

## Revisiting *The Handmaid's Tale*: Reading the Novel through a Scientific Lens

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**Paper Abstract:**

Atwood's novel *The Handmaid's Tale* (1985) has enabled us to see how science can be used to interpret, analyze and relate to the various aspects highlighted in it. Prompted by the seminal reading of this text by June Deery (1997), this article revisits the scientific approach relating to physics to explore different elements in the novel. The representation of time and its relation to space and matter is explored in a manner that casts new light on the understanding of: how time could actually affect characters' past, present and future; how the effects of the space-time relation could affect one's energy by relating it to the characters' disorientated state of mind; how science makes a connection between nature and male dominance, and the portrayal of women and men based on Newtonian mechanics and quantum physics. From this novel, much can be analyzed and explored using science as an instrument, thus offering many possibilities and a different perspective to readers consider and which revolve around the issue of how men and women are viewed.

**Keywords:** Canadian literature, Newtonian Women, Quantum Men, space, time

## 1. Introduction

First published in 1985 by McClelland and Stewart, Margaret Atwood's novel *The Handmaid's Tale* revolves around a fictional depiction of the Republic of Gilead, a radical, rigid and authoritative government which has overthrown the United States. This novel also revolves around issues of power, women's oppression, and religion being used for political purposes, fertility issues, sexual violence and colonialism. A novel which has been banned in schools, it garnered critical reviews and was made into a movie. Atwood adopted a more scientific approach to constructing this story, making it possible for the reader to view feminism from a more scientific perspective. In general, this paper revisits the seminal paper by June Deery on "Science for Feminists: Margaret Atwood's Body of Knowledge" (1997), which touches on how time and space are interconnected and relate to the representation of men and women (hence the Newtonian and quantum men and women).

First, the concept of time itself is analyzed regarding how it is represented in the story and the use of time as a tool to preserve past memories. Throughout the story, it can be seen that the concept of time is used to demonstrate the changes that have taken place in society whereby a backward shift has occurred, with a modern-day society reverting to a rigid, uptight and religious one. This particular shift in time and space has made a big impact on the whole community in general, not only apply to the lifestyle of the people but also the psychological aspect and gender roles in society. That said, the community of women is the one most affected by this sudden change, as portrayed in the novel. Thus, the concept of space-time is seen as one of the main influences for change in women's mindsets and their present actions. The constant reflections on past memories and privileges lead characters in the story to reflect on their current attitudes towards life, and hence to make certain decisions and also probably use these reflections on the past as their only hope to alleviate their present misery.

The backward change in space-time from a modern to a mediaeval community has also led to a loss of identity and personal freedom for women in the story, which has made a significant impact on their psychological state. As these characters are lost in time, they come face to face with notions of uncertainty and confusion, which leads them to be easily contented, as they are already in despair and have lost all hope due to having to live under such circumstances. Time is also seen as a main factor in determining and influencing the characteristics of the women and men in this story. In this paper, science is used as a tool to represent and analyze gender in relation to the concept of time.

As the story mainly revolves around Gileadean times, the division of labour in that particular period, under rigid governmental rule, has resulted in gender stereotypes. The Gileadean government, which echoes mediaeval times, has created a platform whereby men are placed high in the hierarchy of society and women are treated as mere objects to observe. It is understood that women can be treated and examined in a particular way by men at that particular time, under such rule. As for traditional gender roles, men in the story are perceived as stronger than women, and thus they are given higher positions in society. Meanwhile, women are portrayed as taking on a more liquid form, as they can easily be manipulated and changed according to circumstances. This is understandable as most of the women in the story hold no significant position in society. Most of

them are used either for childbearing purposes or as servants in different households. In comparison to pre-Gileadean times, which mirror modern-day communities, the gap between the two gender roles is not as evident, as at that time women work for their living and do not depend on men entirely for their livelihood. As such, the discussion in this paper aims to analyze the representation of space-time in the novel, the relationship between the concept of space-time and women's mindsets, and their actions and the influence of space-time on the representation of men and women under Gileadean rule through a scientific lens.

