to master his own environment and his place in the cosmos. Being so diverse, science fiction is characteristically problematic in the sense that all discussions of the genre begin with definitions, and there is actually little consensus of definition among science fiction scholars and academics. Science fiction proper requires a consciousness of the scientific outlook and a sense of the possibilities of change, whether social or technological, which are considered the basic elements of science fiction tradition. However, the labelling as science fiction of any earlier story written before the twentieth century and implicitly identified as models for science fiction has been a subject of controversy for there has always been much dispute over what science fiction looks like in the centre. Although there really little hope that a workable definition of science fiction will ever be established, science fiction critics and historians have arguably attempted to provide one that might embody its specific characteristics and its distinguished particularity. Hugo Gernsback, an American science fiction magazine editor and the first who gave the genre its name, provided the following definition: "By 'scientifiction' I mean the Jules Verne, H. G. Wells, and Edgar Allan Poe type of story –a charming romance intermingled with scientific fact and prophetic vision" (in Fiedler 1975:11). Similarly, American science fiction writer Robert Heinlein suggests that science fiction is "realistic speculation about possible future events, based solidly on adequate knowledge of the real world, past and present, and on a thorough understanding of the nature and significance of the scientific method" (in Parrinder 1981: 16). While Gernsback and Heinlein's definitions stress scientific fact and method as the guiding force in the plot of science fiction stories with the vision of futuristic developments, science fiction critic James Gunn extends the

concern of science fiction to the explorations of the conditions of human life through time and space in the light of the scientific and technological developments. He asserts that,

> *Science fiction is the branch Science fiction is the branch of literature that deals with the effects of change on people in the real world as it can be projected into the past, the future, or to distant places. It often concerns itself with scientific or technological change and it usually involves matters whose importance is greater than the individual or the community; often the civilization or the race itself is in danger (Gunn 1982: 16)*

Many further science fiction researchers have attempted to generate definitions that would assimilate any earlier eligible work, and for this purpose they have preferred the term "speculative fiction" which is identified by Judith Merril as

> *Stories whose objective is to explore, to discover, to learn, by means of projection, extrapolation, analogue, something about the nature of the universe, of man, or reality... I use the term 'speculative fiction' here specifically to describe the mode which makes use of the traditional 'scientific method' (observation, hypothesis, experiment) to examine some postulated approximation of reality, by introducing a given set of changes –imaginary or inventive- into the common background of known facts (in Clute and Nicholls 1999: 312)*

The emphasis in Merril's definition on extrapolation is rather wider than the concentration on science itself, and this includes all kinds of stories that depict any form of change by creating environments in which the imaginary and the inventive are mingled together.

Although the focus in all definitions falls on the presence of science as a necessary part of the fiction and as the essential agent of change in the life of humanity and the universe, the element of science is not the whole bulk of science fiction writing for we are faced with a heterogeneous genre that combines multiple elements ranging from the real to the purely unreal and imaginary. In fact, science fiction overlaps with many other genres that constitute its historical origin so that all modern science fiction critics and historians have tended to select one or more generic models as central to science fiction. In their critical discussions of the genre's history, science fiction critics have identified as models the melodramatic adventure, the fantastic voyage (travel tale), the gothic novel, and utopia and dystopia. Being the first to provide a critical theory of science fiction and to establish the genre as a self-conscious modern literary genre, Hugo Gernsback was also the first to accept all those earlier genres of fiction as appropriate generic models in his attempt to identify a genre that provides entertainment, education, and scientific ideas. Mark Rose explains the process of generating a new form of fiction by stating that, "any genre appears to develop first by combining and transforming earlier forms... and later a generically self-conscious phase occurs, one in which texts are based on the now explicit form" (Rose 1981: 10).

One of the basic sources from which much of science fiction body has drawn a lot of elements is the literary tradition of fantasy which appears repeatedly in various definitions of the genre. In spite of the fact that fantasy is the fiction of the unreal and the supernatural that could not happen in reality, and does not offer a logical and rational explanation of its happenings such as the existence of supernatural creatures – monsters, demons, dragons- and the impact of some strange elements upon our world, fantasy has always been part of science fiction. Indeed, science fiction writers often tend to provide scientific treatment by shifting from a supernatural mode of presentation to a rational scientific explanation in terms of conventionally formulated natural law or hypothesised laws of the universe. In his definition of the genre science fiction, David Pringle stresses the fantastic by stating that, "science fiction is a form of fantastic fiction which exploits the imaginative perspectives of modern science" (Pringle 1984: 9). Accordingly, science fiction is not pure fantasy but rather a logical and scientific treatment and rendering of the fantastic in the light of the scientific and technological progress of the modern world. It presents its worlds as possible even when they plainly are not, and through the text the writer asks the reader to pretend and accept these world and the happenings described, whether in the past or in the future, to be true. In fact, the sense of wonder is characteristically the emotional heart of science fiction which relies basically on the creation of new inventions or new situations and the description of new phenomena whether natural or technological. The creation of technologically advanced space stations, rocketships, and sophisticated weapons, or the arrival in a new place and the contact with aliens and bizarre creatures are some of the props that continue to power science fiction. In this respect, Kathryn Cramer argues that,

