# T. C. KOCAELİ ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ BATI DİLLERİ VE EDEBİYATLARI ANABİLİM DALI İNGİLİZ DİLİ VE EDEBİYATI PROGRAMI

# AN ANALYSIS OF VIRGINIA WOOLF'S *MRS. DALLOWAY* AND *THE WAVES* IN THE LIGHT OF ALBERT EINSTEIN'S THEORY OF RELATIVITY

# YÜKSEK LİSANS TEZİ

Derya İŞIK

KOCAELİ 2021

# T. C. KOCAELİ ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ BATI DİLLERİ VE EDEBİYATLARI ANABİLİM DALI İNGİLİZ DİLİ VE EDEBİYATI PROGRAMI

### AN ANALYSIS OF VIRGINIA WOOLF'S MRS. DALLOWAY AND THE WAVES IN THE LIGHT OF ALBERT EINSTEIN'S THEORY OF RELATIVITY

YÜKSEK LİSANS TEZİ

Derya İŞIK

Doç. Dr. Berna KÖSEOĞLU

Tezin Kabul Edildiği Enstitü Yönetim Kurulu Karar ve No: 09.06.2021/13

KOCAELİ 2021

# TABLE OF CONTENTS

ÖZET	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
LIST OF FIGURES	v
INTRODUCTION	

# **CHAPTER I**

	1. ALBERT EINSTEIN'S THEORY OF RELATIVITY
N TO SCIENCE .8	1. 1. EINSTEIN'S BIOGRAPHY AND HIS CONTRIBUTION
	1. 2. EINSTEIN'S SPECIAL THEORY OF RELATIVITY
	I. 3. EINSTEIN'S GENERAL THEORY OF RELATIVITY

# CHAPTER II

2. THE MODERN CHANGE IN LITERATURE	. 27
2.1. THE SIGNIFICANT INCIDENTS AND NEW IDEAS IN THE EARLY	
MODERN ERA AFFECTING LITERATURE	. 28
2.1.1. The First World War and Its Impact on Literature	. 30
2.1.2. The New Ideas in Psychology Affecting Literature	. 33
2.2. THE MODERNIST FICTION	.35
2.3. WOOLF'S PERSPECTIVE TO MODERNISM	. 39

### **CHAPTER III**

3. AN ANALYSIS OF MRS. DALLOWAY	
3.1. MODERNIST FEATURES IN <i>MRS. DALLOWAY</i> IN TERMS OF CONTENT AND STYLE	46
3.2. MRS. DALLOWAY IN THE LIGHT OF ALBERT EINSTEIN'S THEORY	7
OF RELATIVITY	51

### **CHAPTER IV**

### 4. AN ANALYSIS OF THE WAVES

4.1. MODERNIST FEATURES IN <i>THE WAVES</i> IN TERMS O AND STYLE	· ·
4.2. <i>THE WAVES</i> IN THE LIGHT OF ALBERT EINSTEIN'S RELATIVITY	
CONCLUSION	
WORKS CITED	

### ÖZET

Bu tezin amacı, Virginia Woolf'un iki romanı Mrs. Dalloway ve The Waves'i Albert Einstein'ın Görelilik Teorisi bağlamında bu teorinin üslup ve içerik açısından bu iki roman üzerinde nasıl kayda değer bir etkiye sahip olduğunu ortaya çıkarmak amacıyla modernist özellikler üstünde durarak incelemektir. Görelilik Teorisi, halen en önde gelen bilim insanlarından biri olarak kabul edilen ve Görelilik Teorisini 1915 yılında, zaman anlayışına yeni bir yaklaşım getirerek, Genel Görelilik Teorisi ile genişleten Albert Einstein tarafından, ilk olarak 1905 yılında Özel Görelilik Teorisi olarak ortaya atılmıştır. Görelilik Teorisi'nin ortaya çıkmasıyla birlikte zamanın durağan olduğu inancı paramparça olmuş, böylece zamanın bireyin nerede olduğuna ve nasıl hareket ettiğine bağlı olduğu anlaşılmıştır. Birinci Dünya Savaşı'nın yanı sıra psikolojide de yeni fikirler olduğu için sadece bu teorinin ortaya çıkışı değil, aynı zamanda diğer önemli olaylar insanların modern çağdaki hayata bakış açısını etkiledi. Tarih boyunca dönemin olaylarından etkilenen bir alan olan edebiyat, modern dönemde bilinç akışı, zamanda geriye dönüşler (flashbacks) ve ileriye atlamalar (flashforwards), iç monologlar vb. gibi yeni tekniklerle hem bireysel konulara hem de öznellik üzerine yoğunlaşarak önemli ölçüde değişmiştir. O dönemde yaşayan bir yazar ve birey olarak Woolf, yeni tekniklerin kullanımıyla karakterlerin zihinlerinin nasıl çalıştığını ortaya koyarak karakterlerin iç dünyalarını resmetmektedir. Mrs. Dalloway ve The Waves romanları, karakterlerin bilincine odaklanma, öznelliğin öne çıkması, kronolojik bir zamanın olmaması ve yeni yöntemlerin kullanılması gibi modernist özelliklerle doludur. Modernist özelliklere sahip olmanın yanı sıra, bu romanlar, karakterler zamanın önemi ile birlikte, çoğunlukla zamanın kendileri için yavaşladığı ya da hızlandığını vurguladıkları için zamanın hem biçim hem de içerik açısından nasıl göreceli olduğunu ortaya çıkarır. Mrs. Dalloway ve The Waves adlı eserlerde modernist özellikleri ve Einstein'ın görelilik teorisini detaylandırarak, bu tez, değişkenlik özelliğinden ötürü zamanın her karakter için farklı aktığını ve bu durumun Woolf'un romanlarındaki karakterler için çok önemli bir rol oynadığını gözler önüne serecektir.

Anahtar Kelimeler: Modernizm, Albert Einstein, Görelilik Teorisi, Virginia Woolf, Mrs. Dalloway, The Waves.

#### ABSTRACT

The purpose of this thesis is to analyse Virginia Woolf's two novels, Mrs. Dalloway, and The Waves, in the context of Albert Einstein's Theory of Relativity in an attempt to reveal how this theory has a remarkable effect on these two novels in terms of style and content by dwelling upon the modernist features. The Theory of Relativity was initially put forward in 1905 as the Special Theory of Relativity by Albert Einstein, who has still been regarded as one of the most leading scientists, and extended it in 1915 with the General Theory of Relativity by bringing a new approach towards the comprehension of time. Along with the appearance of the Theory of Relativity, the belief in time's being stable was shattered, thus, it has been realized that time depends on where the individual is and how s/he moves. Not only the appearance of this theory but also other significant events affected people's perspectives towards life in the modern era since there were also new ideas in psychology as well as the First World War. Literature, as a field influenced by the events of the period throughout history, has changed remarkably in the modern period by concentrating on individual issues as well as subjectivity by means of new techniques such as the stream of consciousness, flashbacks, flashforwards, inner monologues, etc. Woolf, both as an individual and an author living in that era, portrays the inner worlds of the characters by revealing how their minds work thanks to the use of the new techniques. Her novels, Mrs. Dalloway and The Waves, are filled with modernist features such as the focus on the consciousness of the characters, prominence of subjectivity, not having a chronological time along with the use of new methods. In addition to having modernist characteristics, these novels reveal how time is relative through both style and content since characters mostly emphasise that time slows down or accelerates for them as well as the significance of time. By elaborating the modernist features and Einstein's Theory of Relativity in Mrs. Dalloway and The Waves, this thesis will reveal that time flows differently for every character due to its instability and it plays a very important role for the characters in Woolf's novels.

**Key Words**: Modernism, Albert Einstein, The Theory of Relativity, Virginia Woolf, *Mrs. Dalloway, The Waves*.

#### ACKNOWLEDGEMENTS

First of all, I would like to thank my supervisor Assoc. Prof. Dr. Berna KÖSEOĞLU because this process would be very difficult for me to keep going without her endless support and kindness. Throughout the master programme, she always guided me with her feedback, knowledge, patient, and encouragement. I have never lost my motivation thanks to her because I know she has always been there to support, encourage and help me. Therefore, I am deeply grateful to her for all her help and support.

Secondly, I would like to express my appreciation to my lecturers at Kocaeli University, English Language and Literature Department. In addition, I would like to thank the members of my thesis committee, Assist. Prof. Dr. Murat KADİROĞLU and Assist. Prof. Dr. Seda ÇOŞAR ÇELİK, for their support. I would also like to thank Lect. Gülrah MORAMOLLU for her contribution to my reading *Mrs. Dalloway*.

Finally, I owe much to my family, my dear mother, Gül İŞIK and my dear father, Cafer İŞIK who have supported me endlessly since the day I was born and have always motivated me with their encouragement and love. I also thank the other members of my family members and friends for their encouragement. I am very lucky to have you in my life.

### LIST OF FIGURES

Figure 1: Diagram of space-time	. 17
Figure 2: Starlight's being bent by the Sun	. 20
Figure 3: The difference between a stationary clock and a moving clock	. 22



#### **INTRODUCTION**

In the early twentieth century, which was acknowledged as the modern era, people had difficulties in adapting to the new world in which nearly everything was changing. In the modern age, people encountered World War I as well as innovations in science and technology and new ideas in psychology. They witnessed the progressions in the field of science which affected their lives. Industrialisation, which began in the 1760s British society, triggered the developments in science and technology; furthermore, they continued to increase in the twentieth century day by day. The innovations in science have been regarded as scientific revolutions since they marked a new epoch. Albert Einstein has been one of the people who made contributions to the field of science in the twentieth century; moreover, he is still regarded as the most influential scientist today. Not only did he assert the new theories in physics, which made a breakthrough, but he also paved the way for innovations in science. Einstein, who was a German-born physicist, lived between 1879 and 1955. He has been generally regarded as the most leading physicist of the twentieth century; furthermore, his influence continues in the field of science. Although Einstein won the Nobel Prize for his research on the photoelectric effect in 1921, he has been generally famous for his special and general theories of relativity. In his miracle year 1905, Einstein published four articles and he developed the Theory of Special Relativity in one of these articles titled "On the Electrodynamics of Moving Bodies". From the point of this theory, time and space cannot be separated from each other; furthermore, time changes according to the observer. Although the velocity of light, which is signified as "c", is stable, time and space can change. To set an example, a moving clock moves slower than a stationary clock. In this sense, as an object goes faster, time slows down for the object. Therefore, the relativity of time has come into prominence since the article of Einstein was published. In 1915, Einstein enhanced his special relativity by publishing General Theory of Relativity by which he generalises the special relativity along with Newton's law of universal gravitation. Claiming that time can slow down or accelerate created a tremendous impression in the early twentieth century since this new theory refuted the estimations of English physicist Sir Isaac Newton in some aspects. In a way, Einstein as a theoretical physicist brought a new understanding about time by asserting that the situation of time depends on the person.

In the modern era, scientific innovations affected nearly all fields in life. Having no effect in the literature of these progressions would be impossible. In the early twentieth century, there were changes in literature resulting from significant events such as World War I, which lasted from 1914 to 1918, progressions in psychology, and developments in both science and technology. Being in an era, in which there were developments in the fields of science, technology, and new ideas in psychology along with world war, affected the lives of people so much because they began to alienate from the changing world. The changes in the moods of people had an impact on literature since literature is one of the fields which reveals the situation of the period throughout history. Literature is one of the fields affected by the events; therefore, the effects of the events are reflected by applying new techniques and concentrating on individual problems rather than external problems in the twentieth century. People in the modern period retired into their shells because of not feeling as a part of the world. As a consequence of the increase in feelings of isolation and alienation, the authors reflected the inner worlds of the characters in their works instead of the problems of the outside world through both content and style. Literature as a reflection of the era encompassed the changes in both style and content in the early twentieth century. The remarkable changes in literature were related to the modernist movement. In the modern era, the authors began to abandon traditional techniques such as chronological order and detailed depictions. They generally applied new techniques such as the stream of consciousness, flashbacks, flashforwards, and fragmentation which are different from the traditional style in literature. In a way, the stream of consciousness, flashbacks, and flashforwards were preferred by the modernist authors in order to reveal the psychological situation of the characters. People's return to their inner worlds in the modern era brought subjectivity along with it. In a sense, the reality depends on the individual since it changes from one person to the other one. Einstein's Theory of Relativity also triggered the significance of subjectivity since claiming that time is relative brought the concept related to the subjectivity of time into prominence. As a result, subjectivity came to the forefront in literature in terms of both style and content. The content of the works was based on the inner worlds of the characters, at the same time, the techniques that the authors

applied made subjectivity reveal in the works. Consequently, the relativity theory played an enormous role in making subjectivity prominent in literature.

Virginia Woolf is one of the modernist authors who applied new techniques in literature. Woolf, who lived between the years of 1882-1941, became outstanding modernist thanks to her style in her works. In most of her works, the time concept as well as subjectivity are highly recognizable in terms of both style and content. Returning to the past and coming to the present time of the characters mentally in her works are related to the Relativity Theory of Einstein. Feeling in a different time from real-time is similar to Einstein's theory because time is relative for characters; therefore, the stream of consciousness, flashbacks, and flashforwards are the most appropriates techniques in order to highlight the relativity of time for the characters. Moreover, she portrays the inner worlds of the characters by revealing what they think and how they feel through the stream of consciousness technique. Woolf lived in the same years with Einstein who gained popularity so much thanks to his theories in the field of physics, hence, she should be aware of his reputation and theories. Both of them lived in the early twentieth century in which people witnessed the First World War, scientific innovations and new ideas in psychology. In this respect, the Relativity Theory of Einstein affected the literature of his era as well as the era, itself.

The first work will be analysed in the light of Einstein's relativity theory in this thesis is Virginia Woolf's *Mrs. Dalloway. Mrs. Dalloway*, which was published in 1925, is based on one day of Clarissa Dalloway. The novel portrays the inner worlds of most of the characters; however, the most central characters of the novel are Clarissa Dalloway and Septimus Warren Smith who do not even see each other throughout the novel. Although one day in 1923 is portrayed in the novel, the novel also reveals the past lives of the characters through the stream of consciousness technique along with flashbacks. As a modernist work, subjectivity remains at the forefront of the novel since how the mind of each character works is depicted in the novel. Considering the significance of the subjectivity and individuality in the modern era, Woolf's characters are reflections of the people in her period. To clarify, Septimus stands for post-war trauma as a result of having difficulty in adapting to the present because of the pain, chaos, and ambiguity resulting from the war which damages the human soul. Although everything happens in one day, the readers feel that it is a long period. The reason

underlying this situation is the process of going and coming back in time. To set an example, Septimus, who has gone to the war voluntarily, cannot get over the effects of the war because he feels as if he were still at the war. On the other side, war is over for people like Mrs. Dalloway who do not face the war and do not feel the pain and chaos that the war brings with itself. This difference between these two characters reveals that time is relative for the characters. In fact, there is a difference between characters' perceiving the passing of time. For instance, Clarissa is more eager to remember a memory whereas turning back in time through a memory makes people suffer according to Peter. On the other side, Septimus generally feels in the past due to being traumatised by the experiences in the war. Living at the same time does not mean that they feel at the same time because time passes slowly for some people in the novel such as Septimus. Lack of a chronological time shows that time is also subjective for characters, however, Woolf's image of the sound of Big Ben in the novel is a way to indicate the chronological time because the past and present are mingled with each other. In a way, Woolf emphasises the significance of time through her technique and the issues discussed in the novel. The portrayal of the characters' inner worlds, the subjectivity of time, and the technique, which is used to reflect these issues, are related to the modernist movement and Einstein's relativity theory. In addition to the passing of time for the characters and the method to narrate the story, the images of the clock also symbolize how time occupies a substantial place in Mrs. Dalloway. Preserving time in a moment is so significant for both of the central characters Mrs. Dalloway and Septimus and their understanding of each other intuitively, although they do not even see each other in the novel, displays the importance of time for these people.

Woolf's other novel that will be concentrated on in the context of Einstein's relativity theory in this thesis is *The Waves*. This novel, which was published in 1931, is based on soliloquies of six characters: Bernard, Rhoda, Susan, Neville, Jinny, and Louis. Woolf stresses the concept of individuality through these soliloquies. *The Waves* is known as a play-poem because it includes soliloquies used in theatres and the speeches of the characters along with the interludes reflecting poetry. Therefore, this novel, whose parts can be defined as the parts of a poem in the form of prose, has a different style in comparison with the traditional form. The images of the waves create the rhythm of the novel since the images picture the situation and sound of the waves. The interludes, which are break parts written in italic, help the reader visualize

the form of the waves. The interludes play a fundamental role especially in revealing the passing of time because they limit the lives of the six characters to a single day that lasts from sunrise to the sunset. In a way, not only do the interludes give an image of waves, but also, they display life as a single day by highlighting the position of the sun from sunrise to sunset. As well as these interludes, the lives of the characters are portrayed from their childhood to old age. Woolf deals with the inner worlds of the six characters through their soliloquies since these soliloquies reveal what the characters think and how they feel. As a result of the reflection of the characters' inner worlds, subjectivity is in the forefront in the novel. Moreover, the significant role of the time concept in this work can be discovered through both the interludes and soliloquies of the characters. Along with the interludes that show life as a one day thanks to the image of the sun, the soliloquies of the characters touch on the time concept because the characters generally emphasise time and some moments pass fast or slowly for them. The relativity of time for the characters is revealed through their ideas which come into view with the stream of consciousness technique. The use of the stream of consciousness technique makes subjectivity stressed in the novel since the differences among the personalities of the six characters reveal through it. The reflection of their inner world, individual problems, and personalities different from one another are narrated with this technique. It makes their feelings, ideas, especially about time, and moods appear. Woolf as a modernist author uses flashbacks and flashforwards thanks to the use of the stream of consciousness because it helps the narrator reveal the inner world of the character by going to the past mentally. In this respect, Einstein's relativity theory affected the modern age and its literature, thus, the time concept came to the forefront. Concerning the relativity theory, Woolf's The Waves is an example for a literary text in which time is used as a method to narrate the novel in terms of style and content by touching on the relativity of time and putting emphasis on the concept of time. Additionally, the attainableness of the consciousness of the characters, which is a forefront issue of subjectivity, facilitates to show the mind of each character and their differences and it reveals that time flows differently for the characters. In both novels, time and the moment, in which they live, are significant for characters. The other parallelism between these two works is the symbol of one day. In *The Waves*, the interludes give an image of one day through the position of the sun, similarly, Woolf portrays one day of a woman in Mrs. Dalloway. Consequently, both novels are

written in the methods, which help the concept of time show up, by revealing that time like everything is relative for the characters.

In conclusion, people in the early twentieth century witnessed innovations in science and technology, changes in life, along with the First World War. The events leading to the changes in people's moods made subjectivity significant for the people because they began to retire into their shells. One of the outstanding theories, which had an impact on the modern era, was put forward by Albert Einstein. Einstein, who has been still considered as the most influential scientist in history, affected both the era and developments in it with his remarkable theories in the field of physics. He brought a new approach towards the comprehension of time with his Theory of Relativity. Unlike Isaac Newton, an English physicist who asserted that time is the same for everyone, Einstein shows that time is not stable for everyone. In Einstein's universe, space and time are interdependent; therefore, when one of them changes, the other one changes as well. However, no matter what changes, the velocity of light does not change. In this respect, subjectivity of time came into the forefront with Einstein's outstanding theory. In the age, in which people felt as if they had been lost due to the rapidly changing world and WWI, the relativity theory triggered the significance of subjectivity for the people. As a result of these events, the new concepts and styles emerged in modern literature. The new techniques used in storytelling paved the way for focusing on the inner worlds of characters. Woolf is one of the modernist authors who portray how the minds of the characters work in her works through new techniques in literature. Her works Mrs. Dalloway (1925) and The Waves (1931) are examples of the modernist literature in which the new methods such as the stream of consciousness, flashbacks, and flashforwards are applied. The relativity of time can be observed through one of the characters, Septimus in Mrs. Dalloway since time passes slowly for him. Feeling as if there was a war unlike Mrs. Dalloway, for whom war is over, makes him sick in the eyes of the doctors. In addition to Septimus's confusion of time, the way Clarissa and Peter Walsh perceive the flow of time reveals the effect of Einstein's Theory of Relativity on this work since they have different perspectives towards being in the past mentally. Along with the time concept throughout the novel, the techniques reveal the importance of time and subjectivity in the novel. Similarly, in *The Waves*, like everything such as feelings, and ideas, time is also relative for the characters. The characters mostly highlight the significance of time along with the

passing of it; moreover, the interludes limit the whole life of the characters to one day through the phases of the sun in the sky. The relativity concept can be analysed through the modernist technique and the modernist issues portrayed in *The Waves*. As a conclusion, how Einstein's Theory of Relativity, by which he reveals that time is not stable, affected Woolf's well known works *Mrs. Dalloway* and *The Waves* in terms of both style and content, will be studied in this thesis by touching upon the modernist features as well.



#### **CHAPTER I**

#### **1. ALBERT EINSTEIN'S THEORY OF RELATIVITY**

### **1. 1. EINSTEIN'S BIOGRAPHY AND HIS CONTRIBUTION TO SCIENCE**

Pauline Koch, a pianist, and Hermann Einstein, an engineer and a salesman, had a son, Albert Einstein, who has been still regarded as the most impressive scientist, on 14 March 1879 in Ulm, German Empire. After a year Albert Einstein's family moved to Munich in order to found a company which was based on direct current related to electric charge. Thus, Hermann Einstein and his brother Jakob founded Elektrotechnische Fabrik J. Einstein & Cie. when Albert was two years old and his sister Maja was born. Although the descendants of the Einstein family came from Judaism, they sent Einstein to a Catholic elementary school from the age of five to the age of eight. Einstein's mother wanted him to learn playing the violin; therefore, he went to the violin lessons for eight years. He was troubled with education system based on rote-learning after he had begun to go to school. After elementary school, he attended Luitpold Gymnasium to get a primary and secondary school education. Here, his teachers did not like the independent and rebellious personality of Einstein because he was bad with authoritarian figures (Galison, Holton, and Schweber 2018: 62). One of the people, who paved the way for Einstein's interest in science is Max Talmud, who was in need of a university student, invited by Einstein's mother to dinner once a week as a Jewish tradition. Talmud's visits to this family began when Einstein was ten years old and lasted five years. He brought Immanuel Kant's Critique of Pure Reason as well as popular science books. Einstein did not have difficulty in understanding the book of Kant despite his being at the age of thirteen. These books related to science, philosophy and mathematics draw the attention of Einstein (9-10). Furthermore, Einstein could solve all the problems in Euclid's book. It is clear that he was excellent at both physics and math since his childhood. In 1891, his uncle brought a book about algebra to him and it was observed that he could solve even the hardest questions.

After learning algebra, and geometry he was also interested in calculus. When he was sixteen years old, he learnt differential and integral calculus along with analytic geometry (218). Einstein's father and uncle went bankrupt in 1894; therefore, these two families decided to go to Italy by leaving Germany. After Einstein spent six months alone at the age of fifteen in Munich, he also went to Italy where his family lived. In 1901, he became a citizen of Switzerland as he desired. In 1895, he went to Zurich in order to continue his education with Swiss Federal Polytechnic School. Although he got good grades in mathematics and physics, he failed in the other fields. He attended a school in order to complete his secondary education thanks to the advice of the principal of the polytechnic school (Fölsing, 1997: 37). After graduating from this school, Einstein was accepted to the polytechnic school in which he chose the physics department, thus, his interest and success in physics were reinforced. In 1900, Einstein graduated with a federal teaching diploma in the section of physics. After completing his education in this school, his aim was to find an assistantship job in the university, however, he could not find a position for himself. The reason underlying his bad attempt in finding a job was related to his behaviours at the school. His absences in lessons, his rebellious behaviours and his focusing on the issues in the direction of only his desire made the teachers angry with him. To set an example, Einstein found his teacher Heinrich Weber insufficient about advanced physics subjects; moreover, he never talked about electromagnetics. Therefore, he began to study on this subject himself. As a consequence of his behaviours towards the teachers, he could not find a position for the assistantship. Thanks to the father of his friend Marcel Grossmann, he began to work at a patent office as an assistant examiner. Here, his job contains questions about the transmission of electric signals along with electrical-mechanical synchronization of time. Moreover, his experiments about two technical questions paved the way for his reaching to radical outcomes related to the connections between the nature of light and time as well as space and time. One of the situations which triggered his researches and thoughts was his meeting with a discussion group because the members of this group discussed about philosophy and science by reading the works of Henri Poincaré, Ernst Mach, and David Hume. These names affected Einstein's both philosophical and scientific perspective so much (Van Dongen, 2007: 752).

