

Science Fiction: How Speculation Changed the World

Introduction

In this essay I will discuss the modern origins of science fiction, some of the most significant and influential texts from the genre and how they have correctly predicted many advances in our current society. I will also discuss how they've changed our technological goals by their predictions and how they've been used as a vehicle for commentary on society and to warn of potential dangers in the future.

Origins of Science Fiction

Trying to determine the first science fiction work proves to be challenging as there is not even a consensus as to the definition of the genre itself. However, I believe the definition from John W. Campbell Jr, writer of 'Who Goes There?' the novella that is the basis for 'The Thing', provides a succinct foundational definition when he said "To be science fiction, not fantasy, an honest effort at prophetic extrapolation from the known must be made." [1].

Pushing forward with this definition the first work of science fiction can be traced to Johannes Kepler with 'Somnium' which was published in 1634, a novel chronicling the journey of a boy and his mother to the moon. Even so science fiction did not reach the wider public in a form recognisable today until the 'Frankenstein' by Mary Shelley, a landmark novel not just in science fiction but modern literature as a whole.

Science fiction has not been limited only to novels however and there have been many significant works in other form of media such as David Bowie's 'The Rise and Fall of Ziggy Stardust and the Spiders from Mars' or the paintings of H.R. Giger. But perhaps the most significant source of science fiction in the modern world is film and TV where adaptations such as 'Blade Runner' and 'The Thing' have introduced new audiences to definitive science fiction works meanwhile original work such as 'Doctor Who' and 'The Matrix' have pushed the genre forward.

Impacts of Science Fiction

Technological

Unsurprisingly, for a genre focused on 'prophetic extrapolation' there are many predictions made in science fiction literature that have come true and others that have been resigned to fiction. But beyond just prediction science fiction has also inspired and directed innovations as such as the mobile phones who's creator Martin Cooper cited 'Star Trek' as having inspired him [3] or remote manipulators, also known as waldos, which were named after Robert A. Heinlein's short story "Waldo" [4]. Chasing the creations of science fiction has led us down many paths such as flying cars

that are hopelessly impractical and never came to fruition but also more impactful ones such as earphones as described in 'Fahrenheit 451' by Ray Bradbury [2]. There is a cyclical relationship between science fiction writers and inventors/innovators, science fiction writers inspire the inventors/innovator to create new devices and in turn these new creations are used as the basis from which science fiction writers extrapolate to create their new worlds.

Societal

An important part of science fiction since its conception has been the use of it as a vehicle for social commentary and satire. In fact, this is almost a prerequisite for a science fiction novel to be considered a noteworthy and held in high esteem. One of the most impactful novels in science fiction is 'Nineteen Eighty-Four' by George Orwell precisely for its commentary on society to which even the plot often takes a backseat. In 'Nineteen Eighty-Four' Orwell describes a totalitarian government which employs mass surveillance on its citizens to control all aspects of their life. 'Nineteen Eighty-Four' has been so impactful that it has introduced many words and phrases into the English language, words such as 'doublethink', 'thoughtcrime' and 'unperson' have become commonplace. So vivid and distressing was the world portrayed by Orwell, that any laws that may inch us towards a future of increased surveillance are argued against by showing that at the bottom of that slippery slope lies the world described in 'Nineteen Eighty-Four'.

Orwell envisaged a world in which access to information was limited by the government, a world in which there was no objective truth no matter how far and widely you sought it, and although this can be seen to have come to pass in nations like China and North Korea. In the western world it seems to me that his former teacher Aldous Huxley may have been more correct in his prediction, in a 'Brave New World'. A 'Brave New World' portrays a future in which information is as widely and easily available as it is today yet the people have been subdued and pacified by the constant bombardment of new information and by short-term pleasures.

Not only can science fiction forewarn us it can also affect the present by portraying a future that is fairer and more equal, to which we should aspire to. Nichelle Nichols had portrayed Lieutenant Uhura in Star Trek and when she had considered departing the show to pursue other dreams she was counselled against this decision by Martin Luther King who imparted to her significance of her role and the empowering impact [5]it would have on black youth at the time. Following this, she shared an on-screen kiss with William Shatner's character 'Captain Kirk', this was at the time thought to be the first interracial kiss on US TV. Despite the expectation of outrage the response was largely positive and this became a landmark point in the series and is sure to have normalised interracial relationships on-screen.

Conclusion

The impact of science fiction is clear to see in the world today from our technology to our ideas to our vocabulary. This has been the result of the genre being so well suited to exploration of worlds diverging from our own allowing for the author to unleash all their creativity, unrestrained by our world. From these alternate worlds we can take caution or inspiration or just pleasure.

References

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