> *Writing stories within the rules of the universe as we know it and yet discovering fantastic possibilities of new ways of life is the central endeavour of the science fiction writer. Physical law tells us that many things are impossible given existing technology, but the ever-expanding frontier of scientific knowledge shows us how to do many things of which we would never have dreamed (Cramer 1994:81)*

Actually what science fiction tries to evoke is challenging our sense of the stability of reality by insisting that things may be and the will be different, that the future will not be like the present, and that change is the only constant rule. Practically, it is from the history of science fiction that we are convinced we are now living in the world of the future described by the genre science fiction of the 1930's, 1940's and 1950's – a world of technologies and sciences so increasingly complex and steeped in specialised diction and jargon that fewer people could grasp and understand. Space travel, human-machine hybrids, artificial intelligence, genetic transformation, mechanised life are but a few of the dizzying inventions and achievements that many science fiction readers of the past decades thought were mere fantasy. And although some kind of science fiction flagrantly violates scientific rules and has very little to do with scientific fact and theory, it still keeps those virtues of experimentation and speculation that it derives from its unique relationship with science. American writer and critic Edgar Fawcett firmly claims that,

> *To make our romances acceptable with the world of modern readers, we must clothe them in rationalistic raiment... They may be as wonderful as you will, but they must not touch on the mere flimsiness of miracle. They can be excessively improbable, but their improbability must be based upon scientific fact, and not upon the fantastic, emotional and purely imaginative groundwork (in Parrinder 1979: 69)*

Therefore, science fiction stands distinctively as the fiction of the world of the future for its speculative nature, its sense of the fluidity of the future, and the excitement of our scientific attempts to understand our universe involving all kinds of scientific and technological inventions and discoveries.

On the other hand, the complexity of science fiction does not only lie in its definition, but also in its various categories or sub-genres that have come to exist along with the extraordinary progress in scientific and technological research and knowledge and through its different historical stages of development. Two major categories can be identified: hard science fiction and soft science fiction. The former is more concerned with hard sciences that constitute its backbone such as physics, astronomy, computer science, robotics and biological sciences, and these are employed in the treatment of a variety of themes that include space opera (galactic wars and conflicts), space and time travel, apocalypse, and cyberpunk (depicting future computerised societies). Soft science fiction, in contrast, is included in the genre terminology to apply to works that deal with themes related to soft sciences and concerned with human societies and affairs that require neither technological hardware nor physical laws in their treatment. Most soft science fiction writers take common themes in hard science fiction like space travel, alien encounter and cyberpunk to evoke the social and psychological changes caused by the scientific and technological progress in the modern world. Soft sciences comprise such sciences as sociology, anthropology, psychology, and politics although 'hard' scientists often tend to despise these fields for their lack of rigorous accuracy and the difficulty they face in applying scientific principles and in predicting objective recognisable results. Whatever its nature, science fiction is generally recognised as the field which explores subjects and themes that include future histories and societies either better or worse than our own, travel through space and time, life on other planets, crises created by technology or by alien creatures and environments, the destruction of worlds sometimes with extreme and lurid imagery, and the use of science and scientific knowledge to increase plausibility and to predict or prophesy.

The richness and diversity of science fiction have certainly been acquired through a long historical process of development, and the genre has not come as a mere accident of circumstance. Historically, science fiction grew from the merging of many distinct genres from utopia and the gothic to fantasy and space adventure, and it did not finally take shape until the late 19th century and the beginning of the 20th century. In their attempts to situate the historical origins of the genre in earlier traditions of literature, science fiction critics and historians have brought into the light a great number of works that display some form of scientific speculation and extrapolation that have come to be recognised today as fundamental traits of modern science fiction. Although the story of *True History* by the Greek-speaking Syrian writer of the second century