1905 was known as annus mirabillis, which means an amazing year, for Einstein since this year was full of the productiveness of Einstein thanks to his researches. "Einstein shot to fame within the scientific community in 1905, a year christened as his annus mirabilis. While working eight hours days, six days a week at the Swiss patent office in Bern, he wrote four papers in his spare time that changed the course of physics" (Einstein, 2015: 34). In 1905, he published four papers which marked a new epoch not only in Einstein's life but also in modern physics. These ground-breaking articles are about photoelectric effect, Brownian motion, special relativity, and the equivalence of mass and energy; furthermore, the paper written on photoelectric effect helped him win the Nobel Prize in 1921. These papers brought reputation and academic career to him. In 1908, he became a lecturer at Bern University and after a year, he began to continue his career as an associate professor of physics. Furthermore, he received the title of professor in 1911. His being a chairman of The German Physical Society in 1916 reveals how he was a significant scientist in the eyes of the people with his theories (Calaprice and Lipscombe, 2005: 14).

In 1933, Einstein immigrated to the United States since Germany was under the control of the Nazis and under the rule of Adolf Hitler, who was a German politician. Einstein began to work at the Institute for Advanced Study in New Jersey and stayed there until his death. In 1940, he became an American citizen. Einstein had an impact not only upon science but also upon politics since he wrote a significant letter which changed the course of history to Franklin Delano Roosevelt, president of the United States. In 1939, Einstein sent a letter to Roosevelt because he was afraid of the consequences when the Germans produced an atomic bomb. Therefore, he wanted to warn Roosevelt because of the dangerous situation in which the Germans controlled uranium mines. As a result, The Manhattan Project, whose aim was to produce nuclear weapons, was started. Furthermore, Einstein was a member of a committee who investigated the use of atomic energy. Although Roosevelt preferred not to use the atomic bomb as a promise to Einstein, Harry S Truman, who took office after Roosevelt's death as 33rd President of the United States, preferred to use the atomic bombs. In 1945, he attacked Hiroshima and Nagasaki in Japan with atomic bombs and the bombs caused thousands of people to die and cities to collapse at the end of the second world war. Therefore, Einstein's name began to be remembered with the war.

Einstein signed a manifesto which was prepared by Bertrand Russell in 1955 in order to warn the world leaders against any nuclear war that may arise from the international disagreement one week before his death. Einstein had internal bleeding on 17 April 1955; however, he did not want to have surgery. He desired to die when he wanted because he found prolonging life an unpleasant situation. He preferred to go elegantly since he had done his share according to him (Cohen and Graver, 1995: 455-8). Thus, he passed away in Princeton Hospital when he was seventy-six years old by leaving ground-breaking theories to the world.

### **1. 2. EINSTEIN'S SPECIAL THEORY OF RELATIVITY**

In his life, Einstein made a lot of researches about physics and he published more than 350 scientific papers. As it has been stated before, 1905 was a miracle year for Einstein in terms of his academic career. He published four articles which paved the way for the foundation of modern physics, in a scientific journal, Annalen der Physik. The first of them is about the photoelectric effect and it made a contribution to the appearance of quantum theory. He submitted evidence of the existence of atoms in the second work whose focal point was Brownian motion. The third paper, whose title is "On the Electrodynamics of Moving Bodies" is about the special relativity and he concentrates on the matter-energy equivalence in the fourth article by explaining his famous equation E=mc2 and stating that gravity can bend light. In this thesis, the focus will be on Einstein's relativity theory in terms of its effect not only in the era but also in literature. He still has a very significant place in today's science with his groundbreaking theories. He became so famous for his theories and personality that his brain was stolen after his death. Thomas Stoltz Harvey thought that this brain was very important because it changed people's view of the universe while examining his brain for Einstein's autopsy. Thus, Harvey stole Einstein's brain and stored it in a jar. Furthermore, he divided the brain, which has indeed changed the way people view the universe, into 240 pieces for examination and sent to other scientists. Following Harvey's death, the remaining parts of the brain began to be preserved in a museum. The remaining parts of Einstein's brain are still preserved in The Mütter Museum.

The title of the third article, which was published in Annalen der Physik on 26 September 1905 is "On the Electrodynamics of Moving Bodies" or "Zur Elektrodynamik bewegter Körper" in Deutsch. In this paper, not only did he unite Maxwell's equations for electricity and magnetism with the laws of mechanics but also, he brought new changes about the mechanics of the velocity of light. He touched on the references from five significant scientific people: Isaac Newton, Christian Andreas Doppler, James Clerk Maxwell, Hendrik Antoon Lorentz and Heinrich Hertz. Maxwell's equations' being applied to moving objects caused the problem of moving magnet and conductor; furthermore, it was known that it was impossible to discover any relative motion of Earth to light medium. Einstein asserted two statements on the purpose of explaining these estimations. He firstly applies the principle of relativity, in which he puts forward that the laws of physics remain unchanged for any nonaccelerating frame of reference, known as an inertial reference frame, to the laws of electrodynamics and optics along with mechanics. Secondly, he suggests that the velocity of light has the same value in all frames of reference as unconnected from the state of motion of the emitting object.

Another important consequence of the theory, which can be tested experimentally, has to do with the path of rays of light. In the general theory of relativity also the velocity of light is everywhere the same, relatively to a local inertial system. This velocity is unity in our natural measure of time (Einstein, 2003: 95).

Through these lines, Einstein explains one of the significant outcomes of the Theory of Relativity. Thanks to this theory, it is realized that the velocity of light is same in every system. According to Einstein, the speed of light is stable; therefore, it cannot be connected with the motion of the observer. This thesis of Einstein is in contraction with Newtonian classical mechanics since from the point of Newtonian classical mechanics, the speed of life is not fixed and it can be related to the motion of the observer. In other words, no matter the speeds of the observers are, the speed of light is the same for all observers according to the special relativity theory. This situation is one of the foundations of the special relativity theory. "But this assumption of the velocity of light as a universal constant the same for all systems, necessarily demanded by the principles of electro-dynamics, now comes into opposition with the principle of relativity of the Galilei-Newtonian mechanics" (Cassirer, 1922: 113-4). From the perspective of Einstein's relativity theory, the velocity of light does not change

according to the systems. In other words, it is stable for all systems. Therefore, the Theory of Relativity contradicts with Galilei-Newtonian mechanics which defends that the velocity of light is changeable according to the systems. The other foundation of this theory is the physics' laws being the same for everyone. It means that a stationary observer to a reference point and a moving observer in a linear way to the reference point perceive all laws of motion the same. Einstein reveals that there is no absolute time or space since they can change according to the reference system of the observer.

One should analyse the history of the theories about time and space in order to understand Albert Einstein's Theory of Relativity since the theories and experiments influence one another. The ideas about motions of the substances have begun to emerge with Galileo Galilei who was an Italian physicist, engineer and astronomer since before him it was believed that an object is motionless without another force since a Greek philosopher, Aristotle (384–322 BC). From this perspective, a heavy object drops faster than a light object due to a stronger attraction towards the ground. Galilei, who lived between the years of 1564 and 1642, revealed that the speed of an object increases at the same rate, regardless of weight through his calculations. The reason behind a heavier object's falling faster than a light object is air resistance. However, David Randolph Scott, who is an American NASA astronaut, observed that a hammer and a feather dropped at the same time to the ground in Moon, where there is not air. Galilei's calculations underpinned Newton's laws of motions. According to Galilei's experiments, an object continuously accelerates when it is rolled from the ramp because of the impact of the same force which is the heaviness of the object. It means that the object sustains its moving at the same speed in a straight light unless it is exposed to a force. This is known as the first law of Newton and it takes part in Principia Mathematics which was published by Newton in 1687. Newton's laws of motion are concerned with calculations that describe the motion of an object in space. The second law of Newton is related to what happens to the object when it is exposed to a force. From the perspective of this law, the object changes its speed in proportion to the force. Accordingly, the greater the quantity of matter, the smaller its acceleration becomes. In a way, when a force is applied to a mass, acceleration occurs. The larger the mass, the greater the force required to accelerate the object becomes. From the perspective of Newton's third law, there is an equal and opposite reaction for every action (Petersen, 2019: 178). According to Newton's gravitational law, as the distance

between the two objects increases, the pull force decreases. Newton's laws of motion are very significant in physics. In terms of Newton's laws of motion, the force that pulls two objects together depends on their distance from each other. Therefore, while the centre of the Earth pulls the person towards himself/herself, the centre of mass of the person also pulls the Earth towards himself/herself. The person stays attached to the Earth because of its small mass compared to the Earth. In other words, the person remains on the Earth.

According to Newton, there is an absolute time and Aristotle supported this idea as well (Hawking, 1998: 21). In this respect, the period between two events can be evaluated; furthermore, anyone who carries out measurement with a good clock realizes the same time. However, this idea cannot be applied to the things which move close to the speed of light. In 1675, light's moving at very high and final speed was discovered by Ole Christenson Romer who was a Danish astronomer. In 1865, the theory related to the propagation of light was put out by James Clerk Maxwell who was an English physicist. From the perspective of this theory, light waves should move at a steady speed (22). However, there were questions about the calculation of the constant speed of light since Newton's theory put out of sight the idea of absolute motionless. As a result of this question, it was thought that there was a substance called aether. The light waves move in aether which is everywhere. It is similar to sound waves which move in the air. In this context, their speed should be calculated according to the aether. In other words, aether is similar to the environment required for sound waves to propagate. In this respect, light waves also need a medium in order to propagate in space. The substance that fills this gap was called aether. In terms of this idea, the speed of light, which was calculated in the direction of the movement of the world inside the aether, must be greater than the speed of light coming at the right angles. However, Albert Michelson and Edward Williams Morley, who were American scientists, realized that the speed of light in the direction of the world's movement and the speed of light falling at right angles to the movement of the world were the same when they compared them in Case School of Applied Science in 1887. Their aim was to prove the existence of aether; however, the outcome reveals that there is no such substance as aether. Contrary to expectations, in addition to the absence of a substance called ether in the space, the speed of light has been proven to be at the

same speed from each system (23). Thus, some ideas about the speed of light began to change.

In 1905, Einstein and a few weeks after him Henri Poincare, who was a French theoretical physicist, laid emphasis on the unnecessity of the idea about the aether. "[T]here can be no æther-drift, nor any experiment with which to demonstrate it" (Einstein, 1920: 63). According to Einstein, there is not something like a unique coordinate system which verifies the idea of aether's presence. Einstein published his article "On the Electrodynamics of Moving Bodies", which was received on June 30, on 26 September, 1905 as the third article in Annalen der Physik. "The special theory of relativity has crystallised out from the Maxwell–Lorentz theory of electromagnetic phenomena. Thus, all facts of experience which support the electromagnetic theory also support the theory of relativity" (34). As stated by Einstein, his Special Theory of Relativity is based on the Maxwell-Lorentz theory of the electromagnetic phenomenon. Lorentz transformation equations, which was put forward by a Dutch physicist Hendrick Lorentz, describes how space and time measured by two observers are related. Lorentz, Poincare and Minkowski played a fundamental role in the emergence of Einstein's relativity theory. After Michelson-Morley's experiment, the question of why light looks the same on every inactive system has emerged. Hendrik Antoon Lorentz proved that the speed of light is invariant by defining a transformation. Moreover, Henri Poincaré, defined new groups of transformation and was able to solve the problem. Additionally, Hebert Minkowski, constituted a geometrical model. Einstein made a new epoch in physics by bringing a new remark to physics through experiments, explanations, as well as interpretations (Schiller, 2016: 44). In a way, Einstein brought meaning and interpretation to Michel-Morley experiments along with the mathematical solutions of Lorentz and Poincare, and he came up with the Theory of Special Relativity in 1905.

The Theory of Relativity was enhanced from electrodynamics, which is about interactions between currents and electric charges, as a branch of theoretical physics. From the perspective of Einstein's relativity theory, no matter how fast observers move, their speed of light is measured the same. Furthermore, the well-known equation of Einstein, E=mc2, in which E means energy M means mass and C symbolizes the speed of light, shows that nothing can move faster than the speed of light because mass

equals to energy according to this theory. This equation of Einstein is based on the ground of an Italian geologist's, Olinto De Pretto, idea since he calculated the Formula E=mc2 (76). As a result of this equality between mass and energy, the movement of an object is added to the mass of energy it has. In this context, the increase in the speed of the object becomes more difficult. When an object closes to the speed of light, its mass increases. Therefore, it needs more energy in order to move faster. However, as the object approaches the speed of light, it reaches infinite greatness and it may not reach the speed of light in the context of equality of mass and energy. In other words, the object spends infinite energy to reach the speed of light. This situation is similar to Newton's Law of Inertia. Inertia is the resistance of massive bodies to acceleration. As an example, one should consider starting the car's engine because the car requires running the engine faster to start, and it burns more fuel and consumes more energy. In a sense, a massive body cannot travel at the speed of light, as it will have infinite resistance to acceleration. Consequently, according to the Theory of Relativity, objects approaching the speed of light increase in mass. With the equation E = mc2, energy is equal to mass. Objects in space that approach the speed of light are shortening in length in the direction of motion, and energy is added to accelerate them further. However, most of the energy does not accelerate the objects, the mass of the objects increases. In this context, it is impossible for massive objects to go faster than the speed of light. Since the energy required to reach the speed of light will increase the mass of the object, infinite energy is required to reach the speed of light.

The Theory of Relativity paved the way for the changes by bringing a new approach towards the concepts of space and time. From the perspective of Newton's theory, time is absolute; in other words, the different observers are in agreement about the signal of light, which goes from one point to another. Furthermore, it is measured that the light has different speeds. However, the idea of absolute time lost its significance with the relativity theory. To clarify, the clocks, which have the same qualifications and are carried by the different observers, may not show the same time.

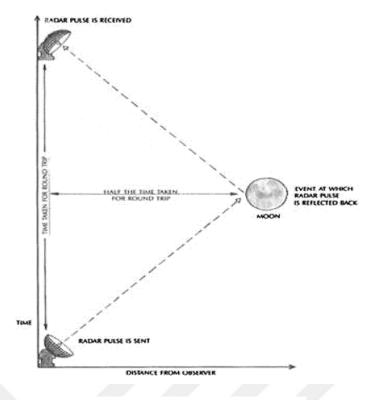


Figure 1 : Diagram of space-time

(Hawking, Stephan (1998). A Brief History of Time. New York: Bantam Books.)

This figure as an example of space-time's diagram is related to the use of radar. Each observer can tell where and when the event will occur by sending a light signal or radio waves through the use of radar. The observer measures the elapsed time until some of the signal is reflected. Thus, the time of the event is said to be the time between the sending of the signal and the time when the illusion is retrieved. The distance to the event is half the time it takes for a complete turn times the speed of light. In a word, an event is something that occurs at a single point in space at a particular moment in time. Through this method, the observers moving relative to each other remark that different position and time for the same event. As the speed of different observers increases, the discrepancy between the time measurements increases as well. In other words, each observer's having his/her own time makes time relative for them. In a way, time is not the same according to the observers who move relative to one another.

In 1905, Einstein also asserted that space and time are connected to each other through the Special Theory of Relativity. The concept of spacetime has come into prominence along with the relativity theory since it has been put forward that time is inseparable from space. Einstein showed that space and time cannot be distinguished from each other. Additionally, the equations of Maxwell, which show that the speed of light should remain the same even if its source changes, were verified. "It seems to have been at this point that Einstein became aware of the Michelson- Morley experiment, which strongly suggested the conclusion to which Einstein's thinking had led: that c is constant for all observer" (Gutting, 1972: 58). The relativity theory revealed that the speed of light is the same for all observers as it was realized via Michelson-Morley's experiment. In other words, the velocity of light does not change from an observer to the other one since it is stable for all observers. According to the Theory of Relativity, events, that can be reached from an event at the speed of light or by a particle or wave, are moving below are in the future of this event. Only the events, which are located in the future of the event, may be affected by what is happening since anything cannot move faster than the speed of light.

Simultaneity is another outcome of the Special Theory of Relativity. When the lamp lights up in the middle of a moving train, the light beam spreads both in the direction of the train and in its opposite direction. According to the observer inside the wagon, the light reaches the front and rear of the wagon at the same time. However, according to the observer on the outside of the train, the light diffuses in front of and behind the car at different times. In other words, the propagation of the light is not synchronous for him. According to the observer in a car that passes quickly by the train, the light reaches the front of the wagon earlier, while it reaches the back of the wagon later because according to him the train goes in the opposite direction. On the other hand, for the ground observer, the light reaches the front of the wagon later, whereas it reaches the back of the wagon earlier because the front of the wagon moves away from the light coming towards him, while the light coming to the back of the wagon approaches relative to the observer. In this context, while events occur simultaneously according to the observer in the wagon, events occur at different times according to the observer on the ground and in the car. One can realize that simultaneousness cannot be in different inertial systems. Furthermore, the speed of light does not change as the Earth moves closer or farther from the Sun during its oneyear orbit around the Sun. Therefore, whether the Earth is near or far from the Sun, Sunlight always reaches the Earth at the same time. The speed of light's being the same for everyone means that the laws of physics are the same for everyone. In this respect, Einstein's Theory of Relativity contrasts with Newtonian mechanics, which states that space and time are separate and that space and time are absolute.

#### **1. 3. EINSTEIN'S GENERAL THEORY OF RELATIVITY**

Einstein strived in order to set forth the law of gravity standing with the special relativity theory for quite a while and he put forward the General Theory of Relativity in 1915. It was suggested that the Special Theory of Relativity and the laws of physics are the same in inertial deployment systems. However, the question arises whether the laws of physics are valid for two bodies moving with respect to each other. "Ten years later he expanded that theory to include gravity, creating general relativity. The idea toppled Isaac Newton's physics and redefined our notion of space and time. It launched new strands of research that scientists are still pursuing and made its creator a star" (Einstein, 2015: 34). Since the Special Theory of Relativity was constrained by inertial systems, Einstein struggled for a long time to remove this constraint because the laws of physics must be the same everywhere for all conditions. Ten years after the Special Theory of Relativity, Einstein demonstrated his General Theory of Relativity and proved that the laws of physics are the same inactive and inertial systems. In this context, the laws of physics are valid not only in inertial deployment systems but also in two bodies moving in action relative to each other. As a result, Einstein states that the laws of physics are the same in inertial deployment systems (2003: 25) and asserts that the laws of physics are the same in every system with or without action (63) by generalizing his Theory of Special Relativity. General relativity defines gravity in space-time by generalizing Newton's law of universal gravity and special relativity theory. As it is outlined, "general relativity describes the motion of matter and of empty space, including the motion of horizons and the evolution of what is usually called the border of the universe" (Schiller, 2006: 287). This theory is related to macroscopic motion resulted from gravity. From the point of this theory, gravity is the outcome of the reality of spacetime's not being straight; moreover, it is not a force. In this context, spacetime is bent because the mass and energy inside it are distributed. Earth-like objects follow geodesic in an inclined space. According to this theory, Mercury is the planet that most feels the gravitational effects since it is the closest planet to the sun; therefore, its orbit is longer than other planets. Einstein asserted that the long axis of the Mercury should revolve around the sun at an angle of about one degree every ten

thousand years with this theory. This is one of the first factors which verified this theory. Moreover, light cannot move in straight lines in the space since space is inclined. This means that light is bent by the gravitational areas. To set an example, the light cones formed by points close to the sun are slightly bent inward. The reason underlying this situation is the mass of the sun. As a result, when a star passes by the sun, the light coming from the star devises at a small angle, thus, it appears in a different position to the observer in the world. In other words, when the world turns around the sun, stars appear to pass behind the sun and the lights coming from them devise. Radio waves close to the sun or small breaks of light can be observed.

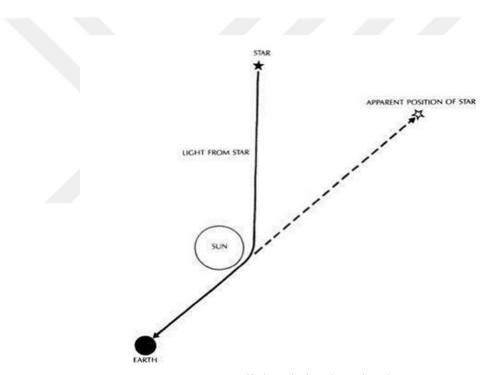


Figure 2: Starlight's being bent by the Sun

(Hawking, Stephan (1998). A Brief History of Time. New York: Bantam Books.)

This figure shows how the light coming from the star is seen in a different position because it is bent by the sun. In this context, the mass of the sun creates the bending of space-time. One of the most significant experiments which proved his ideas about how starlight is bent by the gravity of sun is Eddington's experiment. Arthur Stanley Eddington, who lived between the years of 1882-1944, was an English mathematician, physicist and astronomer. His experiment after the World War I confirmed Einstein's

Theory of General Relativity; moreover, Newton's idea was accepted as correct, which was contrary to Einstein's, until the proof of this experiment. Eddington took measurements during a solar eclipse on 29th May, 1919 on the island of Príncipe, West Africa, to prove whether the stars looked different from their actual positions. As a result of this observation by Eddington, Einstein's idea was proved since the starlight passing near the Sun was bent by the sun's mass. When Einstein was proven right with this experiment, Einstein gained worldwide fame. "Eddington's and Dyson's announcement set off such an extraordinary chain of events - culminating in the widespread acceptance of general relativity and the worldwide fame of Albert Einstein that the 1919 eclipse expeditions' prominence in the history of science is unassailable" (Sponsel, 2002: 440). The deviation of light could not be tested in 1915 in which there was a First World War. The deviation of light by the gravitational area was tested in 1919. In 1919, it was observed that light is detected by the sun through solar eclipse thanks to Eddington's experiment. Therefore, Eddington's experiment in 1919 had a significant place since this experiment showed the world that Einstein was right. Moreover, it was an important factor that made Einstein and his theory famous worldwide. There are experimental evidences of the bending of space and time. In 1919, it was observed that light is detected by the sun through solar eclipse. The General Theory of Relativity is not only related to inclined space but also bent time; therefore, it has been seen as a revolution. This theory revealed that spacetime is bent by the substance and energy in it as well as the effects of gravity. His Special Theory of Relativity published in 1905 and the General Theory of Relativity published in 1915 lead to his popularity around the world since he marked a new epoch in the field of science. As it is stated by Schiller, he "was one of the greatest physicists ever" (25). Einstein's contributions to the science in terms of space and time makes him still as one of the most genius people in the eyes of the people.

Einstein's General Theory of Relativity removed the approach towards the absolute time. Here, the twin paradox can be exemplified. To clarify, one of the twins sets out on a journey with a spaceship. After s/he comes back to the world, s/he is younger than the other twin who stays in the world. In other words, the one who stays in the earth is older than the other twin who sets out on a journey with a spaceship. If you take a ten-year trip to space, you will age ten years, but your friend who stays on Earth will have lived for more than 30 years (Petersen, 2016: 1993). The reason behind

this situation is her/his being in a spaceship which moves close to the speed of light. What is to be taken out of here is that there is personal time measurement rather than absolute time according to the relativity theory since time depends on where the individual is and how s/he moves. To set another example, one can try with two similar watches, if s/he wants to see how time is relative. If one of the two similar watches is carried with observer and brought back, the clock does not show the same time anymore.



Figure 3: The difference between a stationary clock and a moving clock

(Schiller, Christoph (2016). *Motion Mountain: The Adventure of Physics Volume II, Relativity and Cosmology*. Motionmountain/4 December 2020.)

This table reveals how the stationary clock goes faster than a moving clock. In this respect, time is relative for observers although the velocity of light remains stable for everyone all the time. In a way, a watch in a mobile system runs slower than a clock that is stagnant. This is similar to when the twin going with the spaceship stays younger because the more mobile one takes longer to age than the stagnant one. While the event takes longer for the stagnant person to expand, it takes faster for the mobile person. Time expands for the people who move and this situation is called "the expansion of time", which was verified in 1972 with a test. A caesium clock was flown around the world with a plane, and at the end of this experiment, the extension of time was confirmed with an error margin of close to 10 percent. As a result, Special Relativity is a theory that deals with inertial reference systems moving at constant speeds relative to each other.

Before 1915, it was believed that events, which take place in space and time, do not affect spacetime. With the General Theory of Relativity, space and time have started to be seen as dynamic quantities. To clarify, either the effect of a force or the motion of an object affects the curvature of space and time. Therefore, the structure of spacetime affects the way objects affect their forces as well as the way they move. In other words, both space and time affect everything in the universe and are influenced by everything what is going on.

In the following decades this new understanding of space and time was to revolutionize our view of the universe. The old idea of an essentially unchanging universe that could have existed, and could continue to exist forever was replaced by the notion of a dynamic, expanding universe that seemed to have begun a finite time ago, and that might end at a finite time in the future (Hawking, 1998: 35).