## 2. Representation of time

In the *Handmaid's Tale*, throughout the story, the concept of time is shown to demonstrate the past, the present and the future; as in Newton's world, time is viewed in a linear way, past, present and future all are separate though causally related. According to June Deery (1997), "Scientists, like historians, shape and measure time for human purposes: In other words, science is another way to give time meaning" (481). Science is portrayed as a masculine theory. It goes hand in hand with the nature of male dominance, as males are seen to exert authority and dominance over things they can control. Science also tries to apply meaning to everything, and this is the same for the definition of time as well. The concept of time as we see it is thus measured and designed for the convenience of humans, and science is used as a tool to measure time. For many centuries, since the beginning of evolution, the human species has been constantly trying to figure out methods to define the concept of time and its relation to space and matter.

Humans have been determined to decide how they should measure the beginning, middle and end points. For people in the past, they were interested in knowing when summer would come, when the next harvest period would be and when winter would end. They were curious the sequence and duration of events and how they should be measured, thus instruments are invented to fix and give meaning to time. In ancient times, people relied on such factors as the sun, the moon and the stars, and the movement of planets to keep track of time. However, as time evolved and history progressed, other more reliable instruments, such as watches, clocks and calendars, were invented by scientists to define time. Despite all these instruments and methods for measuring time, humans are still not able to define its meaning. Hence, as we can see, time is actually very subjective. Nobody can offer a definite meaning of time. This question has been left unanswered for many years, and even now people struggle to express and understand time:

The bell that measures times is ringing. Time here is measured by bells,  
as once in nunneries. (Atwood, 1985: 8)

Time, as portrayed in Atwood's novel, is given meaning by the citizens of the Republic of Gilead. Through the centuries, humans have tried to apply order to time, even until this very day; hence the clock, or bell, was created by humans symbolise how humans perceive time:

There is the same absence of people, the same air of being asleep.  
The street is almost like a museum, or a street in a model town  
constructed to show the way people used to live. As in those  
pictures, those museums, those model towns, there are no children.  
(Atwood, 1985: 23)

In Atwood's novel, Deery also asserts that "both art and technology are employed to try to fix or stretch time: Museums, photographs and monuments are all seen as devices to halt its movement" (1997: 481). As shown here, the narrator describes the situation of the street, comparing it to the olden days, as seen in pictures, whereby change has occurred and whatever existed before is considered as being from the past or already part of history. Again, this reinforces the notion that time is very subjective. For example, the picture as seen by the narrator does not literally stop time. It is again up to the narrator as to how she perceives time or the past in relation to whatever is currently happening in her country.

## 2.1 Representation of Space-Time

In the *Handmaid's Tale*, the author divides her novel into sections, in the past and the present, in the Gileadean period. The novel ends with a representation of the future, whereby a professor is giving a lecture to a class of students in the year 2195. The author also allows her readers to travel back in time, with various flashback scenes, especially when the protagonist, Offred, recalls events in the pre-Gileadean world; just as in Newton's world, time is viewed in a linear way, past, present and future are all separated though causally related:

Or in a park somewhere, with my mother. How old was I? It was cold, our breaths came out in front of us, there were no leaves on the trees; grey sky, two ducks in the pond, disconsolate. Bread crumbs under my fingers, in my pocket. That's it: she said we were going to feed the ducks.  
(Atwood, 1985: 38)

As this paragraph shows, Offred reminisces about her days as a child with her mother. She often retreats into her room, and usually, at night-time, recalls whatever is left of her memories of pre-Gileadean times, when she was still with her best friend Moira, her partner, her daughter and her mother. It is memories like these which have kept her alive and kept her going while stuck under the rigid rule of the Gileadean world. Atwood also demonstrates the concept of space-time through the mentality and psychological state of her characters and the setting of the story. Certain characters, like Offred and Moira, are depicted as being disoriented within the concept of space-time. The Republic of Gilead itself is portrayed as a government which rules in a backward way, instead of moving forward and evolving with space and time. And as such, the citizens of the country are obliged to move backwards under the rigid and authoritative rule of the government. Moira, for example, is shown to be living during Gileadean times, yet her mentality and perception of time are from the pre-Gileadean world. Portrayed as a lesbian, she is a very modern and rebellious character. Often saying and doing things deemed to be controversial, she is never afraid to stand up for herself and is brave enough to face up to the odds and fight for her own freedom.