AD Lucian de Samosata about travelling to outer space was considered the earliest text that could be called science fiction, a cognitive scientific way of viewing the world did not emerge until the 17th and 18th centuries with the advent of rational philosophies, political revolutions, and the awareness of the importance of science in the life of humanity and in the understanding of the universe. Such works as *Utopia* (1515) by Thomas More, *New Atlantis* (1627) by the English Francis Bacon, *Somnium* (1634) by the German Johannes Kepler,, *The Man in the Moone* (1638) by the English Francis Godwin, *Voyages to the Moon and the Sun* (1656) by the French Cyrano de Bergerac represent the earlier seeds of science fiction that can now unequivocally be located within the literature of scientific imagination though they are identified by critics as proto-science fiction stories for they preceded the creation of the modern genre and they generally lack the required scientific plausibility. Most notable of all is Mary Shelly's story *Frankenstein* (1818) which is claimed by many critics and historians as the first real science fiction work for its use of certain science fiction elements as the mad scientist and the use of technology for purposes beyond the scope of science. In his work *Billion Year Spree*, critic Brian Aldiss claims that *Frankenstein* is "the first seminal work to which the label science fiction can be logically attached" (Aldiss 1973: 126). However, the brand of science fiction proper began really with the three prominent figures Jules Verne, H. G. Wells, and E. A. Poe who are cited as the founders of science fiction tradition in Europe and the United States. The scientific romances of Wells, the adventure stories of Verne, and the short stories with scientific themes of Poe had the greatest influence on American writers of the 19th century such as Fitz-James O'Brien, Edward Bellamy and Nathaniel Hawthorne, and they finally brought about the emergence of modern science fiction as an independent genre separable from mainstream literature.

The first step began in 1926 when Hugo Gernsback founded *Amazing Stories,* the first English-language pulp magazine devoted to science fiction, and gave the genre its name, and soon science fiction magazines in the United States began to invade and encumber the market with new talents, new themes, new techniques, and more popularity among international readership so that science fiction has become part of world culture and thought. Ever since its creation, Science fiction has become an American phenomenon that has boomed through the twentieth century with the deep penetration of science and technology into the fabric of societies, and this has created more interest in that branch of literature which tends to explore the future of humanity and the universe in the light of the huge and extravagant progress in the scientific and technological fields. Much of the genre is written today by Americans or by authors who embrace the American idiom. The names of Isaac Asimov, Robert Heinlein, Arthur C. Clarke, Philip K. Dick, Jack Williamson, Poul Anderson, Ursula Le Guin, A. E van Vogt, Vernor Vinge, William Gibson, and Stephen King are the world famous icons of science fiction whose works have become classics of the new literature with world best-selling ranks.

Moreover, the teaching of science fiction has become of university curricula, and science fiction courses have proliferated, not only in English departments but also in physics, chemistry, sociology, and history. Similarly, science fiction has been offered real invigoration in the field of scholarship with the publication of numerous academic

studies that have witnessed the rise to fame of prominent academic scholars and critics such as Damon Knight, Brian Aldiss, James Blish, John Clute, James Gunn, and Judith Merril who have provided the critical bases and theories and the most advanced analyses of the wide range of science fiction writings. On the other hand, the American cinematographic production of science fiction works has enhanced the popularity and the dominance of science fiction literature which is represented today in all varieties of ordinary and advanced media. Many of the most popular and successful motion pictures have been adapted from the written literature, and these include mainly *War of the Worlds* (2005) and *The Time Machine* (2002) from novels by G. H. Wells, *The Dead Zone* (1983) from a novel by Stephen King, *Blade Runner* (1982) from the novel *Do Androids Dream of Electric Sheep* by Philip K. Dick, *Dune* (1984) from a novel by Frank Herbert, *Jurassic Park* (1993) from a novel by Michael Crichton, *Starship Troopers* (1997) from a novel by Robert Heinlein, *Artificial Intelligence (AI)* (2001) from the story *"Super-Toys Last All Summer Long"* by Brian Aldiss, and *A Scanner Darkly* (2006) from a novel by Philip K. Dick. According to critic James Gunn, "The top ten best-grossing films of all time are mostly science fiction or fantasy... [and] the approximately two thousand books of science fiction and fantasy are published each year" (in James and Mendlesohn eds. 2003: xviii).

2. Arabic Achievements in Science Fiction

2.1. Early Writings

Science fiction in the Arab world is not a modern phenomenon that came into existence only after the creation of the genre in the early twentieth century, but it has ancestral origins in the ancient Arab culture. Arab culture during the Islamic Golden Age was undoubtedly far ahead of Western Europe in science and philosophy, and there are many fantastic motifs with proto-scientific themes in medieval Arabic literature. Several stories within *One Thousand and One Nights* (Standard text 15th century; translated by Sir Richard Burton as *The Arabian Nights* 1885-88) feature some proto-science fiction elements although the work is not Arab in its origin and its stories are imports from India and Persia and they were modified and translated for Arab readers. Stories which feature advanced ancient technologies, lost cities, and ancient civilisations that went astray and the catastrophes which overwhelmed them are classified as earlier examples of Arabic proto-science fiction. For instance, the story of *"The City of Brass"* features an archaeological expedition across the Sahara led by a group of travellers in search of an ancient lost city, "The Ebony Horse" presents a flying mechanical horse that could fly into outer space, and *"The Adventures of Bulukiya"* depicts the protagonist Bulukiya's quest for the herb of immortality which leads him to travel to different worlds in the cosmos including the Garden of Eden and to explore various societies and other forms of life. Other Arabic works of earlier times that touch upon science fiction themes includes Abu Nasr Muhammad Al-Farabi's utopian work *Risala fi mabadi' ahl al madina al-fadila* (first half of 10th century; translated by Richard Walzer as *Al-Farabi on the Perfect State* 1985), Zakariya Ibn Muhammad Al-Qazwini's futuristic tale of *Awaj bin Anfaq* (around 1250) about a man who travelled to Earth from a distant planet, and the Arabic novel *Fadil Ibn Natiq* by the polymath Ibn Al-Nafis (13th century; translated as *Theologus Autodidactus* in the early 20th century). Ibn Al-Nafis's story was regarded as the earliest real model of