Einstein's point of view towards space and time radically changed the way people look at the universe since it was believed that there was a universe at its core that did not change, and it would continue to be. However, the General Theory of Relativity implied that the universe has a beginning and it has probably an end. "[T]he universe will be quasi-spherical. But it will be necessarily finite" (Einstein, 1920: 136-7). The universe's being infinite is another outcome of his theory which helped the physicists look at the world from a different perspective. As a result, this theory is regarded as a revolution in the field of science.

With Einstein's Theory of Relativity, the fourth dimension has come to the forefront. In fact, Hermann Minkwoski, who lived between the years of 1864 and 1909 and was a German mathematician, helped the idea of the fourth dimensional space come into prominence since he revealed that Einstein's special Theory of Relativity could be regarded as a theory which is based on the fourth dimensional space-time. Einstein introduces the first dimensional space of Minkowski in these lines:

For it is composed of individual events, each of which is described by four numbers, namely, three space co-ordinates x, y, z, and a time co-ordinate, the time value t. [...] That we have not been accustomed to regard the world in this sense as a four-dimensional continuum is due to the fact that in physics, before the advent of the theory of relativity, time played a different and more independent role, as compared with the space coordinates (37).

Before the Theory of Relativity, time was regarded as different and independent from space. Minkowski extends the Euclidean three-space to a quasi-Euclidean four-space by adding time. Adding time as a fourth dimension is related to the linking space with the time. To clarify, an event can be defined with four numbers. Three of these four numbers can be its east, its north and its height above sea level. In the larger universe, these figures can be latitude and longitude and distance from the center of the galaxy (Hawking, 1998: 26-7). In this context, the fourth number is the time of the event. In terms of this perspective, spacetime is regarded as fourth-dimensional with including time. Therefore, an event is determined by the time value t next to the three struts x, y, z on the coordinate planes. In this respect, Einstein's Theory of Relativity is in contradiction with classical mechanics due to the fact that time is independent of the motion condition of the system of coordinates, also it is absolute according to classical mechanics. It is obvious that Einstein's Theory of Relativity puts forwards not only fourth dimensional space and time but also the concept of spacetime. Moreover, Einstein put forward how spacetime is bent by substance and energy in it as well as the effects of gravity.

As a consequence, Einstein and his theories of special and general relativity have an impact upon not only in his era but also today since he found the basis of modern physics. In 1905, when he was a patent officer, he published four articles and they helped him be popular around the world. He won the Nobel prize thanks to one of these articles. Moreover, the third article can be considered as the most outstanding one. With the Special Theory of Relativity, he claimed that the speed of light is stable for everyone while time is relative for the observers. In this respect, the relativity of time has come to the forefront. He proposed the General Theory of Relativity 10 years later to complete the questions that arise after the Special Theory of Relativity. His General Theory of Relativity shows that the laws of physics are the same for every system, not just for inactive system. This theory, which is based on gravity, made him become more famous around the world. Einstein and Infeld explain why the relativity theory emerged through these lines:

The relativity theory arose from necessity, from serious and deep contradictions in the old theory from which there seemed no escape. The strength of the new theory lies in the consistency and simplicity with which it solves all these difficulties, using only a few very convincing assumptions (1966: 192).

These lines are related to the reason behind the appearance of relativity theory. It is obvious that the reason behind the emergence of this theory arose from the significant contradictions because of the old theory. Therefore, the Theory of Relativity showed up as a necessity. Einstein is the one who combined the concepts of time and space. Before Einstein, these two terms were considered as different things from each other, however, the concept of spacetime appeared with him. In this respect, time has been accepted as the fourth dimension. Thus, Einstein had a profound influence on physics with his Special and General Relativity theories. The most significant contribution of Einstein to science is related to his Theory of Relativity. This theory is used to explain the gravitational phenomena associated with gravitational lenses, time dilation, and black holes (Petersen, 2016: 190). His claims about gravity and spacetime made him one of the most famous physicists of his time. His ideas still shed light on today's scientists; in a way, Einstein affected not only his own period but also today.

The appearance of the Theory of Relativity affected the literature of the period along with scientific progressions and people's perspective towards time comprehension. Therefore, this theory was first adapted into literature in the modern period. To set an example there were some authors who applied The Theory of Relativity in literature such as James Joyce, William Faulkner and Jean-Paul Sartre. James Joyce, an Irish novelist, reveals the effects of Theory of Relativity in literature by having quotations about relativity and space in *Ulysses*. William Faulkner is another author adopting the relativity theory in his novel The Sound and the Fury by using the paradox of the clocks. As it is stated "[t]he paradox of the clocks is that time slows down as speed increases, so that at the speed of light stops" (Johnson, 1983: 227). In this respect, the use of the paradox of the clocks reveals that time slows down for the one who is closer to the speed of light. In a way, it is similar to the twin paradox since time slows down for the twin who sets out on a journey through space from the perspective of this paradox. Furthermore, among "the three character-narrators of the novel, Quentin is the only one who is in a different spacetime system" (227). Although the narratives of other characters, Benjy and Jason, are about 1928, Quentin narrates his section in 1910. Therefore, in The Sound and the Fury, the relativity of time plays a vital role as it can be observed through Quentin and the use of paradox of the clocks. Similarly, Jean-Paul Sartre, a French literary critic, adopted a different view resulting from Relativity Theory in *Nausea*: "The difficulties involved in fixing some events in the space-time of this novel are

a consequence of our inability to perceive events from within Roquentin's system" (222). In *Nausea*, Sartre shows that there are no absolutes due to the effect of the Theory of Relativity. As a result, the Theory of Relativity, by which Einstein claims that time can slow down or accelerate depending on the position of the observer, has affected not only the field of physics but also literature. In modern literature, the approach towards time has changed by time's becoming relative for the characters. In this thesis, how Virginia Woolf's literature was shaped around the Theory of Relativity will be analysed by exemplifying from the novels *Mrs. Dalloway* and *The Waves* since relativity of time for the characters can be observed through both style and content of the novels.

#### **CHAPTER II**

#### 2. THE MODERN CHANGE IN LITERATURE

After Industrial Revolution, which began in 1760 in England, the scientific and technological developments were increasing day by day during the early twentieth century because this revolution triggered the increase in the improvements in the fields of science and technology. People in that era found themselves in a strange world in which they had difficulties in adapting the innovations and new ideas in psychology. William James, Sigmund Freud and Carl Gustav Jung were significant people who were interested in human psychology and made overwhelming impressions on society with their ideas about consciousness. Moreover, the First World War (1914-1918) affected people's lives deeply because the war brought the worst feelings such as fear, pain and melancholy to their lives. Along with the innovations in technology, new ideas in psychology and the First World War, British society witnessed significant political events. All these situations paved the way for people's attaching importance to their inner worlds. They began to feel isolated from this rapidly changing world; therefore, they lived in their own worlds. As a consequence, the modernist movement emerged with new aims and techniques when it is compared to the previous age. Modernist literature deals with internal problems rather than external problems, hence, the focus is on the mental situation of the characters. Therefore, applied techniques help the thoughts and feelings in the characters' minds come into view. The new techniques such as stream of consciousness, flashback and flashforwards were used in order to reveal the psychological situation of the characters; moreover, time concept changed with these techniques in modern literature. In a way, the changes in all fields of life led to a need for change in literature as the modernist authors rebelled everything through literature. In Victorian literature, chronological time was used to narrate the story in order, however, the readers can go to the past or come back to the present of the character with new techniques in modernist literature. James Joyce, Virginia Woolf and T.S Eliot were some of the leading modernists who became prominent with the

new style. Virginia Woolf, who lived between the years of 1882-1941, experienced depression in terms of both personal and social life. As a person who lived in the modern period, she witnessed innovations, changes, new ideas and wars. Both these situations and the problems in her personal life triggered her towards depression; therefore, she committed suicide when she was at the age of 59. In her life, she made contributions to the field of literature with her style. As a modernist author, she preferred to use the stream of consciousness technique, which includes a non-linear structure with fragmentation, disorder, forward and backward movements in terms of time and narration, however, she helps the reader understand what goes on in the novel, unlike James Joyce whose style is more complicated for the readers, so they cannot really understand the content clearly. Albert Einstein, who has an effect on today's science, asserted that time is relative for everyone in the twentieth century. Einstein and his theories, which have been regarded as innovation, affected the concept of time since one of the situations which changed in literature was time in the modern era. Virginia Woolf used time as both content and form in her novels under the effect of Albert Einstein's theory on time. Woolf's novels can be analysed under the influence of Einstein's Theory of Relativity as time's being relative for each character is forefront in her works; moreover, the use of new techniques such as the stream of consciousness, flashbacks, and flashforwards reveal how time concept changed in Woolf's novels.

# 2.1. THE SIGNIFICANT INCIDENTS AND NEW IDEAS IN THE EARLY MODERN ERA AFFECTING LITERATURE

Modernism is a wide range movement which embodies different styles, techniques and concepts in its works. It corresponds to the early and middle nineteenth century in which people witnessed two world wars along with the changes in the world in terms of science, technology, economy, politics, etc. In 1760, the Industrial Revolution occurred in England, thus, England became the first country which industrialised. This significant event in the history of England triggered innovations in industry, technology and science. "Moreover, the late nineteenth century saw important changes in social organization that carried on deep into the twentieth century" (Epstein, 1995: 296). To set an example, towards the end of the nineteenth century, there were a lot of developments both in communication and transportation such as the invention of the telephone, appearance of the motor, as well as inventions in science such as the use of X-rays and the discovery of radioactivity. The progressions in science and technology continued to increase with the new century; furthermore, these improvements can be called scientific revolutions. In 1900, Max Planck's quantum theory, which examines the atom, and subatomic particles along with light, made an overwhelming impression all around the world (Singh, 2005: 2104). In 1905, the appearance of Albert Einstein's Theory of Relativity led to the increase of the new developments in science (2105). These progressions in science and technology along with the emergence of new ideas in terms of philosophy and psychology triggered the change in people's approach towards life. Because of these progressions, people in the late nineteenth century and twentieth century did not feel as a part of this rapidly changing world. Not only had people difficulties in adapting to these huge changes, but they also had hard times due to the war and its effects. All these events caused a change in people's mood by making people feel isolated, lonely, and depressed, as a result, these feelings paved the way for the emergence of new forms as well as attaching importance to individuality.

The works dealing with realism generally portray the problems in the age as reflections of the era. There were the struggles of the workers along with the problems children and women mostly underwent due to industrialisation. The novelists in the eighteenth and nineteenth centuries preferred to touch on the external problems; in other words, they put emphasis on the struggles of the workers such as low-payments, long-working hours, unhealthy working conditions, the problems of children who began to work at a very young age as well as the problems of women since they were regarded as second-class in the eyes of the society in that era. As a result of the aim of the realist authors, the style, which was used to reveal the outside problems, is known as the traditional style. The events are narrated in a chronological structure, however, both the techniques and content of the works changed in the early twentieth century literary works. In the modern period, there were changes not only in the fields of life but also in literature due to the fact that literature has been influenced by the events of the era throughout history.

# 2.1.1. The First World War and Its Impact on Literature

As well as the innovations in science and technology, people encountered the First World War in the twentieth century. People witnessed pain, and chaos which affected their lives in a negative way because of the four-year war period (1914-1918). Although it ended in 1918, its effects were not easy to get over for people since they lost their loved ones, homes, or parts of their body. Therefore, they were suffering not only physically but also mentally. People in the early twentieth century began to feel isolated in a crowded world due to the changes that they had never seen along with the war which brought chaos and destruction to the human body and soul. As a result, the world was an uncertain and ambiguous place for people who did not want to become a part of that uncertainty and ambiguity. Not being able to feel as a part of this changing world resulted from innovations and the war; therefore, people found themselves on the edge of depression which triggered some of them towards suicide. Not only did people have difficulties in adapting to the changes in the world, but also, they found themselves in a chaotic world because of the world war.

The First World War broke out on 28<sup>th</sup> July 1914 and it lasted until 11<sup>th</sup> November 1918. This four-year war caused many lives and property losses. The war began with the occupation of Austria Hungary in Serbia. After this occupation, other countries started to get involved in the war (Williamson, 1988: 795). There were some reasons why the First World War broke out in that era. "The war of 1914 began as a local quarrel with international ties; those ties converted it into a major conflagration" (818). To clarify, there was a search for colonies and raw materials between countries, and there was an economic competition between some countries, such as Germany and Britain. Moreover, after Industrialisation, armament started to accelerate. The spread of the idea of nationalism after the French Revolution and blocking between states were other reasons that led to the emergence of war. Thus, with the involvement of other countries in the war, the war grew, and moreover, two poles emerged: the allied and central powers. France, Britain, Russia, the United States, Serbia, and Greece were some of the allied powers while Austria-Hungary, Germany, Bulgaria, and the Ottoman Empire were the central powers. The war ended in 1918 with the victory of

the Allied Powers (Phelan, 2018: 27) by leaving millions of deaths, wounded people and many ruined cities behind it. Treaties were signed with the states that were defeated at the end of the First World War, which changed the balances in the world. Although the war ended completely, its effects were not easy to disappear in terms of both physically and psychologically for people. The lives of the people were filled with chaos and ambiguity due to the war. Although England was on the side of the Allied Powers who left the war with victory, the period was so hard to go through for the people since there were some people who lost their relatives, went to the war and saw dead bodies. In a way, people lived with a fear which resulted from the war in that period. They realized that the world was a place full of fear, chaos, pain; furthermore, everything in the world was uncertain and ambiguous for these people. While the slightest event could have a significant impact on history, it was impossible for this great war not to affect world history in a very significant way. As a result of this war, people got injured or died. Moreover, they were broken inside too since it was hard to get over the effects of the war totally. Being alive psychically does not mean that they felt alive mentally too since they had trouble looking at life with vivid feelings. In a way, they encountered both psychical and mental pain.

The new age came with changes in terms of science, and technology along with the First World War between 1914 and 1918. People had difficulties in adapting into these changes since they witnessed new developments which were regarded as innovations. Along with these changes, they saw how war damaged their lives deeply. These events led them to feel in depression because the world was not familiar to people anymore as if they had not been parts of this world. Hence, people were in an ambiguous situation which triggered them towards depression. The feelings of ambiguity and isolation changed the people's view towards life; therefore, the new perspective resulted from the significant events in the world having affected literature inevitably like the other fields in life. Humans began to retire into their shells due to the feeling of isolation, thus, they generally lived in their own minds by trying to stay away from the outside world. The return of people to their inner world brought subjectivity to the fore, and the main reason for this situation was their desire to be in their own familiar inner world rather than the outside world that seemed unfamiliar to them. Thus, they turned to their inner world and subjectivity came to the fore. This orientation to the inner world stemming from the events of the period affected people's lives in every aspect. It was inevitable that this situation would not reflect on the field of literature, which was affected by the events of the period. In a way, the prominence of subjectivity shaped literature both in terms of content and style as people's view of the world completely changed. The subject that the writers wanted to show in literature changed because there was a new world. The main reason for the change in the subject to be reflected in this new world is a new perspective. This new perspective brought with it a new purpose and new techniques. Thus, modern literature emerged, which was different from traditional literature in many aspects. Before modern literature, the aim of the authors was to reveal external problems with chronological time which they used in their works. In this respect, modern literature is quite different from Victorian literature. New technological and scientific developments in the world, as well as the war had a profound effect on literature. In modern literature, the focus has now been on the inner world and psychological state of people, hence, techniques have been shaped around this.

The First World War ended with the Treaty of Versailles after the Paris Peace Conference. David Lloyd George was the one who governed Britain between the years of 1916-1922. When he was the prime minister, Winston Churchill was the secretary of war (Riccards, 1986: 214). Lloyd George, who ruled the country during the war period, dropped from the government with the Liberal Party after the Çanakkale Affair because both the foreign secretary Curzon and secretary of war Churchill opposed to George's confrontational politics (Egerton, 1988: 435); moreover, the British public did not support the war with Turkey. As a result, "David Lloyd George had been forced from office and a conservative administration under the leadership of Andrew Bonar Law came to power" (Parsons, 2013: 873). After Lloyd George, Andrew Bonar became the prime minister, however, he governed the country only for seven months. Stanley Baldwin came to the post of Prime Minister (876) in 1923 and he ruled the country by taking office three times between the years 1924-1929 and 1935-37. In addition to all these events, the Irish War of Independence against the British government of the Irish Republican army continued between 1919-1921 (Bowden, 1973: 3). It was impossible that all these events, both politically and militarily, did not affect British society. People had trouble keeping up with the events that took place in the new century; therefore, they retreated into their own corners. These events influenced the human spirit and psychology as well as history in the twentieth century.

#### 2.1.2. The New Ideas in Psychology Affecting Literature

The 20<sup>th</sup> Century was a period of change in many ways. In addition to the political, military, technological, and scientific developments, developments in the field of philosophy and psychology affected the period deeply. New ideas in the field of psychology were another reason underlying the change of the spirit of the era. Sigmund Freud, an Australian neurologist who lived between 1856 and 1939, was one of the personalities who contributed greatly to the field of psychology. He was interested in concepts related to consciousness, as the founder of Psychoanalysis. He had a great impact on society not only with his thoughts on subconsciousness but also with the methods which he used in this field. One of the methods used by him was the free association method. With this method, everything in the patient's mind is expressed; in other words, it provides to reach memories, experiences as well as the symbols, which were kept in subconsciousness. There are three significant terms which underlie Freud's psychoanalysis theory: id, ego, and superego. On the one hand, "the superego represents the moral standards of person" (Nunberg, 1942: 33) such as principles and rule; on the other hand, the id is related to impulses. The ego tries to provide a balance between the superego and the id (34). Some impulses and desires that make people feel ashamed are pushed to the subconsciousness by the superego due to the fact that they are forbidden and shameful. Everything in the subconsciousness waits for an opportunity in order to come to consciousness. Coming out of the repressed impulses unrestrainedly causes some problems. Therefore, Freud uses several techniques in order to reveal the things which lead to problems in the subconsciousness and one of these methods is the free association method. Through this technique, a doctor can know everything which comes to mind of the patient. According to Freud, the impulses of an artist come into existence through his/her work. In other words, work is a representation of the artists' minds. Moreover, the method, which Freud developed to analyse human psychology, led to the term of consciousness' gaining importance. As a result, the stream of consciousness technique emerged in the literature. The authors in the modern era reveal the situation of the characters' consciousness through this technique. There are other outstanding figures who influenced that century along with Freud:

After Newton, Bergson, and Einstein it could no longer evade the scientific necessity of a new concept of time and space; after Darwin, the bio-logical necessity; after Marx, the economic necessity; after Freud, the psychological necessity of man's own and distorted personality (Kohler, 1948: 331-2).

As it is outlined in the lines above, Isaac Newton, English physicist, Henri Bergson, a French philosopher, and Einstein's concept of time became prominent in that period. Charles Darwin and his theories paved the way for the emergence of new questions about human beings' place in the world. His theory about evolution, which claims that human beings have a common ancestor with primates, caused to lose the importance of humanity in the world because it did not aggrandize humankind. After a while his book On the Origin of Species, which was published in 1859, drew the attention of the society, his theory "survival of the fittest" has created a tremendous impression on the people. Claiming that the strong one can fit into society whereas the weak one is obliged to lose has made way for people's beginning to feel more depressed. As well as Darwin's theories in science, Karl Marx and his ideas have impacts on society. Karl Marx, who lived between the years of 1809-1882, has affected the transition period from realism to modernism with his thoughts in terms of society, economy, and philosophy. Marxism, which was originated from Marx and Friedrich Engels, brought new terms such as labour power, manufacture, fund and these terms had impacts upon the people in the nineteenth century economically. Marxism appeared with criticisms about the capitalist system; therefore, people began to question why they and their labours were exploited by the powerful ones. The effects of Marx's ideas can be observed in both society and the economy. Friedrich Nietzsche, a German philosopher, also affected people's mood in terms of questioning life. Nietzsche's questions about existentialism and his "God is dead" understanding are other reasons for the loss of belief and not feeling belonging to the meaningless world in the late nineteenth century and early twentieth century. Besides all these new ideas in nearly all fields, Freud came up with new methods along with the ideas in psychology and this situation triggered the interest in human psychology which was generally distorted in that era. Freud's thoughts and methods were very influential both in the period and in literature because the authors focused on the human mind in their works and reflected the thoughts in the mind of the characters by throwing the grammar rules into the background with new techniques such as the stream of consciousness.

Swiss psychiatrist Carl Gustav Jung was one of the significant personalities who influenced the period. Jung, who lived between 1875-1961, stated that human psychology is not simple and static; on the contrary, it has a complicated and dynamic structure. The concept of psychological time has come into view instead of chronological time with this idea. This situation was one of the reasons which paved the way for time's being narrated as interbedded. As well as Freud and Jung, William James was one of the leading names in the field of psychology in the modern period. From the perspective of American psychologist William James, consciousness is moving; in other words, it is in flow. Hence, thoughts change all the time and nothing can be repeated. In a way, consciousness and thought cannot be separated from each other.

Stream of Consciousness was a phrase used by William James in his Principles of Psychology (1890) to describe the unbroken flow of perceptions, thoughts, and feelings in the waking mind; it has since been adopted to describe a narrative method in modern fiction (Abrams, 1999: 298).

Through these lines, it is obvious that the reason why the stream of consciousness was preferred by the modernist authors as a method is to portray what goes on in the characters' minds. In other words, this technique was adopted to show what people think and how they feel in their own minds. Moreover, William James had a significant contribution to the emergence of the phrase of the stream of consciousness. The increasing improvements in the fields of science and technology, the new ideas in psychology along with the First World War affected the lives of people in the twentieth century; therefore, these events had a huge impact on the literature of the period. How people were in a depressive mood was reflected through literature and the characters in it as they represent the mental situation of the people in the era.

#### **2.2. THE MODERNIST FICTION**

In the modern era, there was a need for change in everything since people witnessed the complicated feelings due to the massive changes, new ideas and war. "Modernism can be taken as a response by artists and writers to several things, including industrialisation, urban society, war, technological change and new

philosophical ideas" (Childs, 2007: 21). As it is stated, modernism can be regarded as a response of the artists against all the changes in life arisen from industrialisation and its outcomes, developments in technology, new ideas, and war, all of which led to the new perspective towards life. As a result, modern artists tried to break the traditional form in new literature by applying new styles and concentrating on the mental state of the people. Individuality became prominent in the modern era because the focal point has changed in modernist tradition since the aim of the authors was to reflect the inner worlds of the characters, who are the representatives of the people in the twentieth century. People's retiring into their own shells and the distantness in their relationship affected literature. The characters' seeing the world as meaningless portrays how people in the twentieth century were in a depressive mood by alienating themselves from the rest of society. The modernist authors reveal that a human soul is a chaotic place through their characters whose mind is in disorder. In a way, reflecting verisimilitude in their works by using chronological time with long descriptions was not preferred by the modernist authors, unlike Victorian novelists who lived in the nineteenth century and dwelled on social issues through setting, characters and plot. However, in the modern era artist's focus of interest changed. Making a journey to the mind of the characters can be observed in modernist fiction in which there is a portrayal of the psychological state of the characters. Preferring internal journey instead of the external journey and reflecting individual matters instead of social issues are related not only to content but also to form:

> In prose, it is associated with attempts to render human subjectivity in ways more real than realism: to represent consciousness, perception, emotion, meaning and the individual's relation to society through interior monologue, stream of consciousness, tunnelling, defamiliarization, rhythm, irresolution and other terms that will be encountered later in the book (3).

Childs asserts that applied techniques in prose by the modern authors render consciousness of a human. Intending to reveal the inner world of the characters resulted in the appearance of new methods such as the stream of consciousness, tunnelling, an interior monologue which make it easier to focus and look at the human mind. The new techniques appeared in modern literature such as the stream of consciousness, flashbacks, and flashforwards which provide to reveal how the characters' minds work; in other words, what they think or how they feel is revealed thanks to the new techniques in the literature. Stream of consciousness is a technique which provides to plunge the readers into the characters' mind because it portrays everything in the mind directly. Therefore, the readers find themselves on a journey to the inner worlds of the characters. Moreover, the readers go back to the past and go forward with the characters who sometimes find themselves in their memories thanks to the use of flashbacks and flashforwards. In modern novels, time is not narrated in order like realistic novels; therefore, they do not have a certain beginning and an end as well as chronological time structure. Focus on the mind and the aim to reveal how the mind works can be described as a situation arisen from the effect of new ideas in psychology.