## 2.2 The Reconstruction of Self Based on the Past

In the novel, the author closely inspects how actions in the past affect the present. Deery posits that "Atwood's predominant interest is her characters' reconstructions of the past in the light of the present and their coming to understand the past's effect on their present selves" (1997: 478). For example, the characters in the novel are portrayed as taking their previous freedom for granted

during pre-Gileadean times. Previously easily accessible items, such as lotions, magazines and cigarettes, which were taken for granted, are banned by the Gileadean government, and so, many characters, including Offred and the Commander, now long for these privileges in the Republic of Gilead.

Staring at the magazine, as he dangled it before me like fish bait, I wanted it. I wanted it with a force that made the ends of my fingers ache. At the same time I saw this longing of mine as trivial and absurd, because I'd taken such magazines lightly enough once. (Atwood, 1985: 156)

Hand lotion, I said. Or face lotion. Our skin gets very dry. For some reason I said our instead of my. I would have liked to ask also for some bath oil, in those little coloured globules you used to be able to get, that were so much like magic to me when they existed in the round glass bowl in my mother's bathroom at home. (Atwood, 1985: 158)

Handmaids are also shown to sneak in and use butter to replace lotions, as these can now only be used by the wife of the Commander. Even the Commander himself is shown to have kept copies of old fashion magazines and made visits to an underground club, even under the rule of the rigid government. Apart from that, Offred constantly reminisces about the days when she and her husband Luke were living together. She realizes that she often took for granted the little details about Luke that she now longs for. Another instance that reflects how actions from the past affect the present is when Offred obeys orders given by the wife of the Commander to copulate with the driver, Nick. She agrees with this plan, as she is aware that the Commander's wife has updates and news about her long-lost daughter. Desperately longing to seek her daughter again, she has no choice but to obey the order, even though it means risking her life and her dignity.

### **2.3 The Effect of Space-Time formation on Energy**

As explained earlier, the concept of space-time formation also affects the energy of the characters. With the characters living in such a disorientated state, it is no wonder that their mentality is affected and thus reflected in their actions. As explained by Atwood herself, "You can only indulge in the luxury of finding yourself when you're oriented in space and time" (Deery, 1997: 480). It is very evident that the Republic of Gilead lacks such orientation, as it has a traditional and old-fashioned government which is running in a modern time frame. The main character, Offred, is seen to be struggling with her self-identity. She resists Gilead inwardly, however she is not brave enough to make a move or even plan her own escape, unlike Moira. And at one point, Offred even feels that life in Gilead could be bearable with the existence of Nick. Another instance, which shows disorientation, can be seen in the character of Moira. Moira, an independent and rebellious character who embodies female resistance to the rule of Gilead, is depicted at the end to be working as a prostitute in Jezebel. Being a lesbian, she has always rejected sexual interactions between a male and a female, however it seems that in the end she resigned to her fate and accepts the brutal reality that being a prostitute is the only freedom of choice she has while in the country. With the constant

struggle of living in a disorientated state, characters like Offred and Moira do not have the luxury of looking back to the past to figure out their self-identity and future self, thus leading them to confusion over their own 'self'.

### 3. Women as an Object of Observation in Science

Science has always been an area in which scientists try to dominate or attach a meaning to everything they explore and experiment with. For example, they try to understand Mother Nature but at the same time to control it as well. As such, science can represent or symbolize male dominance, meanwhile Mother Nature represents femininity. Atwood's *The Handmaid Tale* may be seen as utilizing this concept to explain the workings of patriarchy and colonialism. Women in the Gilead period are subjected to strict observation, no matter where they go. They are observed with the excuse of keeping them safe and protecting them from any form of rape or harassment. This observation is not confined to males observing females. Women are also observed by their own kind as well – aunts and Marthas are assigned to observe every move of the handmaids. Women in the Republic of Gilead only serve childbearing purposes and have no control over their own bodies. Their sexuality and bodies are basically used as political instruments by the government in order to have control over reproduction. Women are merely treated as ovaries and wombs, whereby they are only useful if they are fertile enough to bear children for the Commander. Besides, they are also examined like objects by doctors and harassed and molested by these so-called "professionals":

The sheet is lifted from my skin, a draft pimples me. A cold finger, rubber-clad and jellied, slides into me, I am poked and prodded. (Atwood, 1985: 60)

In addition to being examined by doctors, women are also talked into having sex with them (the doctors) under the pretext of helping them to bear children for their Commander. These doctors merely use women as sex objects to satisfy their own selfish needs. Hence, it is clearly seen that women are doubly colonized, under the rigid rule of the government and by the men.