Arabic science fiction for its treatment of various science fiction themes as futurology, apocalypse, and resurrection. Ibn Al-Nafis used his own extensive scientific knowledge in anatomy, biology, astronomy, and geology to explain his plot elements, and it is through this novel that he introduced his scientific theory of metabolism and his discovery of the pulmonary circulation of blood to explain bodily resurrection. In contrast to the continuous production of some form of science fiction in Europe, these texts remained rare exceptions in the Arab world and they were written far too early that they were unable to exercise any influence. Surprisingly, no other scientific literary text was ever produced in the Arab world until the second half of the twentieth century.

2.2. Modern and Contemporary Writings

It was not until the 1960's that the first modern Arabic science fiction was written, and Egypt was considered a pioneer and at the vanguard in this field. Although many Arabic writers have flirted with science fiction and a lot of science fiction stories have been published throughout the last five decades, only a handful of authors could be described as science fiction specialists. Most of the authors are mainstream writers and their science fiction stories are usually on a modest scale ranging from 100 to 150 pages long. Arabic literary critics, in the total absence of specialised science fiction critics, nominate Mustafa Mahmud as father of Arabic science fiction with his novels *The Spider* (1964) and *A Man Under Zero* (1967). Like many other Arabic science fiction writers who have written any more than one or two science fiction novels or short stories, Mustafa Mahmud's bibliography of seventy-five books comprises only two science fiction novels. However, Nihad Sharif, who studied history and began writing in 1949, is considered a representative of a disciplined Arabic science fiction writer with his numerous works that include mainly his novels *Ibn al-noujoum* (1997) and *Soukkan al-alam al-tani* (2005), and his collections of stories *Al-masat al-zaytuniyah* (1979) and *Alladhi tahadda al-isar* (1981) which were published in most Arabic newspapers and magazines. Likewise, Muhammad Al-Ashry, a young Egyptian geologist, contributed a great deal to promoting Arabic science fiction by publishing five novels so far including namely *Ghadat al-asatir al-halimah* (1999) , *Halat al-nour* (2002), and *Khayal sakhin* (2008) for which he has been honoured with a number of Arabic literary awards. Even more active is the other Egyptian writer Nabil Farouq who wrote a series of crime and science fiction stories that have made him the most well-known science fiction author in the Arab world. His most outstanding stories began with *"The Prophesy"* (1979) with which he launched the series *Cocktail 2000*, and in 1984 he wrote *"Dead Rays"* with which he began the series *Future File* that employs the elements of parallel worlds and travels through time and space. On the other hand, the first Arabic science fiction novel written by a woman was *The Crime of a World* (1992) by the Egyptian doctor Omayma Khafaji alongside the Kuwaiti female writer Tiba Ahmed Al-Ibrahim who published her science fiction novel *The Multiple Man* in the same year.

Elsewhere in the Arab world and worthy of special mention is the Syrian writer Talib Omran, a doctor in astronomy and head of the Department of Mathematics and Computer Science at the Education Faculty of Al-Rastan in Syria, who is also regarded as a pioneer of Arabic science fiction and who wrote many science fiction novels and short stories as well as a number academic studies with 52 works to date. Among the

most interesting of these are the three collections *Planet of Dreams* (1978), *There are no Poor on the Moon* (1983) and *Secrets of the Town of Wisdom* (1985; translated into English in 1992), and the novels *In Transit Behind the Sun* (1979), *Fountain of Darkness* (1995), and *Beyond the Barrier of Time* (1999). Talib Omran is also the sole Arabic author who wrote a series of theoretical studies of science fiction including *About Science Fiction* (1980) and *About Science and Science Fiction* (1989). Unlike many other Arabic writers of science fiction in Egypt or in other Arab countries, Omran is just a serious and proper science fiction writer whose talent has allowed him to criticise the fellow writers who tend to destroy the genre with illogical and unscientific fantasies. In an interview to the Syrian newspaper Al-Watan, he grumbled about a writer who wrote about a spaceship landing on Jupiter (a planet made of gas), and this, in his view, belongs to the style of Arabian Nights where anything is possible and there are no limits to the imagination (http://www.riyadhmoon.com/vb/showthread.php?t=625).