One of the changes in literature is related to reality. In the modern era, the reality is not stable for everyone in literature. Along with the changes in nearly all fields, the First World War affected human souls negatively in the early twentieth century. The four-year war period affected nearly all over the world. Although England was on the side who won the war, the war left chaos and pain in twentieth-century England. As a result of the changes and war, people felt as if they had been lost in the world. The changes in their mood were reflected through art and literature. From the eyes of the modernists, everyone had their own reality because individuality became more significant than universality. In this complicated era, people retired into their shells; therefore, the reality was not stable for everyone anymore. "There was no such thing as objective reality, only a sense of reality, which depended on the history of your own consciousness" (Daiches, 1975: 814). As it was asserted, in the modern period, reality is not objective anymore since it depends on each people's world. To clarify, it changes from one person to another one. The characters' realities being changeable is related to the situation of people in the modern era because they were in their own worlds. People in the twentieth century felt lonely in a crowded world in which there was nothing familiar to them, hence, the reality was not the same for everyone anymore. In a way, the pessimistic view towards life affected the literature inevitably, for instance, the authors did not put emphasis on the social issues by concentrating on internal problems as well as the human mind, hence, they applied new techniques in order to reveal how human mind works. Artists' focus of interest has changed remarkably as a consequence of the massive changes and the first world war. Therefore, fragmented identities and fragmentation style became the forefront in modern literature. Besides all these, the authors kept themselves away from society due to their elitist attitude. The modernists saw themselves away from society by keeping their distance; therefore, they did not belong to society. The breach between society and the artist also reveals that there were change and revolution in literature. Not only the aim and focus of interest of the authors changed in modern literature, but also the context became different along with the new methods.

In literature, the movement is associated with the works of T.S. Eliot, James Joyce, Virginia Woolf, William Butler Yeats, Ezra Pound, Gertrude Stein, H.D. (Hilda Doolitle), William Faulkner, Franz Kafka, and Knut Hamsun (among others). Their works subvert the "basic conventions earlier prose fiction by breaking up the narrative continuity, departing from the standard ways of representing characters, and violating the traditional syntax and coherence of the modes of narration". Some writers experimented with "automatic writing (writing that has been freed from control by the conscious, purposive mind)" (Kong, 2005: 28).

These lines express how modernist authors and poets such as Eliot, Joyce, Woolf, Yeats, etc. broke the traditional norms in literature by focusing on different issues such as the mental situation of people via new methods. In a way, it was the way that the modernists rebelled against life through literature. In fact, there was a need for a revolution in every field of life and the idea of Ezra Pound's "make it new" is a representation of this situation. Their goal is to make everything new as a result of feeling alienated from the world in which they tried to save themselves in their own corners by keeping themselves away from society. "Lacking a body of traditional belief, in an age of anxiety and doubt, the novelist has been thrown back upon his own" (Kohler, 1948: 332). It was the era in which people lived with anxiety and doubt resulted from the war and other events; therefore, people preferred to stay in their own worlds. One of the ways followed by the modernists to live in their own world is literature and the changes in it. It can be observed that there was a modern change in literature which was resulted from necessity since the momentous changes, improvements, as well as historical events, gave rise to the negative perspective towards life and the feeling of alienation along with the pain experienced within human soul. James Joyce, Virginia Woolf, Ezra Pound and T.S Eliot are some of the leading modernist authors whose works have modernist elements in terms of content and style. In this thesis, since the focus will be on Woolf as a modernist, the impact of Woolf's psychological condition upon her writings and the influence of war on her fiction should be stressed as well while dealing with her modernist style in her works.

#### 2.3. WOOLF'S PERSPECTIVE TO MODERNISM

Virginia Woolf, who lived between the years of 1882-1941, experienced the feelings that the war and the innovations brought to the twentieth century. Woolf was born in 1882 in London as the daughter of a writer Leslie Stephen and an artist' model Julia Stephen. When Virginia Woolf was thirteen years old, she lost her mother because of heart failure arisen from influenza, thus, the attacks of nerves began to appear in Woolf's life.

She was writing almost as soon as she could hold a pen in her hand. But even in her childhood it was observed that her mind was troubled. She had her first nervous breakdown when she was just thirteen. Such breakdowns would happen again during her life – finally, fatally (Sutherland, 2013: 191).

Woolf's nervous breakdown began to emerge when she was just a child and they affected not only her mental health but also her whole life. In the process of time, her hearing inexistent voices as well as seeing hallucinations devastated her mental health. The loss of her mother affected her life deeply as it can be observed in her novel *To The Lighthouse* (1927) as a reflection of her life. Woolf was struggling not only with her psychological condition but also with the difficulties of being a woman at that time because being a woman was an obstacle in the field of education. With the help of her father, she managed to improve herself; furthermore, the writing was one of her interests since she was young. However, the loss of her father in 1904 was another reason for her depression that drove her to death. She joined the Bloomsbury group which includes significant authors and artists such as E.M. Forster, Duncan Grant, Vanessa Bell (the sister of Virginia Woolf) and Leonard Woolf (the husband of Virginia Woolf). One of the other reasons that made Woolf's life tragic was the loss of her brother from typhoid in 1906.

Woolf married Leonard Woolf in 1912, however, the first years of their marriage were not good in terms of Woolf's psychology since she attempted to commit suicide. One of the reasons behind her depression in these years was that she should not have a child according to the doctors. She did not feel like a woman completely because of regarding this situation as a failure. After she stayed in clinic and returned when she did not recover yet, her husband tried to persuade her to stay in the clinic again. This situation resulted in her attempt to commit suicide. Her first novel *Voyage* 

Out was published in 1915. Their publishing house Hogarth Press paved the way for Woolf's publishing her novels. Woolf had a relationship with a woman who was Vita Sackville-West and this relationship was not secret because it was known by the husbands of Woolf and Vita. The strong relationship between the two women can be observed in Vita's letters. Vita with her personality was the source of the inspiration for Woolf's other well-known novel Orlando: A Biography which was published in 1928. Vita's son Nigel described this novel as "the longest and most charming loveletter in literature" (Nicolson, 1998: 202). The effect of Vita on Woolf can be observed throughout this novel. Between 1934-1938, she lost her close friends and in 1939, the Second World War began. With the beginning of the Second World War, the ideas about suicide came back again to her mind. In 1941, when she was 59 years old, she jumped into the Ouse River by filling her pockets with stones in order to sink. "She drowned herself on a cold day in March in a dangerous, ugly river" (Lee, 2005: 55). As it is stated that Woolf threw herself into the river on a cold day. Her suicide attempt became successful at this time and she left a letter behind her for her husband. She wrote that she could not continue living through these words "I feel certain that I am going mad again" (Crinquand, 2008: 54). The letter of Woolf to her husband reveals that her psychology was not good and she was aware of this situation. As a result of her mental state, she decided to commit suicide.

Virginia Woolf is one of the modernist authors who applied the stream of consciousness technique in her works and she generally concentrated on the mental state of the characters by revealing how their minds work. The stream of consciousness technique helps the narrator reveal the thoughts and feelings of the characters in the modern period. She lived in an era which was full of progressions in science and technology, new ideas in psychology and the negative feelings resulting from the war. As a representative of the modernists, she used the stream of consciousness technique in her works since the inner worlds of the characters are presented through this kind of technique. In a way, the readers plunge into the minds of the characters by witnessing what they think or feel. Along with a journey to the minds of the characters, the abrupt changes in time can be observed in modernist fiction due to the theories about time. To set an example, there are generally flashbacks and flashforwards in modern literature. The reader suddenly goes back in time with the characters and comes back to the now with them in the modern novels. In this regard, Virginia Woolf

was one of the writers who contributed to literature in the modern period. Woolf is one of the leading figures using the stream of consciousness technique because the characters go to the past and the future in order to show how people's minds work in her works. Regarding that there was no ultimate truth according to modernists as well as the prominence of the terms such as consciousness and mind are the reasons why the modern authors used the stream of consciousness technique as seen in the quotation from one of the most important modernist novels, *Ulysses* by Joyce:

Pineapple rock, lemon platt, butter scotch. A sugarsticky girl shovelling scoopfuls of creams for a christian brother. Some school treat. Bad for their tummies. Lozenge and comfit manufacturer to His Majesty the King. God. Save. Our. Sitting on his throne sucking red jujubes white (Joyce, 2008: 124).

These lines from *Ulysses*, which was published in 1904 by James Joyce, reveals how modernist authors' techniques differ from traditional rules in literature. James Joyce is one of the authors who applied the stream of consciousness technique in his works. There is no mediation which helps the readers understand what happens in the novel. There are clear sentences and words in realistic novels because the authors narrate everything clearly. On the contrary, some modernists, such as Joyce, avoided using sentences and transition parts in his works. He uses some words by plunging them into the characters' minds. Through this quotation, it is clear that Joyce as a modernist author shows how the mind of the character works rather than giving long descriptions or sentences, unlike other Victorian authors. Through these lines from *Ulysses*, the way which Joyce used the stream of consciousness technique is clear because the structure of sentences is different from the traditional structure which can be observed in Victorian literature. *Ulysses* is one of the best examples which shows the reflection of the significance of memory on literature.

When you read certain passages in *Ulysses* you feel that Joyce's mind and your mind are one, that he knows all about you though he though he has never heard your name, that there exists some world outside time and space in which you and he are together (Orwell and Davison, 2000: 87-8).

James Joyce, who was a significant novelist of the modern era, used the stream of consciousness technique effectively in his works. This kind of technique embodies random sentence structure, the untypical use of punctuation; in other words, the use of unusual grammar style can be observed in modern works. Additionally, the flow to the characters' minds along with the sudden changes in time are other features which have

been applied in literature by modernists. Woolf's style can be considered as different from the style of another well-known modernist author James Joyce. Through her works such as Mrs. Dalloway, the existence of mediations and formulations can be observed whereas there are generally no mediations in Joyce's novels. The sentences are completed and there are verbs in her novels; thus, she helps the reader by formulating and mediating the words. In this regard, her style, which is different from James Joyce's style, helps the reader understand what the characters think and how they feel since she used sentences along with grammatical rules. As a modernist writer, Woolf's novels do not end like traditional novels or convey a moral message because in her works she showed the characters' psychological state. As it is stated, "[h]er novels' relative plotlessness, too easily confused with formlessness" (Phillips, 2003: 421). Woolf's novels do not have a certain beginning and an end since everything in the minds of the characters is conveyed as it is. In other words, by showing how the mind works, events are told unorderly rather than sequentially and chronologically. A journey into the inner world of the characters is in the foreground in Woolf's novels. The most significant reason for this situation is the intense psychological research in the period. Furthermore, according to Woolf, the journey to the internal worlds of the characters does not diminish the normal reality which is related to everyday issues:

For her, too, the emphasis on the inner world of sense- experience, feeling, and thought, is not designed to disparage the normal everyday reality but to enhance it. The realm of consciousness does not replace the reality we naively believe in, it is shown to constitute this reality (Hintikka, 1979: 12).

From the perspective of Woolf, the focus on the inner worlds of the characters which embrace their feelings, thoughts, dreams and experiences makes the everyday reality intensify rather than disparage it. As a result, emphasising consciousness provides to help the constitution of reality. Although the realities of the characters are changeable from one another because of having different experiences, this situation does not disparage normal reality. In a way, individual matters do not replace the everyday problems.

Not only different styles but also the content of Virginia Woolf's works has modernist features. In terms of content, Woolf, as a modernist author, focused on showing what the characters think and feel, rather than writing a novel which ends with a happy ending and gives a lesson at the end of the story. "She was both a combative opponent of conventional characterization and a bold innovator in the representation of personhood" (Abbott, 1993: 394). Woolf applied new techniques and concentrated on individual issues in her works by disregarding traditional style. Therefore, she showed the inner worlds of the characters with the help of new techniques in her works. When the characters suddenly think of the past, the reader goes to the past with that character and travels with him/her. With this technique, which shows how the human mind works, it is easier to show the psychological state of the characters. Along with the conflict between good and bad characters, as in traditional literature, personal problems have been addressed, rather than external problems, since everyone's reality is individualized in the modern period. These situations can also be observed in the works of Virginia Woolf. In addition to all these events in the period, the tragic events in Woolf's life, which led her to depression and even worse, to suicide, affected Woolf's psychology. One of the significant reasons why Woolf focused on the psychology of the characters in her books is that she struggled with both this mental state and the doctors for most of her life. In a way, this depressed state of Woolf, which drove her to suicide at the age of 59, pushed her to examine human psychology. Woolf focuses on individuality and human psychology since she was both an individual complaining about this situation and a modernist who thought that doctors did not understand her at all while struggling with depression. Therefore, Woolf reflected her psychology as well as the mental state of the people of the period in her novels. One of the most obvious examples of this situation can be observed in Mrs. Dalloway. To explain, one of the characters in the book, Septimus Warren Smith, struggles not only with mental problems like Woolf but also with doctors who do not understand him. Beyond being a modernist author, Woolf is an individual who lived in the modern period, as a result, it can be asserted that she reflects her own mental state in her works. Not only does Woolf reflect her consciousness in her works, but also, she plunges the readers into the characters' consciousness. In Mrs. Dalloway, she focuses on the minds of the characters by surrounding the novel especially with two characters who are created as doubles for each other: Septimus and Clarissa. "Woolf, by privileging a consciousness like Clarissa's [...] is presenting us with a model for ethico-affective response whom we as readers must in turn create, from the inside and the outside" (Edmondson, 2012: 28). Woolf portrays the consciousness of Clarissa Dalloway, the central character of the novel in *Mrs. Dalloway*; on the other hand, she provides a model for the readers to create ethical-affective response which is both inner and external. One of the most specific modernist features is displaying the consciousness of the characters as Woolf does in *Mrs. Dalloway* and *The Waves*. She reveals the inner worlds of six characters throughout the novel via their soliloquies in *The Waves*. "Plot and character in the traditional novelistic sense seem at best elusive, at worst sketchy, even nonexistent" (Richardson, 1973: 693). As a modernist author, her style is highly different from the traditional structure in terms of plot and character due to soliloquies, interludes along with being a work which contains the features of prose and poetry at the same time.

Woolf's works reflect the psychology of the people who were drawn to their shells during the period; furthermore, the concept of time is at the forefront in most of her works. The prominence of the concept of time in the novels of an author who lived in the same period with Einstein can be analysed both in terms of content and style. Albert Einstein made one of the greatest influences on science in the modern period with his ground-breaking theories. This scientist, whose name is still frequently heard today, changed the perspective of people towards time by claiming that time varies from person to person; in other words, time is relative. With the disappearance of the idea of absolute time, the concept of time has become subjective, like many things in the period. It was impossible for Woolf, who lived in that period, to live without being affected by all this. The concept of time is at the fore in Woolf's works. This situation mostly occurs with the stream of consciousness technique because the characters go back in time or come to the present thanks to this technique. Although Einstein and Woolf, who lived in the same period, were interested in different fields, both can be associated with the concept of time. It was inevitable that Einstein and his Theory of Relativity would also affect literature. After Einstein claimed that time is changeable for individuals and there is no absolute time comprehension, his perspective changed the approach towards the concept of time. As one of the authors using the stream of consciousness technique, Woolf did not generally write her novels in a specific chronological time. In addition to showing the minds of the characters with the stream of consciousness technique, Woolf also reveals their memories in time. "The concept of memory and the vagaries of relativistic space-time point in one and the same direction. [...] The relativistic problems likewise show especially clearly that the temporal and the spatial perspectives interact" (Hintikka, 1979: 9). As asserted, the concepts of memory space-time have the same direction since both of them are related to time. The significance of the concept of consciousness has brought the concept of memory to the fore, at the same time, the concept of space-time has begun to attract attention with the Theory of Relativity. The concept of memory has revealed the effect of time on people by focusing on what is in consciousness. The Theory of Relativity has revealed that time is relative by combining the concept of space and time. Therefore, these two concepts, memory and space-time, are closely related to time.

Woolf gave great importance to the concept of time in terms of content in her works. In her works, it can be observed that the characters are in the past or that time is significant for them. With the disappearance of the absolute time concept, the concept of time has become individualized in Woolf's works. For example, some characters feel in the past, while for some characters the past is already over. Besides, the characters' thoughts about time show the effect of the concept of time on Woolf's works. Therefore, her works can be analysed both in terms of content and style under the influence of Einstein's Theory of Relativity. In a way, time is changeable for each character or it is a very significant concept for them in her novels.

## **CHAPTER III**

# 3. AN ANALYSIS OF MRS. DALLOWAY

# 3.1. MODERNIST FEATURES IN *MRS. DALLOWAY* IN TERMS OF CONTENT AND STYLE

Mrs. Dalloway which is mostly based on the inner worlds of two characters who do not even see each other throughout the novel, Clarissa Dalloway and Septimus Warren Smith, was published in 1925 by Virginia Woolf. Woolf applied modernist features in terms of both content and style by putting emphasis on the concept of time and presenting the consciousness of the characters via the new techniques emerging in literature in that era. The novel as a modernist fiction does not have a clear beginning and an end because there is not a chronological order in the novel. Woolf portrays one day in 1923 by going and coming back in time due to the effects of the theories about time on literature. Along with the minds of the other characters, the focus is mostly on the consciousness of Clarissa Dalloway who prepares for her party. On the other hand, Woolf stresses how the Great War (WWI) affected people's lives deeply by bringing the negative feelings such as pain, and fear to their worlds through a character Septimus Warren Smith, who is the other central character of the novel. The novel begins with the walk of Clarissa Dalloway on Wednesday, June 1923 and everything happens in one day in the novel. It begins and ends with the same time, however, there are flashbacks to the past of the characters in the novel. Not only does Woolf show the mental situation of characters, but also, she reflects her own psychology in this work. Moreover, "Woolf's method was not only anomalous but also a radical challenge to the assumptions about typical narrative practice" (Edmondson, 2012: 20). Woolf's modernist style is considered as a radical change due to her not preferring traditional rules such as chronological time, giving moral lesson, displaying good and evil sides etc. The stream of consciousness technique helps the modernist authors reveal the way how the mind works; therefore, everything in the consciousness of the characters such as feelings, ideas, dreams and hopes are brought about. Presenting the past, present or

future of the characters along with making a journey to the consciousness of the characters possible prove how this technique is related to both the concept of time and consciousness. Through tunnelling process, Woolf creates the caves, by means of which the inner worlds of the characters are reflected so that she manages to reflect their world, which means their soul, in this way. Touching upon the consciousness of the characters as a modernist work brings the time concept to the forefront because the technique showing their inner worlds is related to going back and forward in time. Hence, in the novel, how the characters feel or what they think in the past is revealed. "Virginia Woolf's use of "The Hours" as a working title for Mrs. Dalloway" (Richter, 1982: 237) shows that the novel has substantial features for time concept; therefore, time concept has an effect not only on the style, but also on the context of the novel. To clarify, Septimus is a man who lives in the post-war period, however, he cannot get over the negative impacts of the war. His situation, in which he cannot feel as a part of the present because of an unforgettable memory for him, shows that time changes from one person to another person as Einstein indicates with his Theory of Relativity. In this chapter of the thesis, the focus will be on Mrs. Dalloway in the light of Einstein's relativity theory since time is forefront in terms of both content and style by touching on modernism, World War I as well as Woolf's consciousness.

The novel begins with Clarissa Dalloway, who is the most central character in the novel, when she walks in London. She is a woman at her fifties and from upper class. Throughout the novel, Woolf shows the reader that the characters' minds are full of different thoughts from different times without neglecting to use poetic similes or the words that make the readers understand the sentences. To set an example from the novel, at the beginning of the novel when Clarissa walks in London, she thinks that "How fresh, how calm, stiller than this of course, the air was in the early morning; like the flap of a wave; the kiss of a wave; chill and sharp and yet (for a girl of eighteen as she then was) solemn, feeling as she did, standing there at the open window" (Woolf, 1996: 5). Woolf intercedes with kinds of these sentences in which there are images. For instance, she uses the words "the kiss of wave" (5) in order to describe the air. In addition to use of poetic similes for formulating the work, her completed sentences help the reader understand this modernist work which is full of new techniques such as stream of consciousness, inner monologues, flashbacks and flash-forwards. Woolf generally helps the reader understand the sentences by using similes. When Clarissa

stands at the window and looks at flowers and trees, Peter Walsh, who is her old boyfriend, comes to her mind suddenly. This is the way how Woolf narrates the story in Mrs. Dalloway. Her remembering the conversation between her and Peter years ago is the feature of the stream of consciousness technique. In the novel, the inner world of Clarissa is revealed since what she thinks or feels is narrated through the new style in literature. "[S]tanding and looking until Peter Walsh said, "Musing among the vegetables?"—was that it?—"I prefer men to cauliflowers"—was that it?" (5). This quotation from the novel is an example of stream of consciousness technique as it presents the mind of Clarissa in which she remembers her old friend Peter Walsh. Therefore, time immediately changes to the past when she has been 18 years old. This technique is a way to demonstrate inward lives of people by illustrating their reflections, impressions, experiences, memories as well as ideas and feelings. Woolf applied the new style in this work by paying attention to use words such as poetic similes, flows, formulations and mediations which facilitate to read the novel for the readers. Throughout the novel, time is narrated without an order owing to remembering the old memories which are kept in the consciousness. "How they argued! She would marry a Prime Minister and stand at the top of a staircase; the perfect hostess he called her" (10). These lines are other examples related to their past. This memory remembered by Clarissa presents that Peter has criticized her and defined a picture of Clarissa in the future. Peter's accusing Clarissa of her interests, which are not intellectual, is an example of their different personalities. Peter's ideas about the situation of Clarissa in the future come true at the end of the novel. This quotation demonstrates how Peter thinks about Clarissa by accusing her of not having much intellectuality thanks to the possibility to witness the way her mind works. Now, Clarissa is married to Richard Dalloway who is a member of parliament; moreover, at the end of the novel Peter sees Clarissa at the top of a staircase when she gives a party. Although Peter is a person who cares the world matters as well as poetry, Clarissa lives in a superficial world away from the real world. In a way, it is the reason why she thinks the war is over. Then, she remembers why she prefers Richard to marry rather than Peter. The essential reason behind it is that there should be independence between two people in marriage from the perspective of Clarissa. In a way, each person in a relationship should have an amount of distance in order to protect their souls. According to Clarissa, she keeps and protects the privacy of her soul along with her

integrity by keeping her distance from her husband. "For in marriage a little licence, a little independence there must be between people living together day in day out in the same house; which Richard gave her, and she him" (10). Although Clarissa is not in love with Richard, the most significant thing for her is independence; therefore, she prefers to marry Richard in order to have independence. Thus, she protects her soul without identifying completely herself to Richard. What has happened in the past of the characters such as Clarissa's preferring Richard rather than Peter is revealed through flashbacks in the modernist fiction. The title of the book shows that how a woman is called by her husband's surname rather than her name. This situation shows that marriage which is for the sake of logic leads to the identity problem of a woman. Although this situation restricts women's freedom, the reason why she marries Richard rather than Peter is not to lose her freedom. In this kind of marriage, she can own bed and time.

The other central character is Septimus Warren Smith who is in his thirties. In the novel, readers come across Septimus when Mrs. Dalloway jumps because of the noise of an explosion from a car. Although Septimus and Clarissa are at the same place and at the same time, they never encounter each other. As a lower-class man, the war is not over yet for him and others like him. He is a victim of the First World War which had a negative impact on society in the early twentieth century by causing wicked feelings such as pain, chaos, fear, and agony becoming prevalent in people's lives. In Mrs Dalloway, Septimus is the one who joins the war voluntarily, however, he becomes a different man away from liveliness and the joy of the present moment owing to the experiences in the war. Hence, Septimus is a representative of the people who suffered from the negative outcomes of WWI in the modern era. Before he goes to the war, he has been a vivacious man; moreover, he has been interested in poetry and books and open to new ideas and impressions. The difference of his personality is obvious thanks to the new techniques in the modern era. The readers plunge into the characters' mind; thus, they go with them to past or present. As soon as the war has been declared, he volunteers to fight for his country. Even if he stays alive, he finds himself in psychological trauma as a sensitive man. In fact, he is not fit to be a soldier because of his sensitiveness. After he witnesses how war is relentless, his view towards life changes in a negative way. Now, he goes to doctors with his wife Rezia Warren Smith as he sees his dead friend Evans from the war. At a park, Peter is likened to Septimus's friend Evans by Septimus. Septimus's talking to his dead friend and the abrupt changes in his mood make him a sick person in terms of mentality in the eyes of society. He has two different personalities: one of them is full of energy of life whereas the other one is on the verge of suicide.

No crime; love; he repeated, fumbling for his card and pencil, when a Skye terrier snuffed his trousers and he started in an agony of fear. It was turning into a man! He could not watch it happen! It was horrible, terrible to see a dog become a man! (75-6).