#### 3.1 Characteristics of Quantum Women and Newtonian Men

In general, quantum physics and Newtonian mechanics involve study of the behaviour of matter and energy at the molecular, atomic, nuclear and even smaller microscopic levels (Weisskopf, 1980; Birkhoff, 1936). It is possible to characterise men and women in terms of their behaviour and energy too. Women in this novel are depicted as unpredictable characters, who take on different forms. As Deery explains, "Atwood's heroines experience the world of quantum mechanics. Most of them are unknown, protean, inscrutable, treacherous – even to themselves" (1997: 474). Women, like liquids, can take in different forms in terms of their name, identity, background and whom they are essentially. Thus they are easily manipulated, just as a liquid form can easily be changed. Water is a very good example of how a change in form can easily take place. When water is heated up, it changes state and evaporates into steam or gas; meanwhile, when the temperature is lowered, water then takes on a solid form and turns into ice.

These processes explain very well how the characters of the women in the story are different in terms of their background and identity. No two women act in the same way. Serena Joy, a gospel singer who has been advocating traditional values and the establishment of a Gileadean state, is a



slick and manipulative woman. Being stuck in an unhappy and childless marriage with the Commander, Serena misuses her power to oppress and exploit Offred in order to have a child. Another example is the characters Offred and Moira. They are about the same age and come from a more or less similar background, but when they are put in the same situation, they act differently and take on different forms. Offred, for one, submits to the rule of Gilead and stays, meanwhile Moira rebels and escapes as she cannot bear to be confined by the strict rule of the government and society.

In contrast to the quantum women, the male characters in the novel are depicted as predictable, reliable and ignorant. Deery states that “some of [Atwood’s] men’s solidity and predictability can be attributed to their inability to perceive others well. She [Atwood] portrays most men as being wrapped in unawareness and ignorance” (1997: 474). If women are represented as liquid, which can easily take on different forms, men are symbolized in solid form. They embrace rock-like characteristics, and hence they represent solidity and reliability, they are Newtonian men. The Commander himself is represented as a reliable figure in the country and in the household. Being in charge of the country’s security, he is portrayed as a man of importance, both in the community and in the household. However, he is ignorant and seems unaware of what is happening to the women outside.

“Why? he asked, as if he really didn’t know. Maybe he didn’t. It wasn’t the first time he gave evidence of being truly ignorant of the real conditions under which we lived. (Atwood, 1985: 159)

The Commander is also portrayed as being someone who is insensitive and ignorant of how his actions can affect Offred. For example, he tries to touch Offred in the presence of Serena while having sex with her during the usual ceremony. He is both insensitive to Serena’s feelings and also ignorant of the effect it would have on Offred if he were to feel emotions for her during sexual intercourse. Another example of a reliable male character in the story is Nick, who is portrayed as a source of emotional reliability for Offred. Many times, Offred depends and relies on Nick for support or whenever she needs someone to confide in. However, Nick is also shown to be an ignorant character. Despite being the Commander’s chauffeur, he goes on to have an affair with Offred, and even plans and arranges her escape.

#### **4. Conclusion**

Atwood’s novel shows us how science can be used to interpret, analyze and relate to the various aspects highlighted in it. A scientific approach relating to physics is utilised to explore different elements in the novel. From a scientific perspective, the representation of time and its relation to space and matter are explored in a way that casts new light on our understanding of how time can affect characters’ past, present and future. Besides, we also see how the effects of space-time formation can affect one’s energy by relating it to the characters’ disorientated state of mind. Science is also used to make a connection between nature and male dominance, thus the aspect of scientific imperialism over women is brought out and analyzed. In addition, the characters of women and men are also examined and compared using explanations based on scientific principles – Newtonian mechanics and quantum physics. Throughout this novel, much is analyzed and

explored making use of science as an instrument, and hence offering many possibilities and a different perspective for the readers to consider in this novel, which revolves around the issue of how women and men are viewed.

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