Various other mainstream writers have written occasional science fiction stories in practically most of the Arab countries, but none of them has been a science fiction specialist and their stories have usually been intermingled with the fantastic and the supernatural. A selective list may include such works as *Short Stories* (1963) by the Syrian Walid Ikhlasi, *The Elixir* (1974) by the Moroccan Mohammad Abdelsalam Al-Baqqali, *The Green Stain* (1984) by the Iraqi Kassem Al-Khattat, and the collection of stories *The Green Planet* (1987) by the other Iraqi Ali Karim Kathem. In the 1990's and since the advent of the Internet, the number of writers taking an interest in science fiction genre grew and numerous names have tried, though without too much success, to break from the traditional mainstream literature by whose standards writers are still measured. The names of such writers as Kassem Kassem in Lebanon, Mustafa Al-Kailani in Tunisia, Lina Kailani in Syria, Abdallah Khalifa in Bahrain, and Ashraf Faqih in Saudi Arabia represent today the new generation that has began taking an interest in science fiction in a hostile environment that lacks the necessary tools and conditions for the development of the genre.

3. Factors Behind the Lagging of Arabic Science Fiction

The factors lying behind the lack of futuristic visions in Arabic literature and the lack of interest in science fiction genre among Arabic writers, readers and academics are manifold, and they are deeply rooted in the Arab-Islamic culture and the general conditions of life in the Arab societies inherently historical and political. Historically, during the European Dark Ages, Arabs and Muslims were in the ascendancy commanding an empire that stretched from India to Spain and leading the world in various fields mainly in science and literature. The glory days of Arab empires are now centuries in the past and the Western world took over the leadership with the Renaissance that paved the way for a new civilisation based on rational thought, science and technology. While the West stepped forward with the philosophical belief in the potential of the mind and the tenacity of humanity that began to find expression in Western culture and literature, Arab culture seemed replete with fantastical anthologies that continued to nurture Arabic literature for centuries. In fact, in the absence of Arab equivalents of Western creative scientists, engineers, and astronauts, it is understandable that Arabs would hark back to the Golden Age looking for inspiring

figures from the past instead of looking forward to a new modern incarnation. Therefore, the focus in modern Arabic literature, though rich in culture, history, characterisation and myth, is actually on classical themes that foster an identity based on charismatic past. Jamil Nasir, an American science fiction writer of Palestinian origin living in the USA, affirms that,

> *Arab culture is a traditional culture and Arabs are very oriented towards the past... There is a real downside to not paying attention to the past, but there is also a downside to being focused too much on the past. I'm not sure it's a very auspicious harbinger for the future... Culturally, Arabs have a lot of anxiety about the future, because they don't see it, the way that Americans are always looking to the future (in Seeley 2008)*

The reason of this orientation is unequivocally the lack of scientific and technological development in the Arab world and the failure to catch up with the huge and dizzying progress that is taking place in the Western world. Most Arab countries have suffered the impact of colonisation, and the emerging political regimes in the newly independent nations have stressed social and political stagnation over the past few decades that so little has changed in the Arab societies and one could think that nothing ever will. All utopian visions of progress and prosperity could not find a fertile ground for development as the traditional clan-based structures derive their sustainability from the preservation of the status-quo, and thus all efforts have paled in the light of power politics and economic interests. Therefore, imagination and scientific creativity are suspended and there is little hope for postulating different worlds in the Arab societies where there is heavy censorship and suffocating conservatism. Regarding these circumstances, science fiction is seen by Arab conservatives as frivolous and immature day dreaming when the hypothetical approaches to living in science fiction literature is viewed as completely detached from what the target audience experiences in reality.

The current difficulties with imagination and futuristic vision in the Arab world stem actually from the poor scientific education and the failure to liberate the students' imagination and to encourage creativity and inquisitiveness. It was not until mid-2005 that Sifat Salama, an Egyptian science fiction scholar living in the United States, came to criticise Arab education systems and called for the integration of science fiction courses at schools and universities in the Arab countries by emphasising that,

> *The importance of the science fiction genre of literature lies in its ability to stimulate the reader's creative phantasy and strengthen his/her ability to envisage imagined scenarios. It is indeed necessary to develop the ability to invent and to develop creative and exceptional children at an early stage, so that our Arab world can receive a generation of inquisitive scientists and academics (in Khammas 2006)*