Through the lines above, the mental situation of Septimus is revealed. He has two sides which make human psychology complicated as these two sides are highly different from each other. On the one hand, the first part of him finds life beautiful whereas the other part of him is disgusted against people. For instance, here, he firstly thinks about love, nevertheless, he suddenly sees a dog becoming a man with fear. Having different two sides from each other causes to feel different feelings: happiness and fear, which belong to the same person. Via the stream of consciousness technique, his psychological state, in which his feelings can suddenly change, is presented. As a result, the abrupt changes in his mood are reflections of the shell-shock effect on people. Septimus is a person who thinks life is beautiful to live on the other hand he begins to feel disgusted with life owing to the experiences that he encounters at the war. Having two different moods shows that he is "the happiest man in the world, and the most miserable" (93) at the same time. Two sides of him can be observed from his attitudes and thoughts in the novel. Thanks to the stream of consciousness technique and flashbacks, the reader can realize how he has a different character before the war because his past and his perspective towards life now are presented to the reader. In the modern period, people had to get through not only the war but also the changes in nearly all fields of life. Being both happy and miserable at the same time is related to having two sides which leads to abrupt changes in his soul. As a reflection of the people's psychology in the early twentieth century, he does not feel as a part of the world and lives in his inner world by struggling with depression. The experiences from the war are the main reasons behind his change. The war changes him so much that he cannot find anything joyful in Shakespeare anymore as he has found before the war as he thinks that "How Shakespeare loathed humanity" (98). He does not get the same satisfaction as he does from reading Shakespeare due to the change in his perspective towards life and people; furthermore, his mental situation draws him to death. He sees

human nature in terms of wicked and evil since according to him he deserves to die due to the crimes such as not caring about Evan's death, marrying Rezia without having love for her. Being accused himself of these crimes pushes him to think that he is condemned to death by human nature which means beast because it is described as "the repulsive brute, with the blood-red nostrils" (102) by him. In this way, Septimus refers to the doctors whom one of them is Dr. Holmes. For instance, according to him, Dr. Holmes as a representative of human nature is on him to catch him. The stream of consciousness technique helps the thoughts such as his blaming on himself, being afraid of human nature, which is after him, reveal. Similarly, Woolf's own mental situation is demonstrated via the modernist technique by which the characters' minds are elaborated as Septimus's feelings towards life, death and the doctors come into view.

In the novel, there is a portrayal of the doctors of the same period in which Virginia Woolf witnessed a person's inability to adapt to society was seen as inadaptability in the eyes of the doctors. Septimus suffers from the wrong approaches of the doctors towards him as well as post-war trauma. Sir William, the psychiatrist, is the other doctor who cannot understand Septimus in the novel. From the perspective of people like Mr. Bradshaw, who resembles the doctors in Woolf's period, people like Septimus suffer from the lack of a sense of proportion; in other words, he cannot fit into society because of behaving and thinking differently from the rest of it. Although Mr Bradshaw should have asked about war and its effects on him as a doctor, all he cares about his lack of fit into society. The main goal of people like this doctor is creating the typical types of the people in society. "Sir William said he never spoke of "madness"; he called it not having a sense of proportion" (107). Mr. Bradshaw does not ask what Septimus witnesses at the war; on the contrary, he ignores this situation. In a way, he decides what happens to Septimus from the eyes of society instead of getting deep in the roof of illness. These people's desire is to fit everyone into the same mood with the aim of creating stereotypical people. As a result of his abnormality, Septimus is regarded as insane in the eyes of the doctors. The similar nervous system disease of Woolf pushed her to suicide like Septimus. Lack of proportion underlies the insanity of people according to the doctors in the novel. To clarify, the reason why Septimus suffers from a mental disorder is his not being able to fit into society like most of the people in that society. The aim of both proportion and conversion, which is imposing their features on the public, is mentioned through these lines:

But Proportion has a sister, less smiling, more formidable, [...] Conversion is her name and she feasts on the wills of the weakly, loving to impress, to impose, adoring her own features stamped on the face of the populace. At Hyde Park Corner on a tub she stands preaching; shrouds herself in white and walks penitentially disguised as brotherly love through factories and parliaments; offers help, but desires power (111).

In the novel, it is hard to understand that these words belong to Septimus or Virginia Woolf. The reason for not being able to distinguish the narrator from the character is her style. Therefore, some of the sentences like the ones above are difficult to distinguish the character from the narrator or vice versa. For instance, it is not clear that who utters these lines. Despite Woolf's use of mediations to formulate the sentences, there might be a complicated situation for the readers such as not understanding whose ideas are narrated. From the eyes of these doctors, everyone should be the same and unformed, unlike Septimus whose mind is different from the rest of the people. Like Septimus, it was thought that Woolf could not comply with society due to lack of proportion. In the quotation above, Woolf highlights how conversion is related to proportion and tries to impose its own attributes on the public. "It loves blood better than brick" (111) because all it does is related to destroying human souls by forming everyone in the same mood.

Septimus's catastrophic psychology prepares him for a life which ends up with suicide. The ironic situation about his death is that he kills himself when he sees life as beautiful. "But he would wait till the very last moment. He did not want to die. Life was good. The sun hot. Only human beings—what did they want?" (107). In fact, the reason behind his committing suicide is to preserve happiness since it is better to die rather than being manipulated by Dr Holmes. When Septimus is upstairs to prepare with the aim of going away with his wife, who feels happy with her husband in the end, he hears the voice of Dr Holmes trying to come upstairs. Until Holmes comes, he sits since he does not desire to die by considering life as good. His aim is to preserve happiness within death by escaping from human nature represented by the doctors who do not get into the roots of his illness and consider him as incompatible. Therefore, in this way, he keeps absolute happiness which is found by him before suicide. In a way, Septimus's goal is to keep the beauty of life instead of escaping from this wretched

life. The use of the stream of consciousness technique is a means to bring about how Septimus feels before he jumps out of the window. Otherwise, the feelings kept in the inner world of Septimus or other characters would be hard to be known by the readers. The focus on the characters' minds by making individuality forefront is one of the most prominent features of modern literature. In fact, Woolf initially planned for Clarissa's death at the end of the novel (Urgan, 2020: 123). Hence, she creates Septimus as a double of Clarissa in the second version of the novel since he commits suicide instead of her by portraying the post-war trauma of people in the modern period after the First World War. His mental state, which is full of pain and chaos, is depicted in detail via the new style in literature. It is obvious that he cannot get over the effects of war which drive him towards depression and suicide in the end. Much attention has been drawn to individuality by the modernist authors. They have paid attention to portray the individual issues by concentrating on the consciousness owing to the effect of the recent studies and theories about psychology such as Sigmund Freud's Psychanalysis, whose aim is to make everything in unconsciousness bring into the open through new methods. Thereby, the focus on the inner world along with the significance of individuality has come to the forefront in modern novels. Hence, in Woolf's novels such as Mrs. Dalloway and The Waves, the readers encounter how the minds of the characters work and how everyone has a different reality from one another. Although Septimus feels that life is beautiful, he prefers to die since it is better than being controlled by Holmes. When everything begins to go better, one of the people, who adopts conversion and proportion, is there in order to judge him. Virginia Woolf "drowned herself on a cold day" (Lee, 2005: 55) in the river by filling her pockets with the stones as Septimus throws himself from the window. Committing suicide is one of the similarities between Woolf's and her character Septimus. Therefore, Woolf's depression, which led to her suicide, is depicted in Mrs. Dalloway through Septimus as a representative of the consciousness of people in the modern period. In a sense, Woolf created this character instead of killing Clarissa Dalloway since in the first version of the book there is not Septimus Warren Smith and Clarissa dies in the novel. The reason why Woolf created Septimus in the second version of the book is killing him instead of Clarissa. However, throughout the novel, there is an invisible relationship between Septimus and Clarissa. Even though both of them never see each other, they sometimes utter the same words and feel the same emotions. As it

is mentioned before, they are at the same place when the car motor breaks out. Another apparent example is that the same words with the same meanings come to the minds of them as seen through these lines: "Fear no more the heat o' the sun / Nor the furious winter's rages" (12). These lines from Shakespeare's *Cymbeline* come to the mind of Clarissa, similarly, Septimus thinks "Fear no more, says the heart in the body; fear no more" (154) when he lies on the sofa. It is obvious that they share the same feelings and they are the ones who can understand each other intuitively even if they do not know each other. In a way, the reason why Woolf makes Septimus double of Clarissa is making him commit suicide instead of Clarissa in the second version of the book.

Septimus exchange an affection that, although unspecified, is apparently so intense that, when Evans is killed, when Septimus is severed from this totality of being and loses his 'complement', he simultaneously loses the ability to feel. Inasmuch as Clarissa is Septimus' 'double', the most emotionally fulfilling relationship for her in the novel is likewise the homo erotic bonding that she experiences with Sally Seton at Bourton (Howard, 1998: 152).

Not only can two central characters Clarissa and Septimus understand each other's feelings intuitively and remember the same lines from Shakespeare's plays, but also, they complete each other. For instance, Septimus loses his feelings due to shell shock whereas Clarissa has feelings which fulfil her emotionally towards Sally Seton. When Clarissa hears the death of this man at her party from Mrs. Bradshaw, she feels uncomfortable. "Oh! thought Clarissa, in the middle of my party, here's death, she thought" (201). The first reaction of Clarissa to Septimus's death is disappointment for her since this bad news has a possibility to destroy her party in which even the president is there. Therefore, when she hears the death of a young man from Lady Bradshaw, discomfort fills her soul. After a while, Clarissa hears the suicide of a man, whose name is Septimus, at her party, and goes to another room. Although she is able to empathize with him, her first feelings about the death of Septimus show how she feels disturbed through the stream of consciousness technique which brings out the flow of thoughts in Clarissa's mind:

What business had the Bradshaws to talk of death at her party? A young man had killed himself. And they talked of it at her party--the Bradshaws, talked of death. He had killed himself--but how? Always her body went through it first, when she was told, suddenly, of an accident; her dress flamed, her body burnt. He had thrown himself from a window. Up had flashed the ground; through him, blundering, bruising, went the rusty spikes. There he lay with a thud, thud in his brain, and then a suffocation of blackness. So she saw it. But why had he done it? And the Bradshaws talked of it at her party! (202).

According to Clarissa the conversation about the death of a man can ruin her party for which she thinks all day and makes preparations. The initial thoughts about Septimus's death, which pass through Clarissa's mind, are revealed thanks to the stream of consciousness technique. The most substantial thing for her is the success of her party; therefore, the Bradhaws's talking about the suicide of this young man is an obstacle for it. Before she thinks about how he commits suicide and feels the way Septimus feels, she feels uncomfortable due to what the Bradshaws do at the party. Then, she begins to think about how he commits suicide in the room. Suddenly, she begins to feel the same emotions with Septimus by understanding him intuitively.

Death was an attempt to communicate, people feelings the impossibility of reaching the centre which, mystically, evaded them; closeness drew apart; rapture faded; one was alone. There was an embrace in death. But this young man who had killed himself-had he plunged holding his treasure? (202).

These lines from the novel display how Woolf uses the stream of consciousness technique because this quotation shows the opinions of Clarissa about death. Through the quotation, it is clear that her idea about death can be considered as positive since death is a way of communication and it keeps an embrace within it. In a way, she understands Septimus, whom she never meets or comes across, with the same feelings. The main reason for his committing suicide is preserving happiness within death; therefore, she understands why he commits suicide. In fact, the main reason for his death is not life's being bad or ugly, but the desire to keep the beauty of life through death. Therefore, the words from Othello by Shakespeare come to Clarissa's mind. "If it were now to die, were now to be most happy," she said herself once, coming down, in white" (202-3). In the play, these words are uttered by Othello when he feels happy. The feelings of Othello, Septimus and Clarissa are the same with one another since all of them desire to preserve absolute happiness rather than losing it with life. Even though there is not even communication between Clarissa and Septimus, at the end they share the same feelings about life and death. Despite the fact that they do not utter their feelings to someone, the reader can understand how the characters feel or what they think thanks to the stream of consciousness technique. Although Clarissa is a superficial person who considers that the war is over as an upper-class woman, she is able to understand how Septimus feels intuitively without knowing him. She sees the main reason behind his death which is preserving the beauty of life by escaping from

life since it is impossible to preserve this beauty in the material world. In this respect, she sees death as communication to keep the beauty within it. Therefore, Shakespeare's lines from *Othello* come to her mind by considering that "There was an embrace in death" (202). Woolf's applying modernist features in the novel provides the intuitive understanding between these two characters to be observed although none of the characters speak of their feelings. Everything is in consciousness is displayed; thus, it can be claimed that new style creates a way to reach and get into the roots of the minds of the characters.

At the end of the novel, when Sally and Peter have a conversation at Clarissa's party, Sally compares the heart with brain: "What does the brain matter," said Lady Rosseter, getting up, "compared with the heart?" (213) Through these lines uttered by Sally, it is clear that intuitive communication is more significant in comparison with the brain. To set an example, in the novel, the communication between Septimus and Clarissa happens through the heart rather than the brain because they share the same feelings and Clarissa can understand him intuitively. This situation in the novel shows that intuitive understanding between people is so valuable that, they can have the same feelings. What Peter feels for Clarissa is similar to Clarissa's feelings for Septimus. At the end of the novel, Peter thinks that "What is terror? What is ecstasy?" (213) While Peter thinks of Clarissa in terms of these emotions: ecstasy and terror, Clarissa feels ecstasy and terror for Septimus's death. She thinks that there are both enjoyment and fear in life which are called ecstasy and terror. Peter also feels these emotions for Clarissa because he sees Clarissa in terms of life. Throughout the novel, the characters' past, present, and future are presented as well as their thoughts and emotions by Woolf. Although Woolf helps the reader with the sentences and similes, it is hard to distinguish Woolf's words from the characters in several quotations. The novel ends with these lines "For there she was" (213) when Clarissa stands there in the face of Peter. Peter's seeing Clarissa at the end of the novel gives rise to ecstasy and terror. The end of Mrs. Dalloway does not give a moral message like a traditional novel. The novel presents the people's mood, feelings, and thoughts towards someone or life; furthermore, there are not people who can be considered in terms of good and evil qualities in the novel. For instance, realistic novels, which are based on the problems of society, generally deal with how a moral character can get over the hardness in the world. At the end of the traditional novels, the moral character generally can achieve

happiness with marriage or wealthy life. In modern novels, analysing the consciousness of people is more noteworthy rather than the struggles between good and evil. Moreover, in the novel, the reality depends on individuals. Reality is subjective for individuals, just as time is relative to individuals. In a way, In *Mrs. Dalloway*, subjectivity is in the foreground in terms of both reality and time. Consequently, *Mrs. Dalloway*, as a modernist novel, portrays individual issues as well as the psychological sufferings of the shell-shocked by putting emphasis on consciousness via new techniques in the literature.

# **3.2.** *MRS. DALLOWAY* IN THE LIGHT OF ALBERT EINSTEIN'S THEORY OF RELATIVITY

Albert Einstein brought a new approach towards time through his Theory of Relativity by shattering understanding of absolute time. In the light of the Theory of Relativity, which was first put forward in 1905 as Special Theory of Relativity and extended in 1915 as General Theory of Relativity, time depends on the observer where s/he is because the speed of passage of time is related to the velocity of light. To clarify, Einstein's theory proved that time for someone, who is closer to the speed of light, slows down whereas the time for someone, who is farther to the speed of light, passes faster by bringing personal time measurement instead of absolute time and claiming that time and space cannot be separated from each other. Along with time's being relative, Einstein brought to light other substantial consequences for science such as the velocity of light's being stable in every system, claiming that time and space can change according to the reference system of the observer, showing that nothing can move faster than the speed of light since mass equals to energy with his famous equation: E=mc2 and how light coming from the sun is bent owing to the mass of the sun. As a result of Einstein's Theory of Relativity, subjectivity in time has appeared in literature out in literature. In Mrs. Dalloway, on the one hand, the characters can go back in time and come back to present via stream of consciousness technique, at the same time, the characters' ideas highlight the importance of time. Furthermore, one of the characters, Septimus, stays in the past at most of the time. Hence, the effect of Einstein's theory can be observed not only through form but also through content in

Mrs. Dalloway. "There are thus two fictions at work in the text - Woolf's fiction which is the novel, and Clarissa's fiction which is the private world she creates out of shards of reality: moments, memories, images" (Guth, 1989: 22). As well as Woolf's fictional world as an author, there is Clarissa's private world. It consists of her ideas, feelings, memories and moments all of which are reachable through the new style applied by Woolf in the novel. One of the ways to make time concept foreground in the novel is to demonstrate how both past and present have great impacts on the characters' lives and consciousness as distinct from one another. The most apparent situation reflecting the different effects of time on characters can be analysed through especially Clarissa, Peter and Septimus since their reactions to past are quite unlike from one another. To clarify, Peter takes a critical view of living in the memories of the past by thinking that: "For why go back like this to the past? (48) whereas Clarissa is able to hold the past by always remembering her memories which include some of the characters such as Peter, Sally, Richard and Hugh. On the other hand, Septimus has traumas arisen from his experiences in the past. Clarissa is more successful to embrace past than Peter as Peter thinks that "[F]or women live much more in the past than we do" (62). Clarissa stands for an example which is indicated by Peter since she remembers her old memories most of the time without any complaint unlike Peter. Besides, "Woolf presents in the short hours of one day, thirty-four years of Clarissa's past at Bourton and London. Thirty-four years have molded her mature life since she was eighteen at Bourton" (Benjamin, 1965: 222). Thanks to the way that Woolf applies to show the memories in characters' youthfulness, more than years are revealed in just one day.

As it is stated, Peter has a critical view about the past. "For why go back like this to the past?" he thought. Why make him think of it again? Why make him suffer, when she had tortured him so infernally? Why?" (48). The thoughts in the mind of Peter Walsh about Clarissa come into view via stream of consciousness technique. This new method related to the flow of ideas, feelings, experiences and expressions is like a mirror to the minds as well as the pasts of the characters from the perspective of the readers. Woolf makes the time concept become forefront in *Mrs. Dalloway* in terms of not only style but also content. Using new methods in literature such as stream of consciousness, inner monologues, flashbacks, flashforwards is a way to reach both the roots of consciousness and present the different times of the characters. Moreover, time is a significant term for the characters. To clarify, these lines belonging to Peter

are about the negative consequence of turning back to the past by providing it to come in the consciousness as a memory. In a way, here, according to Peter, remembering the past makes him suffer. Another use of the stream of consciousness, which makes possible to encounter the ideas passing in Peter's mind can be observed as follows: "As a cloud crosses the sun, silence falls on London; and falls on the mind. Effort ceases. Time flaps on the mast. There we stop; there we stand" (55). In the same manner, this quotation is an example of Peter's mind along with highlighting the significance of time for the characters through their internal monologues. Everything's being stuck in time is related to time's passing slowly for some moments. The Theory of Relativity creates an awareness about the speed of time. Here, Peter's ideas are based on some moments' lasting more longer than other moments as it freezes sometimes. In fact, this understanding is related to Einstein's theory since he asserts that time passes different for one person to the other. Another example which reveals the cruciality of time for Peter can be observed thanks to the inner worlds of the characters' being presented by Woolf throughout the novel. Therefore, there are emphasises on moments such as this question, which comes to the mind of Peter, "What moment?" (56). Moreover, he feels ", as if there rolled down to him, vigorous, unending, his future" (56). The reason underlying his feelings towards future is the Theory of Relativity because passage of time or the future's coming fast means that time is relative rather than stable. "Time and personality have been considered the main underlying themes of her fiction" (Gelfant, 1966: 229). As claimed, time and personality are the main themes in Woolf's fiction; moreover, both of them are foregrounded through stream of consciousness technique which opens a way to the consciousness of the characters along with their pasts.

Einstein's theory on time, by which he claims that time is not stable, shattered the understanding towards time since it was believed that time was same for everybody before Theory of Relativity. From the perspective of Einstein, time depends on the observer; furthermore, he combined the concepts of space and time as spacetime. Thanks to the experiment of Michelson-Morley, it was proved that the speed of light is same for everyone which is one of the outcomes of Einstein's theory; therefore, Einstein and his ideas about time were evidenced. In 1915, Einstein came up with elaborated theory: The Theory of General Relativity to find out that law of gravity is consistent to the Theory of Special Relativity. Thus, the interest in time along with the curiosity about it increased day by day. As a consequence, literature as well as society were affected inevitably by Einstein's Theory of Relativity. Time has gained more significance so much so that the readers make a journey to the pasts of the characters. Furthermore, the quotations show that time's valuableness for the characters as Peter talks about going back and its negative effect on him. Clarissa's thoughts about time reveal how the concept of time is embedded in the novel. "[S]he always had the feeling that it was very, very dangerous to live even one day" (11). From the point of Clarissa, even living just one day is dangerous since everything can happen in one day or one moment. From the perspective of Einstein, time passes differently for everyone because it depends on the velocity of light. To clarify, some moments, in which people find themselves in full of happiness pass quickly; on the contrary, some moments, in which, they feel sadness and pain in their souls, are too slow to endure for them. In this respect, Clarissa thinks that one day can be long enough to witness a lot of events no matter how much it lasts. In the novel, Einstein's name is mentioned in this manner: "by means of thought, Einstein, speculation, mathematics" (32); therefore, it is impossible that Woolf did not hear about Einstein and his theory on time. Similarly, Clarissa's thoughts in her consciousness are related to time: "But she feared time itself, and read on Lady Bruton's face, as if it had been a dial cut in impassive stone, the dwindling of life; how year by year her share was sliced" (34). Clarissa's thoughts, which are delivered via the stream of consciousness, illustrate how time is significant for the characters. As it can be analysed through the perspective of the central character, Clarissa Dalloway, towards time, the time concept plays a vital role in Mrs. Dalloway. Time's becoming something both crucial and fearful underlies Einstein's relativity theory on time. Time is so fearful that for Clarissa because as time passes, she gets older. In addition to her going to the memories in their youthfulness, she has difficulty in adapting into getting older. According to her, even one day is dangerous to live, how long time can encompass a number of events which have possibilities to affect her life and soul deeply. Consequently, Einstein's theory brought a new point of view towards time. Moreover, it was one of the main reasons why time has become more crucial for the characters in literature as well as society. Characters' journey to their pasts mentally by remembering their memories is the most attractive characteristic of the novel related to time. Unlike Peter, Clarissa is more willing to remember the memories. Einstein's theory led to increase the interest in time journey.

Similarly, in Mrs. Dalloway, the reader makes a journey to characters' past thanks to the new style in literature. Throughout the novel, what happens or how they feel in during their youth are portrayed. For instance, through memories, Clarissa's ideas and feelings in the past are revealed; in other words, how she has felt towards someone and how they have spent have spent time together. For instance, she firstly talks about how Sally behaves in their youth in this way: "Sally went out, picked hollyhocks, dahliasall sorts of flowers that had never been seen together-cut their heads off, and made them swim on the top of water in bowls" (38). As it can be analysed through their memories, Sally is a reckless girl who is so different from Clarissa since both Sally's ideas and behaviours are not traditional like hers. One of the memories of Clarissa is Sally's kiss for her: "Sally stopped; picked a flower; kissed her on the lips. The whole world might have turned upside down! The others disappeared; there she was alone with Sally. And she felt that she had been given a present" (40). Both the events she has experienced in her youth and her reaction and feelings to those events are revealed with the stream of consciousness technique. The way Clarissa feels towards Sally is related to love rather than friendship. The kiss of Sally for Clarissa makes the whole thing in the world disappear for her. In a way, it is obvious that she feels love towards Sally rather than Peter or Richard with whom she keeps distance in their marriage. Moreover, thanks to going back and forward in time through flashbacks and flashforwards, it is unfolded how Sally changes in comparison with her youth since she, who has rebellious and different ideas from the rest of the society, becomes a married woman who has five children. Therefore, seeing and comparing the past and present shows that Sally is the character who changes the most in the novel.

The word of time is as significant as the concept of it for the characters. For instance, "It is time," said Rezia. The word "time" split its husk; poured its riches over him" (58-70). Even its word has an effect on the characters especially on Septimus since he is the one who is stuck in the past. One of the consequences of Septimus's psychological state is his time confusion. "[A]n immortal ode to Time. He sang. Evans answered from behind the tree" (78). One part of him lives in present whereas the other part of him keeps away from present by showing the emotional reactions to the events in the past. He generally considers himself that as if he lives in the past, when Evans, his dead friend, has been alive. The relativity of time can be observed clearly through Septimus's consciousness. Here, he sees his dead friend Evans since he does not feel

as a part of the present. Septimus answers the question of Rezia about what the time is with these lines "I will tell you the time" (79) although his soul is away from the present time. When the clock, which differentiates the psychological time from the chronological time as a tool, strikes the quarter to twelve, Septimus still sees his dead friend in the grey suit. This situation reveals that for someone, like Septimus, time passes slowly whereas the others, for whom time passes more quickly, live in the present. As Einstein asserts that time is relative, the flow of time is different for the characters in Mrs. Dalloway. To set another example, when Mrs. Dalloway continues to walk, she thinks that the war is over. Even though according to Mrs. Dalloway, who is from upper class, the war is over, it is not over for everyone. For people, who have been at war and suffered from the negative consequences of it in terms of psychological and physical manners, it is impossible to get over its negative impacts completely. As being a superficial person, she lives away from the realities of the world. The war is not over for people like Septimus Warren Smith who has difficulty in adapting to time because of feelings related to pain, chaos and ambiguity that the war brings to the human souls. For instance, the war is over for Mrs. Dalloway, however, it still goes on for many others since its effects are too hard to get over totally in terms of mental health. Its ending officially does not mean that the pain and chaos went away since it brought destruction not only on human body, but also on human soul. Septimus is one of the people who cannot get through due to the experiences in the war. Therefore, time is still past for Septimus whereas the other people live in the present except remembering a memory. He still sees Evans who has lost his life in the war. Septimus is not able to live in the present since time slows down for him. Until Septimus's death throughout the novel, there are parts in which he sees and talks to Evans. His seeing hallucinations, the abrupt changes in his mood along with being stuck in past portray most of the people's psychological state in the modern period. For instance, he sees people "talking behind the bedroom walls" (74) and sees "an old woman's head in the middle of a fern" (74). In a way, he sees events and people that do not exist due to his mental disorder. Rezia summarizes his abrupt changes through these lines:

> [T]hey were perfectly happy. All the little red and yellow flowers were out on the grass, like floating lamps he said, and talked and chattered and laughed, making up stories. Suddenly he said, "Now we will kill ourselves," when they were standing by the river (74).

As mentioned before, one part of him is happy with life whereas the other part of him is full of deadly thoughts. His other part who thinks about death, has trouble in adapting to time. One of the reasons behind his mental state is his being away from present as well as the main reason: war. Due to the post-war trauma, he still lives in the past in which there is Evans. Seeing Evans as alive is an example that shows both his psychological state and belonging in a different time. Therefore, not only does he live with the memories of the war, but also, he still lives with the war inside him. Septimus is traumatised by the past, hence, the past has a different effect on him. For example, to show how he still remains in the past: "A man in grey was actually walking towards them. It was Evans! But no mud was on him; no wounds; he was not changed" (78). Septimus, who is exposed to shell shock, becomes crippled in terms of mental health after the war. In Regent's Park, he thinks that Peter is Evans due to hallucinations. Septimus's dependency on the past is arisen from his experiences in the war in which people lose their lives.

The other characteristic related to time concept in *Mrs. Dalloway* is presenting two types of time: psychological time and clock time. Indicating clock time through the image of Big Ben and bells throughout the novel helps the reader understand what time it is in the course of events:

When the time is stated exactly by Woolf, as many have pointed out already, it is 1) to indicate the simultaneity of certain acts; 2) to provide a transition from one character to another [...]; 3) to provide a transition from the present to past [...]; 4) to suggest the fact that characters are bound together by time (Benjamin, 1965: 217).

As it is stated through these lines, the reasons why Woolf pictures the image of clock are marking the simultaneity of events, making a transition part which passes from one character to another or past to present and showing how characters are bound by time. Regardless of the reason, the image of the clock is a clue to the follow-up of chronological time, in this way, in a short period of time like a day, the effect of time on people is reflected by referring to memories with flashbacks. The fact that some characters often return to the memories of the past, or that some of them move away from the present and still remain in the past, highlights the relativity feature of time. In a way, specifying the time often makes it easy to understand that the characters are in the present: Reveries of time and death preoccupy many of the characters, particularly Clarissa and her friend Peter, returning from India and seeing her after some years. The working title for Mrs Dalloway was The Hours, and the Woolfs' London is still a city where there are clocks which still tell the time. Such clocks chime on the quarters as well as the hour. The chimes of the quarters are a constant reminder of time passing, life frittering by, followed by the finality of the sounding of the hour (Thomson, 2004: 56).

According to the characters, both time and death have a significant place in their lives. Especially Peter and Clarissa have significant ideas about time which are the opposites of each other. For instance, While Clarissa is more inclined to recall memories of the past, Peter feels that recalling them torments him. Moreover, *The Hours* was other option for *Mrs. Dalloway* due to the fact that the sound of the clocks shows the passing time in the novel. The movie, *The Hours*, which is based on Michael Cunningham's novel with the same title and related to Woolf's psychology along with *Mrs. Dalloway*, was released in 2002. In the film, one of the women, who lives in three different years, is Virginia Woolf in 1923, the other is Laura Brown, who reads Woolf's novel *Mrs Dalloway* in 1951, and the third character is Clarissa Vaughan, who resembles Mrs Dalloway and *The Hours*. To make the significance of the image of hours clear; in the beginning of the novel, Clarissa walks in early morning, the stroke of Big Ben differentiates the chronological time from psychological time:

For having lived in Westminster—how many years now? over twenty, one feels even in the midst of the traffic, or waking at night, Clarissa was positive, a particular hush, or solemnity; an indescribable pause; a suspense (but that might be her heart, affected, they said, by influenza) before Big Ben strikes. There! Out it boomed. First a warning, musical; then the hour, irrevocable (6).

Thanks to presenting the image of Big Ben, the reader can understand that the time mentioned is the past or the present of the characters. Here, after Clarissa remembers her memories with Peter in the past, the stroke of Big Ben reveals the present by indicating turning back to present in which Clarissa walks in the morning to buy the flowers for her party. Similarly, another example which shows the use of the image of Big Ben can be observed through these lines:

It was precisely twelve o'clock; twelve by Big Ben; whose stroke was wafted over the northern part of London; blent with that of other clocks, mixed in a thin ethereal way with the clouds and wisps of smoke, and died up there among the seagulls—twelve o'clock struck as Clarissa Dalloway laid her green dress on her bed, and the Warren Smiths walked down Harley Street. Twelve was the hour of their appointment (104).

The use of the Big Ben shows the chronological time of the novel which is twelve o'clock here. As it is stated, Clarissa lays her dress on the bed when Septimus and his wife Rezia walk at noon since they have an appointment with Sir William Bradshaw, doctor of Septimus. Although the pasts of the characters including their thoughts, feelings, expectations along with memories are presented through new techniques by showing that time does not flow the same for everyone. Another use of the sound of Big Ben indicates three o'clock: "For with overpowering directness and dignity the clock struck three" (130). When the Big Ben strikes at three, Richard enters with flowers. The clock again strikes after the moment in which Septimus commits suicide: "The clock was striking—one, two, three: how sensible the sound was; compared with all this thumping and whispering; like Septimus himself. She was falling asleep. But the clock went on striking, four, five, six [...]" (165). Woolf pictures the sound of clock to show the chronological time in the novel in the course of the events. As it is stated that time is 6 o'clock after a few pages, Septimus commits suicide nearly at six o'clock in which Rezia falls asleep with the effect of her husband's death. Towards the end of novel, When Clarissa thinks about the death of a young man, Septimus Warren Smith, whom she is able to sympathize with, and watches the old woman in the room opposite, the clock strikes once more: "The clock began striking. The young man had killed himself; but she did not pity him; with the clock striking the hour, one, two, three, she did not pity him" (204). From the beginning to the end of the novel, Woolf pictures the stokes of Big Ben to make the real time be realized for the readers by differentiating it from the psychological time which is a way to present that what has happened in the pasts of the characters. Furthermore, as it is stated "[T]he relative nature of time is reflected by the contrasting chimes of St. Margaret's and Big Ben" (Brown, 2009: 43). Woolf's use of the strikes of the clocks creates an awareness about the relativity of time. Presenting both chronological time and psychological time is other characteristic of Mrs. Dalloway which makes time concept forefront. Both time concept and its being relative for the characters become forefront in Woolf's Mrs. Dalloway with the effect of Einstein's Theory of Relativity.

Stream of consciousness preferred by modernist authors is an example which reveals how time concept has become prominent in modern era since this technique is related not only to inner worlds but also to time. The traditional novels before modernism, have a clear beginning and an end as everything is narrated in an order; therefore, time concept has changed markedly in modernist fiction in comparison with the traditional literature. This new technique is a way to portray the feelings and thoughts which in a non-linear way without chronology; furthermore, it takes the readers to the pasts of the characters. Hence, time is not narrated sequentially in modern novels contrary to traditional form in literature. Woolf pictures the consciousness of the characters in which there are their thoughts, emotions, dreams, passions and memories through a new style in Mrs. Dalloway. Inevitably, past, present and future are narrated through the flow of thoughts. The readers find themselves suddenly in the pasts of the characters when they read about the present of them. Einstein's theory revealed that time is relative by combining the concepts of space and time: spacetime; moreover, time is begun to be considered as the fourth dimension accompanied by other coordinates. This situation remarks that time understanding changes substantially thanks to the relativity theory in the modern period. His concentration on time affected the view towards time; in a way, he made a new epoch with relativity theory. Believing that time is relative had an effect on literature of the era as well. In modern novels, the most attractive point which made them different from traditional novels is its style since the new techniques are under the effect of changes and new ideas in the fields of psychology, science along with the events of the era. For instance, time is narrated as interbedded by going past and coming back to the present instead of a chronological time. In a sense, time is narrated according to psychological time since the readers find themselves in the consciousness of the characters. If a character remembers a memory, the reader goes to that time with her/him. The great change in time concept in modern literature can be analysed in terms of content as well as style. In other words, time's being relative for the characters can be observed in Virginia Woolf's novels such as Mrs. Dalloway and The Waves. As Urgan states that at the time of writing this novel, Virginia Woolf sought not only great goals but also new craft (2020: 103) thanks to the connections between the present and the past which can be defined as one of the most striking features of this new style. Moreover, among the nine novels she wrote, Mrs. Dalloway deals with her personal problem, the madness that poisoned her life and ultimately caused her to kill herself (103). In Mrs. Dalloway, on the one hand time passes slowly for some characters or they still feel belong to the past in which they have unforgettable memories; on the other hand, some characters feel as a part of their past by only

remembering their past as a memory in their lives. The new techniques, a means of displaying these issues in literature provide to combine past, present and future via flashbacks and flashforwards. Chronological time, which enables to narrate everything in an order throughout the novel, was not preferred by the modernists who broke the traditional norms in literature. In this sense, the change in approach towards time thanks to Einstein's theory brings with the substantial differences in 1900s literature.



## **CHAPTER IV**

#### 4. AN ANALYSIS OF THE WAVES

## 4.1. MODERNIST FEATURES IN *THE WAVES* IN TERMS OF CONTENT AND STYLE

The Waves, which comprises of the soliloquies of six characters: Bernard, Neville, Susan, Rhoda, Louis and Jinny, was published in 1931 by Virginia Woolf. Both the content and style of the novel include modernist features due to its being based on the inner worlds of the characters along with the use of stream of consciousness technique. The novel consists of nine chapters along with the interludes by highlighting the inner worlds of the six characters, three women and three men. The style in *The Waves* is highly different from traditional novels as a modernist work since it is between prose and poem. Along with the intermediate parts between the chapters, which are written in italic, the language of the characters is like poetry. Thus, "[1]anguage provides the motion of the novel; words create connections that carry us in and out of the minds of each character, pushing the text from childhood to death" (Hild, 1994: 69). Through these lines, it is obvious that the language of the novel brings the motion because of creating the connections with the minds of the characters along with presenting them from childhood to death. Woolf depicts the sun from sunrise to sunset by reducing the lives of the characters narrated throughout the novel to one day as well as the image of the waves in interludes. In this novel, leaving the outer world in the background by not remarking exact place and time enables the characters to concentrate on their inner world. In other words, the outer world is given according to the reflections of the characters in their inner worlds, as a result, their inner world comes to the fore. Therefore, The Waves as a modernist work is completely different from the realist novel tradition both in terms of content and style. In the chapters except interludes, the consciousness of the characters is reflected thanks to the stream of consciousness technique, thus, the thoughts, feelings, dreams, lives of these six

different characters from childhood to old age and how they differ from one other are conveyed to the reader. The soliloquies of these close six characters' being more than their dialogues with one another makes revealing of their minds easier. The poetic language of the novel, which is far from everyday language, is another feature making the novel different from the realistic novel tradition. Throughout the novel, the soliloquies provide to bring out how the characters look at the events as well as their thoughts on life and death. In this chapter of the thesis, the focus will be on *The Waves* by initially analysing it in the light of modernism and then in the light of Einstein's Theory of Relativity.

Woolf applied the stream of consciousness technique in *The Waves* intensely by concentrating on the minds of six characters through their soliloquies. The stream of consciousness technique preferred by the modernist authors is a way to reveal what the characters think or dream and how they feel. Everything in the characters' minds is given to show how the mind works; therefore, the readers find themselves in a journey through the inner worlds of the characters in which they witness characters' pasts, presents and futures along with their feelings, thoughts, dreams and hopes. Although The Waves is written with the stream of consciousness technique and soliloquies, the mediations help the reader understand that the characters think or talk. The novel mostly consists of soliloquies instead of dialogues, however, there are a few dialogues like at dinner meetings. In the dialogues, Woolf adds words like said in italics with quotation marks to indicate that the characters talk rather than think. Although there is constant communication between the inner worlds of the characters in *The Waves*, there are a few moments in which they talk to each other (Urgan, 2020: 178). As it is stated, Woolf uses mediations to remark that the sentences are used with the dialogues or they are formed in the characters' consciousness. As a modernist work, the inner worlds of the characters, in which the readers encounter the feelings, thoughts, and experiences of the characters, are foregrounded since individual matters along with subjectivity take the place of the external issues in the modernist literature. In The Waves, the characters' soliloquies bring their minds to the fore throughout the novel as a result their thoughts, feelings, reactions towards an event are revealed. Moreover, how the characters' personalities differ from one another can be observed thanks to the new style in literature. Focusing on the inner worlds of the characters leads to eliminating the outside world throughout the novel, hence, the exact time and place are not indicated by the characters or the author. In the novel, in which there is not a specific plot, the thoughts of the characters in their inner worlds are conveyed to the reader for a period. Therefore, the outer world is given as much as it reflects on the inner world of the characters. Besides these six characters, Percival, who has a significant place in the life of each character, is frequently mentioned in the novel, however, neither himself nor his thoughts are encountered by the reader. In a way, Percival is the common ground of six characters. Moreover, the differences of these six characters, which result in having their perspectives, are observed by the reader as different reflections of the same character. Although the novel progresses chronologically by chapters, concentrating on the flow of consciousness provides the readers' going past with the characters suddenly when the characters remember a memory. As a result, the style in The Waves plays a fundamental role in reflecting the consciousness of the characters. In the beginning, the first character beginning to express his ideas is Bernard who is considered as the spokesman in the novel. To clarify, from the very beginning of the novel, the characters' expressing their ideas reveals that the attention of each character is different from one another. Although the characters are children, their language is not easy to understand. The reason why the language they use is away from the everyday language is Woolf's aim which is presenting prose like poetry; therefore, the novel is like a play-poem. In Woolf's diary, Woolf describes this work as play-poetry since it consists of soliloquies of the characters used in theatre plays and these speeches match the rhythm of the waves and are encumbered with poetry (176). In addition to the fact that this work is filled with soliloquies, its language's resembling poetry leads this work to appear as play-poetry to the reader. As a result, *The Waves* contains both theatrical and poetic features.

On the first page of Chapter I, six characters express their ideas which are unlike one another. In modern literature, individuality comes to the forefront due to the complicated era in which people witnessed one of the bloodiest wars in the world, the first world war, scientific innovations along with new ideas in both philosophy and psychology. All these events brought about a change in people's perspectives towards nearly everything. As a result of this change, the individual problems take the place of external reality. In other words, it was supposed that everyone might have a different reality from one another. The main reason underlying the increase in the significance of individuality is people's desire to hide in their shells in order to escape from the unfamiliar world. This approach towards individuality affected literature; therefore, subjectivity is one of the attractive features in modern literature as recognized in the novel along these lines:

'I see a ring,' said Bernard, 'hanging above me. It quivers and hangs in a loop of light.' 'I see a slab of pale yellow,' said Susan, 'spreading away until it meets a purple stripe.' 'I hear a sound,' said Rhoda, 'cheep, chirp; cheep chirp; going up and down.'

'I see a globe,' said Neville, 'hanging down in a drop against the enormous flanks of some hill.'

'I see a crimson tassel,' said Jinny, 'twisted with gold threads.'

'I hear something stamping,' said Louis. 'A great beast's foot is chained. It stamps, and stamps, and stamps' (Woolf, 2018: 6).

These lines from the novel are related to the different personalities and realities of the characters since they look at life from dissimilar perspectives. For example, when Bernard sees a ring, Susan sees a slab of pale yellow, or when Neville sees a globe Jinny sees a crimson tassel. On the other hand, Rhoda hears a sound whereas Louis hears something stamping. As it can be observed, six of them see or hear another thing which is irrelevant to the other one. The reason behind this situation is that their different personalities have different realities. As a modernist text, the subjectivity is foregrounded by Woolf to reflect the inner worlds of the characters along with individuality. Furthermore, stream of consciousness is a technique to show what it is in the mind of the characters. Therefore, the method in modern literature helps individuality be highlighted by presenting the inwardness of the characters. The personalities of the characters can be brought out through the method applied by Woolf to portray the inner worlds, consciousness and mental situation of the characters. To set an example, according to Rhoda, Susan's style is better than Jinny's since she is not as ambitious as Jinny to outmanoeuvre and she is more resolute than her. She states her thoughts through this sentence in the second chapter, "But I like Susan's way better, for she is more resolute, and less ambitious of distinction than Jinny" (32). As it is obvious, not only do the readers see the characters' personalities, but also, they witness what a character thinks about the other one. In this way, the differences between the six characters are observed as Rhoda considers Susan more resolute than Jinny by preferring her style. Neville's ideas about Louis can also be defined as another example of revealing the personalities of the characters through other characters thanks to the modernist style of Woolf. For instance, Neville finds Louis "too cold, too universal"

(38) then Louis describes himself "I am the best scholar in the school" (39). As a result, not only the opinions about the others, but also their own ideas about themselves are portrayed in the novel via the stream of consciousness technique. Similarly, Susan's ideas both about herself and Jinny are revealed through the technique. Witnessing what kind of ideas come to her mind through the method provides to realize the differences between her and Jinny's personalities since she says "I do not want, as Jinny wants, to be admired. I do not want people, when I come in, to look up with admiration. I want to give, to be given, and solitude in which to unfold my possessions" (40). Thanks to focusing on consciousness, the reader is able to reach information about the characters. Through these lines, it is known that Jinny loves to be admired whereas Susan does not desire to be observed with admiration by preferring solitude. Jinny's personality is dissimilar from other girls, especially from Susan, as Jinny is opposed to being attached to one person; on the other hand, Susan often talks about marriage in her dreams. In the same manner, the portrayal of Bernard's consciousness helps his personality come into view:

The fact is that I have little aptitude for reflection. I require the concrete in everything. It is so only that I lay hands upon the world. A good phrase, however, seems to me to have an independent existence. Yet I think it is likely that the best are made in solitude (51).

As it is stated by Bernard, thanks to the stream of consciousness, he is a person who thinks deeply and desires to see the concrete whatever it is. Furthermore, it can be seen that he admires precision and exactitude about the personalities of Louis and Neville. Therefore, in this way, both Louis's and Neville's identities and Bernard's opinions for their behaviours are obvious. As well as encountering what the characters think about themselves or someone, their predictions about what the others think about them can be witnessed since the method shows the inner world of a person in which there are the characters' thoughts, feelings, hopes, experiences and dreams, etc. To clarify, according to Bernard, "for they are now undoubtedly discussing me, saying I escape them, am evasive" (56). He assumes that the other people discuss him by considering that he escapes from them and he bubbles in society whereas he is secretive in private. Woolf's attention to portray the consciousness of the characters through the stream of consciousness technique helps the reader see how Bernard assumes the ideas about his personality.

According to Bernard, Louis and Rhoda, who are authentic, find themselves in solitude: "To be myself (I note) I need the illumination of other people's eyes, and therefore cannot be entirely sure what is my self. The authentic ones, like Louis, like Rhoda, exist most completely in solitude" (86). Another feature of Louis and Rhoda is brought out through Bernard's ideas in Chapter IV. Moreover, this is one of the differences between their personalities since Bernard needs other people to be himself unlike Louis and Rhoda. As Louis indicates: "We differ, it may be too profoundly,' said Louis, 'for explanation" (94), all characters are different from one another in terms of personality. In the modern era, people's need to stay in their private worlds had an effect on literature by leading to individuality's coming to the forefront instead of external issues. As a result, in The Waves, every character's difference as well as consciousness are reflected. Encountering the way which Bernard thinks about Rhoda reveals her personality: "Rhoda loves to be alone. She fears us because we shatter the sense of being which is so extreme in solitude" (99). As he generally states that she prefers to be alone rather than being in public since she is a different personality from Bernard. In this way, the differences between the characters are highlighted in the novel. Besides, Bernard puts emphasis on their differences through this sentence: "Our differences are clear-cut as the shadows of rocks in full sunlight" (105). Louis's consciousness also reflects that he prefers loneliness to be happy and find himself like Rhoda "Yet am happiest alone" (164). Through the method, which is a mirror to characters' consciousness, what they like or not and how they differ from one another can be observed as follows: "Louis was disgusted by the nature of human flesh; Rhoda by our cruelty; Susan could not share; Neville wanted order; Jinny love; and so on. We suffered terribly as we became separate bodies" (180). As it is indicated by Bernard, the six characters have different features as if they belong to one person. Both Louis and Rhoda are disgusted by something about human beings, for instance, Louis abhors human nature, similarly, Rhoda abhors the cruelty of human cruelty. The disgust of Rhoda and Louis for human nature is similar to Septimus's perspective towards human nature in Mrs. Dalloway since he assumes that human nature condemns him to death. In a way, Septimus considers human nature as wicked and evil like Rhoda's and Louis's perspectives. On the one hand, Neville's desire is to have order, Jinny's is love. Different from the others, Susan is a person who does not like sharing. Consequently, each character's personality, structure, likes or dislikes are different

from one other, despite this situation, all of them seem to be different characteristics of a single person. Moreover, the different perspectives of all six characters on life throughout the novel reveal that everyone has a different reality thanks to the significance of individuality in the modern era. ""Let's discuss Hamlet." With Louis, science. With Jinny, love" (191). These lines reveal the dissimilarities about the interests of the characters since these expressions display Neville's interest in drama, Louis's interest in science as well as Jinny's interest, which is love. As it is asserted by Katz, "six of the novel's speakers possess similar voices and use the same diction, their consciousnesses only marked as separate by the cluster of particular images assigned to each; and all of these characters finally merge into one at the end" (1995, 237). It can be indicated that the language they employ and the way the six characters think of each other are nearly the same, thanks to Woolf's emphasis on the characters' identities through their monologues, which is obvious throughout the novel. Although all of them have different personalities as representatives of dissimilar voices, they look like one another as if they are different characteristics of a whole.

Stream of consciousness is a tool to see how the minds of the characters work since it enables to show everything in consciousness such as experiences, dreams as well as thoughts and feelings. One of the events which will be portrayed as a memory in the future of the character is Jinny's kissing Louis in Chapter I. When Susan sees her kiss Louis, she describes her feelings through these words: "Now I will wrap my agony inside my pocket-handkerchief" (10). How Susan feels agony inside her about this kiss is reflected thanks to the stream of consciousness technique. Showing the flow of thoughts in the characters' minds contributes to revealing what kind of feelings they have inside. Although Bernard sees her without crying: "She was not crying, but her eyes, which are so beautiful, were narrow as cats' eyes before they spring" (10), he is able to understand that there is something wrong with her due to her look. The other example related to the consciousness of the characters is: "The apple-tree leaves became fixed in the sky; the moon glared; I was unable to lift my foot up the stair. He was found in the gutter. His blood gurgled down the gutter. His jowl was white as a dead codfish" (18). In Neville's mind, the subject of the thoughts changes abruptly. When he thinks about the shining of the moon and his listlessness, the dead man found in the gutter comes to his mind at the same time. In fact, the stream of consciousness method shows how the mind works since the thoughts are mingled with one another and in flow. At the beginning of Chapter II, the characters begin to go to school and how they feel is presented via the stream of consciousness technique. For example, Bernard feels uneasy by trying not to cry whereas according to Louis: "He is composed; he is easy" (23). Thanks to the use of stream of consciousness technique, Bernard's being uneasy for the school along with Louis's ideas about how he feels are obvious as the method is a mirror to the consciousness of the characters. Similarly, Neville's aim to see Percival is revealed through the method employed in the novel. "Now I will lean sideways as if to scratch my thigh. So I shall see Percival" (26). Neville's scratching his thigh in order to see Percival, who is loved by Neville, is known by the reader. If the reader did not see the consciousness of him through the method, s/he would not assume that the reason behind his scratching his thigh is his seeing Percival by leaning sideways. The dreams of the characters can also be reached through the way applied by Woolf to facilitate seeing the roots of the consciousness. For instance, Susan's dream for her future is obvious through this sentence: "I shall have children" (73). Thanks to the stream of consciousness, her dream, which comes true in the future, is revealed. Unlike Jinny, who is opposed to be dependent on one person, Susan is more eager to get married and to have a husband and children. As well as characters' dreams, their fears can also be revealed, to set an example, Rhoda's fear, which is being offended and derided, is also obvious since the method provides to bring out the character's mind.