In fact, in the absence of scientific development and freedom of creativity in the Arab world, increasing numbers of Arab scientists have left their home countries in what is called the brain drain seeking better conditions for scientific research in America and Europe. Ahmed Zewail, a Nobel Prize winner for chemistry, is one of the Arab scientists who succeeded in the West and he published numerous articles in which he highlighted the scientific backwardness in the Arab countries by stating that, "the lack of a solid science and technology base is not always a result of a poor capital or human resources. It sometimes stems from a lack of appreciation of the critical role of science and technology in development" (Zewail 2001: 741). Ahmed Zewail stresses the importance of a science base by arguing that,

> *The foundations of a science base are investment in special education for the gifted, the establishment of centres of excellence, and the chance to apply knowledge in the industrial and economic markets of the country... With such a vision, a scientific culture will emerge... thus scientific thinking becomes essential to the fabric of the society (*Zewail 2001: 741*)*

In the absence of such a vision, stagnation would be the established order hindering scientific progress and the potential for change in traditional societies that cling to a glorious past and avoid dreams for the future. Abdul Rahman Al Rashed, the general manager of Al Arabiya TV, argues that,

Therefore, it is undeniable that scientific education and the encouragement of creativity constitute the basic ingredients that would create an interest in science fiction as a cultural practice in a future-oriented world. Indeed, science and technology have always been the key to progress and have always represented society's investment in its own future. It is this concern about the future that made and still makes science the core and centre of science fiction. Even in its moments of rebellion against science and technology, science fiction has continued to be moulded and shaped by scientific thought and the outspoken support for its values, and more important than detailed correctness is the imaginative debt which science fiction writers owe to scientific outlook with its experimental and rigorous spirit. In addition, the most fascinating aspect in the interaction between science and science fiction is that many of the innovative ideas in science originated not in laboratories but from the minds of imaginative science fiction writers such as rocketships, computers, space travel, and genetic transformation. Science fiction historian and writer James Gunn observes,

> *Many inventions, Buck Rogers's backpack rocket to robots, lasers, computers, have first been described in science fiction. But the literature owes an equal debt to science, from which it drew not only inspiration but many of its ideas (Gunn 2005: 1)*

The absence of a science and technology base in the Arab world explains to a large extent the lack of a futuristic vision in Arabic literature and the lack of interest in among writers, readers, and academics in science fiction genre. The dean of American science fiction Isaac Asimov firmly states that, "True science fiction could not really

exist until people understood the rationalism of science and began to use it with respect in their stories" (http://wapedia.mobi/en/Bangla_science_fiction)

On the other hand, part of the scientific underdevelopment in the Arab world is viewed in the Arabic language that many Arabic intellectuals are persuaded of the limitations of their linguistic tool that fails to absorb and create a vocabulary for contemporary science and technology. Although younger people in all Arab countries are familiar with science fiction films and TV series as *Star Wars*, *Alien*, *Matrix*, and *Blade Runner*, they still have no interest in Arabic-language science fiction stories, and even Arabic science fiction writers are regarded as lacking the scientific qualifications in Arabic language to be the equivalents of Asimov, Heinlein, Clarke, or Stephen King. Science fiction writer Muhammad Al Ashry acknowledges that, "most new technological terms appear as strange and difficult to us, so that we hardly use them" (in Khammas 2006). In this respect, most Arabic science fiction stories written so far lack the new scientific and technological terms and theories in physics, astronomy, biology, and engineering, which need obviously high specialisation and mastery of terminology and which constitute the core and the foundational part of hard science fiction. Arabic language has actually proved so poorly adapted to the new age of science and technology in the light of the scientific underdevelopment and the absence of translations either in the scientific field or in science fiction. The experience of the two Lebanese poets and journalists in Al Nahar newspaper Jumana Haddad and Zayneb Assaf has come to testify the inability of Arabic to embrace the new world of science with its dizzying progress, high specialisation, and extraordinary jargon. The two journalists decided in February 2006 to include science fiction in the literature section of the newspaper and they called on young writers to submit their texts. The call received no response and, in their analysis of the situation, the two journalists came to the conclusion that the main culprit is not the lack of imagination that has always been a guiding and inspirational force in Arabic literature; it is rather the Arabic language that has been kept disconnected from the world of science and technology since all science subjects are taught in the Arab world in English or French and even the translations have showed the difficulty of accepting the new terms in Arabic because they seem, according to Jumana Haddad, so strange and impossible to use (Haddad and Assaf 2006).