Through the journey to Neville's inner world, how he feels and thinks about Percival is revealed. In fact, throughout the novel, his obsession with Percival is reflected along these lines: "He must be in some cab; he must be passing some shop" (88) this expression presents his consciousness in which he assumes what Percival does when he waits for their friend along with Percival in Chapter IV. According to him, he should be in a cab or passing a shop. Although it is not known what Percival does, the reader can guess about his current action via Neville's consciousness. Furthermore, he is so dependent on Percival that he cannot bear not seeing him. Not only the personalities of the characters, but also their physical appearances can be brought into the open via the method. When Jinny sees herself through a looking-glass, she describes how she looks. She describes her physical appearance by claiming that: "[M]y lips are too wide, and my eyes are too close together; I show my gums too much when I laugh" (31). In a way, Woolf's portrayal of the characters' minds along with their psychological state help the physical appearances be revealed as well. For example, Jinny's having wide lips and close eyes can be grasped by focusing on her mind. She keeps thinking about her appearance by describing herself as "my narrow body" "my thin legs" (31). Revealing her consciousness through the method is a tool for imagining her appearance. In the same manner, after years, she realizes her nose, chin, wide lips with gum through mirror like the situation in her youth. She sees herself through the looking-glass by realizing that her hair gets grey when she is middle-aged: "Now I turn grey" (165). The mirror, in other words reflection of the consciousness, makes the information about how she changes after years, obvious. Another example related to presenting the physical appearances of the characters through the stream of consciousness technique is Louis's describing himself: "I am pale" (15). Woolf shows how the characters look by touching on their consciousness since it is a mirror to see what they think, feel about anything. Similarly, how Louis looks through his mind is presented again with these adjectives "my large nose, my thin lips" (39), in this way, his appearance can be imagined by the readers. Thanks to the use of stream of consciousness, which is a mirror to characters' minds, the appearances of the characters are revealed. In a way, in modern literature, the aim becomes reflecting the inner worlds of the characters rather than the external world; therefore, this situation results in consciousness along with subjectivity's becoming forefront. Woolf even reflects the reflections of the characters through their minds when they look at the mirror or think about themselves by breaking traditional rules in literature since in the realist novels the narrator generally pictures the appearance of the characters with the long descriptions unlike the modernists such as Woolf who chooses to reflect the consciousness and inner world of the characters in her novels as recognized in the quotation below:

They are human creatines, who experience the pain of loss or potential loss—the fading of youth, the end of love, the death of a friend. While these six people are also shown by technique and through traits and experiences to be individuals, (Gorsky, 1972: 457).

As a modernist writer, Woolf portrays the experiences of six characters such as the disappearance of their youth, their last love, or the death of their close friends, along with their personalities thanks to the method applied in *The Waves*. Consequently, Woolf portrays each of the six character's consciousness via this new style in *The Waves*, from their childhood to old age. In the last chapter, Bernard gives a summary

of their lives as a spokesman. Bernard's being spokesman is explained through these lines:

Because the reader depends so much on the monologues and because Bernard dominates the monologues more and more as the book moves to its conclusion, the reader is perhaps not surprised that the final monologue is spoken entirely by Bernard, whose re-creation of his own and his friends' experience parallels the function of the central intelligence of the monologues (Richardson, 1973: 701).

It is obvious that Bernard's monologues begin to dominate the novel more as it progresses to its end. As a spokesman, he summarizes the experiences of him and his friends by touching upon their significant characteristics and giving some information such as Rhoda's death to the reader.

# 4.2. *THE WAVES* IN THE LIGHT OF ALBERT EINSTEIN'S THEORY OF RELATIVITY

In The Waves, Woolf portrays the consciousness of the six characters through their soliloquies rather than dialogues as stressed by Hartley: "The Waves (1931) presents six characters entirely through soliloquies, without actual dialogue, without description or the recording of events" (1939: 236). The Waves will be examined in the light of the relativity of time after the discussion about the elements of modernism in the novel because time has a very significant place in terms of both style and content throughout the novel. After Einstein first proposed that time changes from one observer to another observer in 1905 with his Special Theory of Relativity, he brought forward the Theory of General Relativity in 1915. Einstein brought a new perspective towards time by breaking down absolute time understanding with his Theory of Relativity in the modern period. In a way, he initiated a new epoch in science since not only did he prove time's not being stable for everyone, but also, he paved the way for new improvements in the field of science since the new questions emerged with this theory. Before the Theory of Relativity, time was believed to be the same for everyone, however, this theory showed that time varies from person to person, because it suggests that time passes slower for someone closer to the speed of light than for someone farther than the speed of light. To set an example, a moving clock is slower than a stationary clock due to being closer to the speed of light. Thus, Einstein shattered the understanding of absolute time by asserting that time can accelerate or slow down according to the velocity of light, which is signified as "c" and is stable for every reference system. Furthermore, claiming that space and time are interdepended enabled to combine these two terms as *spacetime*. Inevitably, this theory regarding time as relative has led to subjectivity in time and it being foregrounded in literature. Time is a prominent concept in *The Waves*, as in *Mrs. Dalloway*. In addition to going backward or forward in time via the stream of consciousness technique, the emphasis of time is laid by the characters throughout the novel.

In The Waves, Woolf divides the chapters into sections which are indicated in italic instead of numbering. First of all, the intermediate sections between the chapters symbolize a day with the image of the sun since the sunset is depicted from the first interlude to the last. In other words, Woolf reduces all events to one day by describing the phases of the sun along with the shapes of the waves. "Introducing each section is a brief prose poem or interlude, in which the passing of time is marked and the sounds and rhythms of nature are described" (Levin, 1983: 164-5). As it is stated, the sections written in italic between the chapters are tools to indicate the passing of time along with reflecting the rhythms from nature. These sections called as interludes represent the period of the characters' youth to old age by reducing all these events in a long period of time to one day via the images of the sun's phases from its rise to its down. In these interludes, she presents the moves of the waves along with giving images from the natural world such as the sea, trees and bird. In the initial interludes, the liveliness of nature is observed thanks to the image of flowers and birds when the sun rises slowly. By using the images from nature and connecting them to the lives of the characters, Woolf brings rhythm to the novel, at the same time, she reveals how time passes. The structure of the novel is indicated via the place of the sun in the sky. The first interlude begins with: "The sun had not yet risen" (5). The first interlude depicts the time when the sun has not risen yet and the first chapter is based on the childhood of the characters before they begin to go to school. In a way, the novel begins with their childhood; therefore, the position of the sun is at its most early level in the first interlude. As the position of the sun proceeds, the characters get older. The second interlude's first line is "The sun rose higher" (21). The position of the sun progresses to rise, similarly, the characters are grown up since the characters' school life begins after this section as Bernard states that: "I am going to school for the first time" (22). As it can be seen, characters, who are children in this chapter, start to go to the school after the interlude in which the sun rises higher. In this way, Woolf presents one day, hence, it seems like everything happens in just one day. Similarly, there is an image of one day in *Mrs. Dalloway*. Although everything happens in one day, the flashbacks and flashforwards are the tools to go and come back in time by encountering what happens in the past of the characters. In the same manner, the phrase of the sun changes to a higher level in the sky: "*The sun rose*" (54) in the third interlude coming before the third chapter in which Bernard mentions college with these words "here at college" (56). In the next interlude, the position of the sun gets close to its highest level in the sky: "*The sun, risen, no longer couched on a green mattress darting a fitful glance through watery jewels, bared its face and looked straight over the waves*" (80). After this section, the characters are not teenagers anymore as Bernard states that "the oldest is not yet twenty-five" (91). Bernard is engaged and now they wait for a farewell dinner all together including Percival who is going to India.

In the next interlude, the sun's position reaches to it's the highest level in the sky. After this interlude, in Chapter V, characters get older and the most attractive event, which is presented with the sun's highest level, takes place. In this chapter, Percival's death, which has a striking effect on the characters' consciousness, is attained by the reader through Bernard's mind: "My son is born; Percival is dead" (113). Until Chapter VI how Percival's unexpected death, which results from his falling from the horse, affects each character's lives, is reflected through the stream of consciousness technique. As well as their reactions and feelings about the death of their close friend, their maturation as a part of the aging process is highlighted. For example, Bernard has a child when Susan is engaged with a farmer in the fifth chapter. In a way, Woolf's way is so attractive that when the sun rises to its full height, the lives of the characters change deeply. In fact, the sun's being in the middle of the sky symbolizes the characters' having the most remarkable event in their lives. The interlude before the Chapter VI begins with "The sun no longer stood in the middle of the sky. Its light slanted, falling obliquely" (123). When the sun gets closer to its lowest position in the sky, the characters become older as Louis describes himself "now a full-grown man" (124). Rhoda and Louis's having a relationship and Susan's having kids can be defined as the information received by the reader. The characters' ages are

recognized thanks to the focus on the consciousness of Jinny "I am now past thirty" (130). The beginning sentence of the next interlude is that: "*The sun had sunk lower in the sky*" (135). After this interlude, Jinny's describing her feelings about her age "How solitary, how shrunk, how aged! I am no longer young" (143) reveals that they get older now. In the same manner, "*The sun was sinking*" (154) is the beginning of the next interlude. The sun's being about to sink symbolizes that the characters are middle-aged now as Neville states: "Being now all of us middle-aged, loads are on us" (157). Now, the characters are middle-aged with the burdens of life, similarly, Bernard concentrates on how he changes in comparison with his youth:

'But it is only my body—this elderly man here whom you call Bernard that is fixed irrevocably—so I desire to believe. I think more disinterestedly than I could when I was young and must dig furiously like a child rummaging in a bran-pie to discover my self (161).

Through these lines, Bernard makes a comparison with his youth by claiming that he has thought more interestedly unlike the present moment. As stated by both, Neville and Bernard, they are not young anymore. In the last interlude, the sun reaches its final phase in the sky: "Now the sun had sunk" (176). Similarly, in the last chapter, which is summarized by Bernard, the characters are older than the previous chapters. "In the ninth and final section, one of the six, Bernard, seeks to weave their various experiences and personalities into a final unity, as Woolf indicates in the diary" (Levin, 1983: 164). In the last chapter, Bernard tries to reach unity via his last monologue by touching on his experiences and friends, besides, how time passes is illustrated by Bernard and the reader learns about Rhoda's death. Bernard focuses on time as well as life and death as an old man. As a result of the connection between the italic interludes and the chapters, the sun's phases from its set to down represent characters' lives from childhood to old age. Therefore, in this way, Woolf makes the whole life look like one day. As Einstein asserts that time is not the same for everyone through the relativity theory, similarly, it seems that the whole lives of the characters pass so fast resulting from the image of one day via the position of the sun in the sky in the interludes between the chapters.

Woolf's reflecting relativity of time is observed not only through the style of the novel but also through the content of it since the characters mostly put emphasis on how time passes for them. In *The Waves*, for the characters, time is so significant that they always remark it in the way which they consider. To begin with, in the first chapter, in which the characters are children yet, Rhoda's sentence: "Oh save me, from being blown for ever outside the loop of time!" (16) proclaims that time is emphasised in the rest of the novel as well. Even as a child, she desires to be out of the time circle. In the same manner, in Chapter II, in which the characters' school life begins, Bernard states that: "The urgency of it all is fearful" (22). Here, Bernard emphasises that everyone's aim is to do something for the moment they live in not for the after by criticizing the urgency of everything. In a way, what he points out here is the goal to make everything suddenly. It can be deduced that the swiftness of passage of time results in the necessity of urgency. Moreover, Neville highlights the significance of a moment: "This is indeed a moment—this is indeed a solemn moment" (23). Neville's emphasis on the moment, which can be observed throughout the novel, is arisen from the understanding about how a moment can change everything regardless of its being a short time since everything can happen in just a moment.

Susan's remembering the past is a reflection of the use of the stream of consciousness technique, which brings out the experiences of the characters along with their feelings and thoughts. "For how many months,' said Susan, 'for how many years, have I run up these stairs, in the dismal days of winter, in the chilly days of spring? Now it is midsummer" (30). Here, she remembers how she runs up for many years in the winter by turning back to the past. In the following lines, Jinny indicates that "I cannot follow any thought from present to past (31) by comparing herself with Susan and Rhoda. With this sentence, she highlights that she does not go after a thought which belongs neither to past nor to present, unlike Susan who remembers home, or in other words past. Susan's mostly remembering her past or dreaming her future, which can be observed throughout the novel, and her mental devotion to some memories are related to time's being relative since she is more inclined to recall a memory where Jinny prefers not to get lost by remembering home. In a way, time flows differently for everyone as Einstein claims. In fact, as Jinny states that: "There is nothing staid, nothing settled, in this universe" (34). Everything flows without stop like time. Although time does not stop for even a second, some memories are sometimes alive for the characters. Therefore, time slows down for some characters because of an experience or a moment; on the other hand, some of them have difficulty in the swiftness of time. When they are on the summer holiday, Susan's remembering

school time through the stream of consciousness technique is revealed. Her mind shows that she thinks not only about the past but also about the future. For instance, she asserts that: "I will not send my children to school nor spend a night all my life in London" (46). Susan's dreams about her future are presented via the stream of consciousness technique. In a way, applying this method enables the characters to go back or future in time thanks to the effect of the Theory of Relativity. Although the chapters progress chronologically, they have flashback and flashforwards which make the change in time occurs.

Louis's feeling of existing for a long time at life reveals how time is relative for the characters in *The Waves*. He states that "I seem already to have lived many thousand years" (49). What can be pointed out from here is that this situation of Louis is not about how much time has passes for him, but how time passes. Therefore, the focal point here is that time flows differently for everyone regardless of living at the same time. After he states the feeling about living thousand years, he leaves himself with his childhood memories: "I dash and sprinkle myself with the bright waters of childhood. Its thin veil quivers. But the chained beast stamps and stamps on the shore" (50). In Chapter IV, Bernard's perspective is related to the Theory of Relativity: "But I am aware of our ephemeral passage" (85). Through these words, he highlights that time passes so fast that everything happens in the blink of an eye. In other words, some moments take short whereas sometimes "[t]ime seems endless" (101). In the same manner, Bernard's reference to time's being endless is another effect of Einstein's theory on Woolf's literature; moreover, Neville makes the same emphasis on the following pages: "With infinite time before us" (105). The reason behind why the eternity of time comes forefront is that the theory has caused to an increase in the questions about the eternity of time. Neville's turning back to the past mentally through memories is another example of the impact of the Theory of Relativity since he recalls memories by staying away from the present moment even for a second. Furthermore, his lines: "Barns and summer days in the country, rooms where we sat-all now lie in the unreal world which is gone. My past is cut from me. They came running" (112) show how time understanding changes in the modern literature since living in the past or leaving it is the consequence of Einstein's Theory of Relativity by which he claims that time is not stable for every observer. Louis's feeling is revealed once more through the same technique. He highlights once again that he has lived thousands of times; in other words, it shows that time is relative by feeling that he exists in the world more than the years he has really lived. According to the twin paradox, one of the twins, who sets out on a journey through space, is younger than the other one who stays in the Earth, due to being closer to the velocity of light. Similarly, Louis feels older than he lives in the world although all characters have the same ages.

Susan's consciousness, in which she remembers the old times: "I, who used to walk through beech woods noting the jay's feather turning blue as it falls, past the shepherd and the tramp" (128) brings out her memories when she walks through the beech woods. The stream of consciousness technique helps the past, present and future be narrated as mingled in modern literature. Similarly, Neville finds himself in the past: "I revisit my past life, scene by scene" (132). Neville's visiting his past is one of the impacts of the Theory of Relativity as he visits his memories by leaving the present. In a way, time is not present time for him. As a result, time flows differently for the characters. He realizes time passes; however, he prefers to visit his past due to Percival whom he loves and values so much. "To follow the dark paths of the mind and enter the past, to visit books, to brush aside their branches and break off some fruit" (133). As he indicates that one passes through the dark ways of the mind to go back to the past. In a way, mentally, they can go back to a memory; moreover, the reader makes a journey with the character through the method. In this way, s/he witnesses what time the character belongs to at that moment. In the following lines, he refers to the tick of the clock by desiring to wipe off it because of the clock's way to remind of the time which is always in flow.

"The violent passions of childhood, my tears in the garden when Jinny kissed Louis" (141). As observed, Jinny's kissing Louis is remembered by Susan when they are not children anymore. This memory, which has an effect on her feelings at their childhood, is remembered by her and Louis. Jinny's kiss is remembered by Louis at this time. Mentally, he turns back to the past. "Jinny broke the thread when she kisses me in the garden years ago" (163). Through the method, the reader can go or come back in time with the characters who visit some memories in terms of time. This kiss affects three characters: Susan, Jinny, and Louis, however, all three have different feelings for this, for instance, this kiss makes Jinny excited whereas Susan feels agony. Thanks to the use of the stream of consciousness technique, both the feelings of all of

them about this kiss and its being remembered in the future are revealed. At this time, the relativity of time is brought out by Rhoda:

How you chained me to one spot, one hour, one chair, and sat yourselves down opposite! How you snatched from me the white spaces that lie between hour and hour and rolled them into dirty pellets and tossed them into the waste-paper basket with your greasy paws. Yet those were my life (152).

Her being stuck in a specific time is related to time's flowing differently for everybody. According to the Theory of Relativity, time is not the same for everyone because time flows more slowly for one who is closer to the speed of light. The Theory of Relativity has brought a new breath to the understanding of time with this view. Here, too, Rhoda talks about staying in a specific time since the subjectivity of time is at the forefront in Woolf's literature. To clarify, although time is chronologically the same for the characters, sometimes they can stay at a certain time like Rhoda; in other words, time can flow slower for them. In this case, it is one of the reflections of relativity in time on The Waves. "How swift life runs from January to December!" (161) This sentence by Bernard shows that time passes quickly for him from January to December. This situation is similar to what Einstein asserts via the Theory of Relativity since from the perspective of this theory for someone, who is closer to the velocity of light, time flows slower. At this point, the fact of time's flowing not the same for everybody emerges. 'As if the miracle had happened,' said Jinny, 'and life were stayed here and now.' 'And,' said Rhoda, 'we had no more to live' (168). Jinny's emphasis on life's staying there means that time freezes at that moment for her; moreover, Jinny's reply to her means there is nothing to live. In a way, according to them, they are stuck in a time due to the idea that there is no more time to live. Throughout the novel, from childhood to old age, one of the most dominant issues occupying the minds of the characters is time. Although time always continues to flow, the idea of being stuck in a specific time is related to the reflection of the Theory of Relativity by which Einstein asserts that time can change for everyone due to the position to the speed of light. After Louis's reference to "the abysses of time" (168), Bernard wants them to realize the tick of the clock to remind them of real-time. Similarly, Neville's sentence "as we walk, time comes back" (170) is another obvious reflection of the Theory of Relativity in Woolf's literature since this theory paves the way for the increase in the questions about time travelling. "We have been walking for hours it seems" (176). Time is also relative for Bernard, who understands that he has been walking for hours due to the fatigue of his leg muscles since he is not aware that time has passed so much when he walks. Towards the end of the novel, the only one whose consciousness is presented is Bernard. In the last chapter, his concentration is generally on the issues of life, death and time. For instance, he states that: "All these things happen in one second and last forever" (179). Here, he highlights that although the events in the past, which are described as all these things by him, pass very quickly since they last as a memory so he highlights that the past passes suddenly and lasts forever. Stewart explains what marks Bernard through these words: "Only the present moment exists, yet it is evanescent and can never be grasped entirely. Only in moments of visionary intensity does Time seem to stand still" (1972: 444). The point to be deduced from here is that only the present moment exists, however, this moment also disappears due to the passing of time. Although time always goes on, it seems to be there for some moments. In the same way, Bernard emphasises how time flows quickly one more time. From his perspective, the days follow one another thus time passes quickly from January to December. He indicates that Tuesday follows Monday several times to reveal how time passes in this way: "Tuesday follows Monday; then comes Wednesday" (192). The same ideas of Bernard are repeated several times until the end of the novel. "Yes, but suddenly one hears a clock tick. We who had been immersed in this world became aware of another. It is painful. It was Neville who changed our time" (203). When he gets lost in his consciousness, he refers to the ticks of the clock which symbolize chronological time. This sound of the clock helps them recognize this world by making them stay away from their consciousness which takes them to their pasts. Similarly, in Mrs. Dalloway, the sound of Big Ben presents chronological time by distinguishing psychological time from it due to the journey to the pasts of the characters via their consciousness. "We were extinguished for a moment, went out like sparks in burnt paper and the blackness roared. Past time, past history we went. For me this lasts but one second" (207). Through these lines, it is obvious that for Bernard going to the past lasts only one second since he generally remembers the past until he recognizes the sound of the clock. Going past or coming back to the present becomes an issue along with the emergence of the Theory of Relativity. In a way, his last monologue outlines the personalities and sensibilities of his friends. When the sun is at the top, the characters have almost half of their lives; moreover, at this central point Percival dies.

After this time and Percival's death, the sun begins to set, similarly, the characters begin to age. In the last interlude, the sun sets; therefore, the last sentence of the novel suggests that the waves stay on the shore after Bernard hurls himself towards death. The movements of the waves given in these interludes also draw attention to the events in the chapters that will come after the interludes. The characters are still young as the sun rises above the waves in one of the interludes: "The sun [...] bared its face and looks straight over the waves" (80). In the same manner, the fact that the waves are about to come to the shore is similar to the characters being close to the end of their lives and the novel ends when they break on the shore. Consequently, The Waves as a modernist work presents the consciousness of the six characters through their soliloquies thanks to the new style in literature. Furthermore, Woolf's emphasis on the time concept can be observed in *The Waves* through both style and content since the stream of consciousness technique is a mirror to reveal how the characters give importance to the passing of time by enabling the abrupt changes in time. The interludes between the chapters limit the whole life of the characters to one day and give the image of one day via the sun's position in the sky by symbolizing the phases of the characters' lives from childhood to old age. In this respect, The Waves is one of the novels which is analysed in the context of Einstein's relativity theory and modernist features in this thesis.

## CONCLUSION

The Theory of Relativity was asserted by one of the most leading scientists in the world, Albert Einstein in his miracle year 1905 in which he published four articles changing his life. This theory, which appeared in the article "On the Electrodynamics of Moving Bodies", brought a new perspective towards time by shattering the understanding of absolute time connected to well-known English physicist Sir Isaac Newton. In 1915, Einstein demonstrated the General Theory of Relativity to prove that the laws of physics are the same for the same inactive and inertial systems by defining gravity in space as well as generalizing the Special Theory Relativity and Newton's law of universal gravity. In this context, the Theory of Relativity and its outcomes made a new epoch in the field of science in the modern period; moreover, Einstein and his theory have affected today's science as well. In the early modern period, people encountered significant events, which affected the lives of people deeply and paved the way for the changes not only in society but also in the human soul. The new ideas and theories in the fields of science and psychology along with the First World War led to people's beginning to look at life from another perspective since they felt that they were alienated from this world in which most things were not familiar to them. Thus, they preferred to hide in their shells by throwing the outer world out of their focus. As a result of the change in people's viewpoints to life, literature changed as well. The modern authors intended to reflect individual matters by making the subjectivity forefront in their works both via the style and content. Thus, the content of literature changed along with the style due to the new aim in literature. Portraying the inner worlds of the characters along with their psychological states became the new interest of the modernists owing to the use of new techniques such as stream of consciousness, flashbacks, flashforwards and fragmentation, etc. Virginia Woolf, who lived between the years of 1882-1941, was one of the leading voices of the twentieth century modernists whose style is highly different from the traditional style because of the changes in the main goal, in terms of the content of the work and the style. Woolf, as a person who lived in the modern period, was influenced by the new improvements and the war which brought the destruction and chaos to the human soul as people encountered its destructive parts although England was on the side of

defeater. Woolf achieved producing one of her significant novels, Mrs. Dalloway (1925), in which she portrays one day of a woman, Clarissa Dalloway, by reflecting the effects of shell shock through the psychology of a man, Septimus Warren Smith, in 1923. She focuses on the consciousness of the characters via the stream of consciousness technique; therefore, the work does not progress chronologically due to its modernist structure unlike the traditional structure of realistic novels. Both the style, which provides going backward and forward in time, and the content reflecting how time is relative for the characters, are the effects of Einstein's Theory of Relativity on this work. Similarly, The Waves, which was published in 1931, reflects the Theory of Relativity by presenting that the swiftness of passing of time depends on the individual by concentrating on the consciousness which facilitates to see characters' thoughts and feelings. In this work, which is filled with the soliloquies of the six characters, Woolf emphasises the significance of time for them by revealing the consciousness of the characters with the stream of consciousness technique. On the other hand, by imagining a day with interludes, she limits the lives of characters from childhood to old age to one day. In this thesis, the effect of Einstein's Theory of Relativity on Virginia Woolf's works Mrs. Dalloway and The Waves is reflected.