In addition, the scientific terminology becomes even more difficult in some new branches of science that have appeared in the West in the last few decades and have been extensively employed in science fiction such as bionics (bionic technology) which refers to the applications of biological systems and methods to the study of engineering systems (used in artificial neural networks, replacement or enhancement of organs by mechanical versions, merging organism and machine in a hybrid system), nanotology which tends to merge disciplines dealing with matter at the micro scale (physics, chemistry, biology) with those dealing with matter at the macro scale (engineering and computer science), and biomechatronics which includes biology, mechanics, and electronics (the goal is to make devices that interact with living organisms). These disciplines remain unknown in the Arab countries and do not even appear as subjects in education at schools and universities and most Arab writers still ignore and cannot afford to use in their writings. German Science fiction expert

Achmad Khammas illustrates the difficulty of translating scientific terminology into Arabic by noting that,

> *Publishers' reluctance to issue translations is quite understandable when we see, for example, that "hard SF" is literally translated as "difficult SF"! Along with the following explanation: that this SF is so "difficult" because it deals with scientific laws and theories of the greatest precision- and therefore requires a high degree of specialisationby the author! Given such circumstances, what publishing house would wish to tackle Banks, Brin or Vinge?! (Khammas 2006)*

More striking, however, in the lack of interest in science fiction in the Arab world is the religious factor that the genre is viewed by Islamic fundamentalists as an extension of a foreign heritage with its roots in Darwinism which is regarded as being at odds with a monotheist world view. In fact, Islamic extremists tend to view science fiction as a challenge to God's will and therefore it is sacrilegious to want to predict, speculate or fantasise about the future which, alongside creation, is in the hands of God alone. One of the Islamic scholars (ulema), Shaykh Muhammad Al Munajjid, has answered a question about reading science fiction on his "fatwa" website "Islam Question and Answer" arguing that,

> *If these stories include lies, such as Darwin's theory (evolution), and other things that are contrary to the facts stated by Islam and the facts of natural science, then the Muslim should avoid them... Many of the movies and novels that are known as "science fiction" include a lot of kufr, such as putting life and death in the hands of some created being, giving creatures the ability to create from nothing, making inanimate things come alive, creating life from a fossil that has been dead for many millennia, or travelling to the future then coming back to the present. All of this is impossible, and no one knows the unseen except Allah. Some people claim that this is just entertainment... but entertainment is not permitted if it is* haraam *(www.islamqa.com)*

Given such oppositions by traditional "ulema", a lot of younger creative talents fear that their work would be misunderstood or taken out of context, and they prefer instead to turn back to a brighter past or to deal with a desolate reality marked essentially by repression under rigid regimes. Yemeni critic Dr Omar Abdelaziz observes in this context that, "A scientific novel which is connected with phantasy cannot fall on fertile ground in an environment of pre-prepared answers and rejection of a culture of knowledge" (in Khammas 2006). In fact, traditional interpretations of Islam seem probably not compatible with the development of science. In recent years, the lagging of the Arab world in science is clearly shown in its disproportionately small scientific

output and scarcity of scientific and engineering research. Against such a background, the paucity of science fiction is hardly surprising.

4. Attempts to Promote Science Fiction Writing in the Arab World

While in the Western world science fiction has gained a respectable and a highly popular status with organised national and international conventions, advanced academic studies and theory, and famous awards (Hugo Award, Nebula Award, the British Science Fiction Association Award...), science fiction in the Arab world is blatantly deprived of all kinds of support and encouragement especially by academics who might be considered guilty of lacking awareness of science fiction and not paying enough attention to this literary genre with its inherently imaginative and subversive potential. In fact, it was not until June 2007 that the first unofficial conference of Arabic science fiction was held in Syria under the title "The Science Fiction of Arab Nations" with the subtitle "Lucian de Samosata", the second century Greek-speaking Syrian writer whose tale *A True Story* was considered one of the early proto-science fiction works. The conference organiser Talib Omran, the Syrian science fiction writer, emphasised the importance of promoting science fiction literature within Arabic culture and he called for the urgent need to recognise the existing Arabic science fiction works, to encourage new creative talents, and to promote academic studies in this field. The participants in the conference, including Nihad Sherif, Tiba Al Ibrahim, and Lina Kailani, discussed the genre's origins in ancient Arabic literature, the problem of terminology, the possibility of translating Arabic science fiction works into English, and the connection between scientific development and science fiction. Mostly important was the announcement in the closing speech of Talib Omran of the idea of organising the first official Arabic science fiction convention to be held in six months time where a charter would be drafted to determine the objectives and the perspectives and to which Western participants would be invited to exchange experiences and to establish bridges with the international science fiction community.

However, the second meeting took much more time to be held, and it was in August 2009 that the Syrian Ministry of Culture in cooperation with the Arab League Educational, Cultural and Scientific Organisation (ALESCO) organised what was agreed upon as the Second Science Fiction Literature Seminar in Damascus (Syria). Surprisingly, the discussions did not bring about concrete decisions but only stressed the importance of science fiction and its role in developing creativity and opening up new horizons. According to the Syrian Arab News Agency report, "Novelist Lina Kailani said that Science fiction literature is one of the most important methods of relaying scientific thinking to younger generations, providing not only possible and known scientific facts, but also what these facts can lead to in the future" (www.sana.syr/eng/). Simultaneously, the ALESCO invited a meeting called "The Meeting of Science Fiction Literature Experts in the Arab World" at ALESCO's headquarters in Tunis in April 2009 and announced several plans for developing and promoting Arabic science fiction. With the participation of prominent Arab science fiction writers and academics, such as Nihad Sherif (Egypt), Talib Omran (Syria), Lina Kailani (Syria), Kassem Kassem (Lebanon), and Kawthar Ayad (Tunisia), the meeting offered the opportunity to present some recommendations that include mainly establishing an Arab association of science fiction writers and supporting translation

from Arabic into English and vice versa in the field of science fiction. In addition, the experts expressed the necessity of including science fiction courses in the curricula at schools and universities, and they discussed the conditions for a prize that the ALESCO intends to launch to encourage young writers in the field. In spite of these attempts that have remained quite limited in time and space and have achieved none of the planned goals, science fiction genre in the Arab world still suffers the lack of seriousness in treatment and the lack of awareness of its importance for younger generations and its role in raising creative writers and scientists.

Conclusion

Finally, it is important to emphasise that the development of science fiction in the Arab world requires primarily the breaking of the barriers to science fiction's acceptance in the Arab societies that are still crippled by economic deprivation, scientific and technological backwardness, fundamentalist ideology, and authoritarian repression. Science fiction in the Western world had built a solid background in popular culture and had gained wide popularity unprecedented in the history of world literature before it actually became a recognised literary genre enjoying a highly respectable academic status. In contrast, the Arab world does not appear to offer the appropriate atmosphere and the fertile ground for the growth and development of the freedom of creativity, not only in the field of science fiction but also in other scientific and cultural activities. Obviously, science fiction should have a solid base in culture and can by no means be a subject imposed by the few practitioners in the Arab world whose writings are still confined to a quite limited readership while the general Arab audience seems not yet ready to accept science fiction as part of Arabic literature and culture. Regarding these circumstances, we can affirm that Arabic science fiction writers have to expect tough times ahead and the war is a long way from being gained.

References

1. Aldiss, Brian. *Billion Year Spree: The True History of Science Fiction*. New York: Schocken, 1973.
2. Aldiss, Brian and David Wingrove. *Trillion Year Spree*. North Yorkshire: House of Stratus Ltd, 2001.
3. Clute, John & Peter Nicholls. *The Encyclopedia of Science Fiction*. London: Orbit, 1999.
4. Cramer, Kathryn & David G. Hartwell eds. *The Ascent of Wonder: The Evolution of Hard Science Fiction*. London: Orbit Book, 1994.
5. Fiedler, Leslie A. *Dreams Awake: A Historical Critical Anthology of Science Fiction*. New York: Dell, 1975.
6. Gunn, James, ed. *The Road to Science Fiction: From Here to Forever*. Vol. 4, Georgia: White Wolf Publishing, 1982.
7. Gunn, James and Robert Bly. *The Science in Science Fiction: 83 Science Fiction Predictions that Became Scientific Reality*. New York: Ben Bella Books, 2005.
8. James, Edward and Farah Mendlesohn eds. *The Cambridge Companion to Science Fiction*. New York: Cambridge University Press, 2003.
9. Parrinder, Patrick. *Science Fiction: Its Criticism and Teaching*. London: Methuen & Co Ltd, 1981.
10. Parrinder, Patrick, ed. *Science Fiction: A Critical Guide*. London: Longman, 1979.

11.Pringle, David. *Science Fiction, The 100 Best Novels: An English Language Selection, 1949-1984*. New York: Carroll and Graf, 1984.
12.Rose, Mark. *Alien Encounters: Anatomy of Science Fiction*. Harvard University Press, 1981.
13.Zewail, Ahmed. *"Science for the Have-Nots"*. Nature, Vol. 410, 12 April 2001, p.741.
14.Al Rashed, Abdul Rahman. *"Learning From Ahmed Zewail"*. Al Sharq Al Awsat, 04 Oct 2005.
15.Haddad, Jumana and Zayneb Assaf. *"Writers Predicted Travelling to the Moon Centuries Before It Happened"*. Al Nahar, 21 Feb 2006. (www.annahar.com).

Websites

- Seeley, Nicholas. *"Transformed Minds: Jamil Nasir Discusses War, Culture, and How our Dreams Determine our Reality"* 17 Mar 2008

(www.strangehorizons.com/2008/20080317/0seeley- a.shtml)

- Khammas, Achmad A. W. "*The Almost Complete Lack of the Element of 'Futureness'*", 2006 (http://www.heise.de/tp/r4/artikel/23/23713/1.html).

- http://www.riyadhmoon.com/vb/showthread.php?t=625

- http://wapedia.mobi/en/Bangla_science_fiction

- http://www.islamqa.com/en/ref/3324/reading%20science%20fiction

- www.sana.syr/eng/

- www.alesco.org.tn