Albert Einstein, who was born in 1879 in Germany and died in 1955 as a citizen of the United States, published four articles in a journal, Annalen der Physik, in 1905 when he was a patent officer. The first article related to the photoelectric effect paved the way for the emergence of the quantum theory and the second article is about the Brownian motion. The third article, whose title is "On the Electrodynamics of Moving Bodies", is based on the Special Theory of Relativity when the focal point is matterenergy equivalence in the fourth article which has explanations of his well-known equation  $E=mc^2$  and being bent of the light by gravity. 1905 is known as the miracle year of Einstein since these articles laid the groundwork for the foundation of modern physics and one of these articles related to his research on the photoelectric effect made him win the Nobel prize. Einstein unites Maxwell's equations for electricity and magnetism with the laws of mechanics; moreover, he asserts the new ideas about the mechanics of the speed of light. Einstein claims that although the velocity of light is always stable in every system, time changes from an observer to the other one by declaring that time and space cannot be inseparable from each other. Thus, Einstein made a new epoch in the field of science by creating the concept of spacetime as well as proving the relativity of time. Before the appearance of the Theory of Relativity, it was believed that time is absolute since it cannot change according to the reference system of the observer. With this theory, some of Einstein's substantial deductions highlight that nothing can move faster than the speed of light due to the equality of mass to energy, there is no absolute time, space and time cannot be distinguished from each other and laws of physics are the same for everyone. In 1915, Einstein established the General Theory of Relativity by which he generalizes Newton's law of universal gravity and the Special Theory of Relativity by defining gravity in spacetime. Therefore, he shows that the laws of physics are the same for every system unlike the previous belief whose assertion is that the laws of physics are the same for just inactive system. In the context of this theory, spacetime is bent due to the circulation of the mass and energy inside it. Another outcome of this theory is that light is bent by the gravitational areas, to set an example, the light coming from the star, which passes by the sun, appears in a different position because of the mass of the sun for someone in the Earth. The experiment of English physicist Arthur Stanley Eddington in 1919 after the end of the First World War confirmed Einstein's General Theory of Relativity since his experiment proved that the starlight, which passes near the Sun, is bent due to the mass of the sun. Thus, the popularity of Einstein and his theory began to increase worldwide thanks to the confirmation of his theory with this experiment. Moreover, the fourth dimension has come into prominence because Hermann Minkowski, a German mathematician, extended the Euclidean three-space to a quasi-Euclidean fourspace by adding time. Therefore, Einstein puts forward the concept of spacetime along with fourth dimensional space which consists of the three struts x, y, z on the coordinate planes and t, time. As a result, Einstein and his theory brought a new perspective to the understanding of time, for example, personal time measurement took the place of understanding of absolute time since time depends on both where the individual is and how s/he moves. In a way, it can be pointed out that Einstein's perspective towards spacetime has ineradicably impressed the way people look at the universe; therefore, the Theory of Relativity is considered as a revolution in the field of science.

In the modern period, people witnessed the events and the emergence of new ideas all of which had effects on changing people's perspectives towards life and the world due to the feelings resulting from isolation in the unfamiliar world. The Industrial Revolution, which began in 1760 in England, triggered the increase in the progressions in both science and technology towards the twentieth century. The developments in communication and transportation towards the end of the nineteenth century continued to increase in the twentieth century. For example, the appearances of Max Planck's quantum theory in 1900 and Albert Einstein's Theory of Relativity in 1905 paved the way for innovations in science and technology. The First World War, which lasted from 1914 to 1918, led to destruction in the lives of people along with loss of properties. Because of some reasons such as a search for colonies and raw materials between countries, the economic competition between some countries, acceleration of armament after the industrialisation and the spread of the idea of nationalism after the French Revolution, the war broke out with the occupation of Austria Hungary in Serbia in 1914. With other countries' getting involved in the war, it became a world war. The war, which had two poles: the allied and central powers, ended in 1918 with the victory of the Allied Powers including Britain. However, its causing millions of deaths and wounded people behind it reveals that its effects were not easy to get over completely for people since they lost their families, friends, or parts of their bodies and their cities were ruined. In a way, the war had a great effect on the lives of people both physically and psychologically. As a result of the negative outcomes of the war on their lives, people's views towards the world changed remarkably in a negative way. They witnessed how the world was filled with chaos, fear, ambiguity and agony; therefore, they had difficulties in looking at life with vivid feelings. The damages of the war on people's lives not only physically but also psychologically triggered them towards depression by causing the spreading of the feelings of loneliness and alienation as isolating themselves from that uncertain world was the way to stay away from this ambiguity. Besides, there were significant incidents in the politics and military structure of England such as alterations in the administration and the Irish War of Independence against the British government. Therefore, the English society got through these events and tried to overcome them.

As well as the progressions in science and technology and the First World War, the new ideas, which can be seen one of the factors changing people's views towards life in the field of psychology, began to appear in the twentieth century, in which there were changes in many aspects. Sigmund Freud, Carl Gustav Jung and William James were outstanding figures who had drawn the attention of society with their ideas in the field of psychology. Sigmund Freud, an Australian neurologist, founded Psychoanalysis thanks to his interest in the consciousness of people. His methods such as free association, by which he reveals everything in the patient's mind, can be accepted as the means to analyse human psychology. Thus, consciousness became more of an issue in the early twentieth century. Swiss psychiatrist Carl Gustav Jung's claim about the complicated and dynamic structure of human psychology, and American psychologist William James's ideas on consciousness has reached its being in flow were the other reasons why the interest in consciousness has reached its peak in the modern period. As a result of the research on psychology as well as developments in science and technology and the First World War, people preferred to retire into their shells by trying to stay away from the unfamiliar world in which nearly everything changed.

All these conditions led to the change in literature as well since it was a way to rebel against these circumstances. By means of the new methods in literature, the modernists broke the traditional form in literature by preferring to focus on the inner worlds of the characters rather than external issues. People's desires to stay in their private worlds along with the distant in their relationships in the early twentieth century resulted in the increase in the significance of subjectivity and individuality in modern literature. In this sense, the modernist authors' focus of interest turned into the reflection of the inner worlds of the characters, as representatives of people's psychology in the modern period, through the use of new techniques such as stream of consciousness, flashbacks, flashforwards, all of which can be defined as the most significant ways of showing, by abandoning traditionalism in literature such as depicting the conflict between the good and evil, having chronological structure and highlighting the outside problems. In this way, the modernist authors reflect the mental situation of the characters; moreover, they help the readers see how the minds of the characters work and make a journey to the past, present or future of the characters by applying new methods in literature. Besides, individuality's coming to the forefront in the modern period underlies the change of idea about reality. In modern literature, reality changes from one character to the other one because reality was not the same for everyone anymore in the twentieth century. The multiplicity of the reality arising from the world's becoming unfamiliar for people due to the massive changes and incidents is related to the concepts of individuality and subjectivity. Thus, each

character's inner world, psychological state and consciousness have been portrayed instead of the external problems in modernist fiction.

Virginia Woolf, who contributed to the modernist literature, portrayed the inner worlds of the characters by applying new methods as a modernist author. Beyond being a modernist author, she was an individual who encountered all of the events, which led to the increase in the feelings of agony, isolation, and fear, in the modern period; therefore, her mental situation dragged her towards suicide, which resulted in her death when she filled her pockets with stones in order to sink and threw herself into Ouse River, when she was 59 years old in 1941. In fact, she had nervous breakdowns since her childhood, unfortunately, hearing inexistent voices along with seeing hallucinations began to accompany the nervous breakdown in the course of time. As a result, her mental situation led to her suicide. In her works, she generally portrays the psychology of the people in the modern era by reflecting her own mental situation. The modernist techniques applied by Woolf help the consciousness reveal since they enable the readers to plunge into the minds of the characters by reflecting how the characters feel or what they think. The abrupt change in time is another feature which can be observed in Woolf's works, for instance, the readers suddenly find themselves in the pasts of the characters through flashbacks, then, they can come back in time. Therefore, Woolf's novels generally do not have a certain beginning and end; in other words, the events do not move on sequentially. Woolf, as one of the leading figures for modern literature, applied the new methods in literature by concentrating on the consciousness of the characters and the individual issues. Unlike some other modernists like James Joyce, the existence of mediations and formulations in her works help the reader understand the sentences. Not only the consciousness of the characters but also the time concept is intensely foregrounded by Woolf. Not knowing Einstein would be impossible for her since she lived in the same era with this wellknown physicist, as it can be understood from her mentioning his name in Mrs. Dalloway. In her works, the effect of Einstein's theory on time can be observed in terms of both style and content. On the one hand, the techniques provide to go backward or forward in time by disregarding the chronological time structure; on the other hand, the time has a significant place for the characters' lives. In this thesis, how Albert Einstein's Theory of Relativity affected Woolf's novel, Mrs. Dalloway and The *Waves*, is analysed by touching on the modernist features.

Mrs. Dalloway (1925) portrays one day of a woman, Clarissa Dalloway in 1923 along with the post-war trauma through another central character Septimus Warren Smith. The novel generally centres around these two characters, who can understand each other intuitively although they do not encounter each other throughout the novel. As a modernist novel, the consciousness of the characters, in which there are their feelings, ideas, experiences, fears and hopes, is presented through the stream of consciousness technique; moreover, the use of flashbacks and flashforwards makes it possible to see the different times of the characters such as past, present and future. Hence, not only the present of Clarissa or other significant characters such as Peter, Richard and Sally but also their youth is revealed in the novel. Besides their consciousness, how Septimus is traumatized due to the negative feelings the war brings to his world is stressed by Woolf. This modernist novel does not have a certain beginning and end as the events do not progress chronologically. Rather than having a chronological time structure, presenting one day with flashbacks and flashforwards is one of the most significant modernist features in the work. Moreover, the author aims to reflect the way the characters' minds work by touching on their individual problems thanks to the new style in literature. Woolf's use of mediations and formulations allows the reader to comprehend the complexity of the sentences, otherwise, reflecting how the mind works in the novel would cause confusion for the readers. The stream of consciousness technique enables the reader to witness how Clarissa and Septimus feel in the same way in some aspects although they have different lives from each other. The time concept is another characteristic which dominates the novel, as well as the significance of the consciousness, since both the style and content of the work are related to time, especially the relativity of time. The characters generally turn back in time mentally by remembering a memory; thus, the novel does not move on in a specific order. It can be observed that some characters are stuck in a particular time like Septimus who cannot get over the effects of the war. His experiences in the war, such as losing his friend, lead to his staying in that time by having difficulty in adapting to the present. In this respect, time slows down for him as Einstein states that time depends on the individual through his Theory of Relativity. On the other hand, Clarissa prefers to turn back to a memory related to their youth. On the contrary, Peter is less willing to remember the memories as he considers that staying in the past is a way to suffer, as a consequence he prefers to live in the present. As a result, the situations of these three characters are related to the relativity of time for everyone. Furthermore, the image of the sound of Big Ben is a way to remind of chronological time in the novel. Thanks to this image, the readers can recognize that the characters are in the present.

The Waves is the second work in this thesis which is analysed in the light of Einstein's Theory of Relativity by putting emphasis on the modernist features in it. The Waves (1931) consists of the soliloquies of the six characters who are friends of one another: Bernard, Neville Susan, Rhoda, Louis and Jinny. The novel begins with their childhood and it progresses to their old age as the novel goes on until the last, chapter. One of the most remarkable characteristics of the novel is that it is regarded as a play poem because Woolf uses soliloquies from the theatres and the speeches as well as the interludes matching the rhythms of the waves by creating the effect of poetry. In this way, it is highly different from traditional novels. Throughout the novel, the consciousness of each character is reflected via the stream of consciousness technique. Highlighting the inner worlds of characters through soliloquies by leaving the outer world to the background without indicating the exact time and place makes the novel a modernist text. The domination of the soliloquies in the novel along with the minority of the dialogues results in more focus on the inner worlds of the characters. In this context, the subjectivity becomes prominent in The Waves due to centring of the individuality, similarly, the different personalities of the six characters reflect how the reality is changeable. Their ideas about one another, their reactions to some situations, their feelings and dreams are attainable for the readers thanks to the method of focusing on the consciousness of the characters. Moreover, how they look is reflected through the way they think. In this respect, not only does the technique in the novel show the minds of the characters but also, it reflects their physical appearances. Similar to Mrs. Dalloway, Woolf's use of the mediations such as some words like "said" facilitates to understand whether the characters think or speak. In addition to having modernist features, The Waves has the concept of time which can be observed through both style and content. The interludes between the chapters symbolize one day thanks to the image of the sun since the sun's position progresses towards the end of the novel from its rise to its set. In this way, Woolf portrays the whole lives of the characters from childhood to old age by depicting one day with these interludes which picture nature such as the sun, the sea, and its waves. To clarify, the position of the sun is at its first level before its rise, similarly, the chapter after the first interlude begins with the characters' childhood. Furthermore, the characters' remembrance of the past and dreaming about future via the stream of consciousness technique also reveal how time is relative for each character as Einstein affirms that time can slow down or accelerate according to the observer. In *The Waves*, the characters intensely emphasise the swiftness of the passing of time according to them. For instance, Louis feels that he exists for a long time while time flows so fast for Bernard. In the same manner, some characters sometimes feel that they are stuck in a specific time. In this respect, the flow of time changes from one character to the other one.

All in all, Virginia Woolf's two novels, Mrs. Dalloway and The Waves, are analysed in the light of Albert Einstein's Theory of Relativity by touching upon the modernist features in them. Therefore, initially, the Theory of Relativity asserted by German scientist Albert Einstein is expressed to strengthen the effect of it on Woolf's literature. Then, the significant historical events in the early modern period are depicted with the intention of showing why literature has changed so much in that era. In modern literature, the perspectives of the authors along with their styles changed in comparison with the traditional literature. The improvements in the fields of science and technology, the appearance of the new ideas in philosophy and psychology, and WWI affected the viewpoints of people; hence, literature becomes a tool to rebel against the negative feelings appearing as a result of the changes in society. In modernist fiction, subjectivity becomes a forefront issue thanks to the reflection of the inner worlds of the characters via the new techniques, instead of external issues. Virginia Woolf as an individual experiencing all these circumstances got through depression, which led to her suicide. In the light of these issues, in this thesis, Mrs. Dalloway and The Waves are examined in the context of modernism and the Theory of Relativity. In these works, her style and focus of interest reflect the modernist features; moreover, both reveal how her works are under the effect of the concept of time since relativity of time, according to the characters, can be observed thanks to the style bringing out their consciousness. In view of these issues, Einstein's Theory of Relativity plays a substantial role in Mrs. Dalloway and The Waves because both the content and style of these works reflect that time is not stable for everyone.

## WORKS CITED

## **PRIMARY SOURCES**

- Einstein, Albert, Leopold Infeld (1966). *The Evolution of Physics from Early Concepts to Relativity and Quanta*. New York: Simon and Schuster. Google Books/30 September 2020.
- Einstein, Albert (1920). *Relativity: The Special & the General Theory* (Trans.R.W. Lawson). New York: Henry Holt and Company. Elegant Ebooks/14 September 2020.
- --- (2003). *The Meaning of Relativity* (Trans. E. Adams, E. Straus, S. Bargmann) London: Routledge Classics.
- Woolf, Virginia (1996). Mrs. Dalloway. Penguin Popular Classics.

Woolf, Virginia (2018). The Waves. Istanbul: Karbon Books.

## **SECONDARY SOURCES**

Abbott, H. Porter (1993). "Character and Modernism: Reading Woolf Writing Woolf." New Literary History, 24 (2), 393–405. JSTOR/10 December 2020.

Abrams, M.H (1999). A Glossary of Literary Terms. 7th ed. USA: Heinle & Heinle.

- Benjamin, Anna S (1965). "Towards an Understanding of the Meaning of Virginia Woolf's 'Mrs. Dalloway." Wisconsin Studies in Contemporary Literature, 6 (2), 214– 227. JSTOR/ 28 March 2012.
- Bowden, Tom (1973). "The Irish Underground and the War of Independence 1919-21." *Journal of Contemporary History*, 8 (2), 3–23. JSTOR/20 November 2020.
- Brown, Paul Tolliver (2009). "Relativity, Quantum Physics, and Consciousness in Virginia Woolf's 'To the Lighthouse." *Journal of Modern Literature*, 32 (3), 39– 62. JSTOR/ 30 March 2021.
- Calaprice, Alice, Trevor Lipscombe (2005). *Albert Einstein: A Biography. Westport*, Conn: Greenwood Press.

Cassirer, Ernst (1922). "Einstein's Theory of Relativity Considered from The

Epistemological Standpoint." *The Monist*, 32 (1), 89–134a. JSTOR/17 September 2020.

Childs, Peter (2007). Modernism. London: Taylor & Francis e-Library.

- Cohen, J. R. and L. Michael Graver (1995). "The Ruptured Abdominal Aortic Aneurysm of Albert Einstein". Surgery, Gynecology & Obstetrics. 170 (5): 455–458. JSTOR/15 September 2020.
- Crinquand, Sylive (2008). Last Letters. UK: Cambridge Scholars Publishing.
- Daiches, David (1975). "What Was the Modern Novel?" *Critical Inquiry*, 1 (4), 813–819. JSTOR/ 25 November 2020.

Edmondson, Annalee (2012). "Narrativizing Characters in Mrs. Dalloway." *Journal* of Modern Literature, 36 (1), 17–36. JSTOR/1 April 2021.

- Egerton, George W (1988). "The Lloyd George 'War Memoirs': A Study in the Politics of Memory." *The Journal of Modern History*, 60 (1), 55–94. JSTOR/ 5 November 2020.
- "Einstein" (2015). *Scientific American*, 313 (3), 32–34. JSTOR/15 September 2020.
- Epstein, James (1995). "Victorian Subjects: Introduction." *Journal of British Studies*, 34 (3), 295–299. JSTOR/30 October 2020.
- Fölsing, Albrecht (1997). *Albert Einstein: A Biography* (Trans. O. Ewald). New York: Penguin Viking.
- Gelfant, Blanche H (1966). "Love and Conversion in 'Mrs. Dalloway." *Criticism*, 8 (3), 229–245. JSTOR/27 February 2021.
- Gorsky, Susan (1972). "'The Central Shadow': Characterization in 'The Waves.'" *Modern Fiction Studies*, 18 (3), 449–466. JSTOR/18 April 2021.
- Guth, Deborah (1989). "What a Lark! What a Plunge!": Fiction as Self-Evasion in 'Mrs. Dalloway." *The Modern Language Review*, 84, (1), 18–25. JSTOR/27 March 2021.
- Gutting, Gary (1972). "Einstein's Discovery of Special Relativity." *Philosophy of Science*, 39 (1), 51–68. JSTOR/22 September 2020.
- Hartley, Lodwick (1939). "Of Time and Mrs. Woolf." *The Sewanee Review*, 47 (2), 235–241. JSTOR/20 April 2021.

Hawking, Stephan (1998). A Brief History of Time. New York: Bantam Books.

- Hild, Allison (1994). "Community/Communication in Woolf's 'The Waves': The Language of Motion." *The Journal of Narrative Technique*, 24 (1), 69–79. JSTOR/4 April 2021.
- Hintikka, Jaakko (1979). "Virginia Woolf and Our Knowledge of the External World." *The Journal of Aesthetics and Art Criticism*, 38 (1), 5–14. JSTOR/9 December 2020.
- Howard, Douglas L (1998). "Mrs Dalloway: Virginia Woolf's Redemptive Cycle." *Literature and Theology*, 12 (2), 149–158. JSTOR/20 January 2021.
- Johnson, Julie M (1983). "The Theory of Relativity in Modern Literature: An Overview and "The Sound and the Fury."" *Journal of Modern Literature*, 10 (2), 217-230. JSTOR/4 June 2021.
- Joyce, James (2008). Ulysses. Oxford: Oxford University Press.
- Katz, Tamar (1995). "Modernism, Subjectivity, and Narrative Form: Abstraction in 'The Waves." *Narrative*, 3 (3), 232–251. JSTOR/22 April 2021.
- Kohler, Dayton (1948). "Time in the Modern Novel." *The English Journal*, 37 (7), 331–340. JSTOR/4 April 2021.
- Kong, Ying (2005). "Cinematic Techniques in Modernist Poetry." Literature/Film Quarterly, 33 (1), 28–40. JSTOR/10 December 2020.
- Lee, Hermione (2005). "Virginia Woolf's Nose." Virginia Woolf's Nose: Essays on Biography. Princeton; Oxford: Princeton University Press, 37–62. JSTOR/12 December 2020.
- Levin, Gerald (1983). "The Musical Style of 'The Waves."" *The Journal of Narrative Technique*, 13 (3), 164–171. JSTOR/22 April 2021.
- Nicolson, Nigel (1998). Portrait of a Marriage: Vita Sackville-West and Harold Nicolson. Chicago: University of Chicago Press.
- Nunberg, Herman (1942). "Ego Strength and Ego Weakness." *American Imago*, 3 (3), 25–40. JSTOR/23 November 2020.
- Orwell, George, Peter Davison (2000). *The Complete Works of George Orwell: Vol.* 2. London: Secker & Warburg.
- Parsons, Greg S (2013). "British Conservative Opinion and the Problem of Germany after the First World War." *The International History Review*, 35 (4), 863–883. JSTOR/20 November 2020.
- Petersen, Carolyn Collins (2016). Evren 101: Güneş Sistemi'nden Solucan Deliğine Evren Hakkında Bilmeniz Gereken Her Şey (Trans. Ö. Özarpacı). İstanbul: Say Yayınları.

Phelan, Mark (2018). "How the Central Powers Were Defeated, July-November

1918." History Ireland, 26 (6), 24-27. JSTOR/11 November 2020.

- Phillips, Brian (2003). "Reality and Virginia Woolf." *The Hudson Review*, 56 (3), 415–430. JSTOR/12 December 2020.
- Riccards, Michael P (1986). "Waging the Last War: Winston Churchill and the Presidential Imagination." *Presidential Studies Quarterly*, 16 (2), 213–223. JSTOR/4 November 2020.
- Richardson, Robert O (1973). "Point of View in Virginia Woolf's The Waves." *Texas Studies in Literature and Language*, 14 (4), 691–709. JSTOR/14 December 2020.
- Richter, Harvena (1982). "The Canonical Hours in 'Mrs. Dalloway." *Modern Fiction Studies*, 28 (2), 236–240. JSTOR/25 January 2021.
- Schiller, Christoph (2016). *Motion Mountain: The Adventure of Physics Volume II, Relativity and Cosmology*. Motionmountain/4 December 2020.
- Singh, Virendra (2005). "Einstein and the Quantum." *Current Science*, 89 (12), 2101–2112. JSTOR/30 October 2020.
- Sponsel, Alistair (2002). "Constructing a 'Revolution in Science': The Campaign to Promote a Favourable Reception for the 1919 Solar Eclipse Experiments." *The British Journal for the History of Science*, 35 (4), 439–467. JSTOR/27 September 2020.
- Stewart, Jack F (1972). "Existence and Symbol in 'The Waves."" *Modern Fiction Studies*, 18 (3), 433–447. JSTOR/28 April 2021.
- Sutherland, John (2013). "A Literature of Her Own: Woolf." *A Little History of Literature*. New Haven; London: Yale University Press, 188-94.
- Thomson, Jean (2004). "Virginia Woolf and the Case of Septimus Smith." *The San Francisco Jung Institute Library Journal*, 23 (3), 55–71. JSTOR/24 March 2021.
- Urgan, Mina (2020). Virginia Woolf. Istanbul: Yapı Kredi Yayınları.
- Van Dongen, Jeroen (2007). "Fame, Philosophy, and Physics." *Science*, 317 (5839), 752–753.JSTOR/30 October 2020.
- Williamson, Samuel R (1988). "The Origins of World War I." *The Journal of Interdisciplinary History*, 18 (4), 795–818. JSTOR/14 November 2020.