

## CHAPTER II

### THEORITICAL FRAMEWORK

This chapter contains theories related to research. The theories are the mental disorder theory which explains what mental disorder are, the causes of mental disorder. Then there is a summary of the film A Beautiful Mind, when it was released and how the synopsis is. In addition, there is a theory of semiotics that I use semiotic analysis to describe how the scenes in the film A Beautiful Mind represent psychological concepts and mental disorder through the signs that Charles S. Peirce calls icons, indexes, symbols.

A Beautiful Mind film is interesting to study because this film presents a psychological in which the main character in this film is suffering from a mental disorder and required special care and social support from the surrounding environment. In the context of this research, the film is an image that is full of meaning and multiple interpretations. Films are composed of many iconic signs, namely images that have similarities to objects and also indexes of images that are full of meaning and symbols that have many meanings that need to be interpreted.

Therefore, it becomes interesting for me to explore what signs represented in images of the film, especially how the signs in the film A Beautiful Mind represent what mental disorder are like, especially in schizophrenic disorders. Schizophrenic disorders is a mental disorder that occurs in the long term. This disorder causes sufferers to experience hallucinations, delusions, thinking confusion, and behavior changes. The signs are collaborated to achieve the desired effect.

With many semiotic models available, I chose Charles S. Peirce's semiotic model. In general, semiotics is the study of signs in human life.

#### **2.1 Mental Disorder**

Mental disorder is a psychological or behavior pattern shown in individuals that causes distress, reduces the quality of life and dysfunction. This reflects psychological dysfunction, not as a result of social distortion or conflict with society (Stuart, 2013). Meanwhile, Keliat states that mental disorders are a pattern of behavior, a syndrome that is clinically significant related to suffering, distress and causing impairment in more or one function of human life. (Keliat, 2011)

According to the American Psychiatric Association or APA, mental disorder is / behavioral patterns / syndromes, clinical psychology occurs in individuals related to the distress they experience, for example, painful symptoms, impaired function is more important with an increased risk of death, suffering, pain, loss of important freedom. and failure (O'Brien, 2013).

Mental disorder is a form of manifestation of behavioral deviations due to emotional distortions so that behavior is found in inappropriate behavior. This can occur because all psychological functions decline (Abdul, 2011).

According to Videbeck in (Abdul, 2011) states that the general criteria for disorders are as follow:

- a. Not content to live in the world.
- b. Dissatisfaction with the characteristics, abilities and achievements.
- c. Coping that is not affective with life events.
- d. There is no personal growth.

According to (Prabowo, 2014) said that there are also characteristics of mental disorders that can be identified as follow:

- a. Shut himself.
- b. Don't know anyone else.
- c. Angry for no reason.
- d. Talk chaotic.
- e. Not being able to take care of yourself.

### **2.1.1 Causes of Mental Disorder**

The causes of mental disorder are psychiatric, but the main cause may be in the body (somatogenic), in psychology (psychology), culture (cultural pressure) or in the social environment (sociogenic) and religious pressure (spiritual). From one of these elements there is one prominent cause, usually there is no single cause, but there are several causes in the body, soul and cultural-Spiritual environment at the same time arising and coincidence occurring together. Then arise body or mental disorders (Maramis, 2009).

According to (Yusuf, 2015) the causes of mental disorder are influenced by factors that influence each other, namely as follows:

A. Organobiological or somatogenic somatic factors.

- 1) Neurophysiological.
- 2) Neuroanatomy.
- 3) Neurochemistry.
- 4) Pre and peri-natal factors.
- 5) The level of maturity and organic development.

B. Psychological factors (Psychogenic).

- 1) The role of the father.
- 2) Mother and child interactions.

Normal sense of security and abnormal trust based on disconnection (feeling of disbelief and doubt), deficiency.

- 3) Intelligence.
- 4) Siblings who experience competition.
- 5) Work, play, community and family relationships.
- 6) Depression, anxiety, shame or guilt results in loss.
- 7) Skills, creativity and talents.
- 8) Development and adaptation patterns in reaction to hazards.

C. Socio-cultural (Sociogenic) factors:

- 1) Patterns in parenting.
- 2) Family stability.
- 3) Urban versus rural housing.
- 4) Economic level.
- 5) Religious influence and social influence.
- 6) Minority group problems, including health facilities and prejudice, inadequate welfare and education.
- 7) Values.

From the three factors above, there are several other causes of mental disorder including the following:

1) Genetics.

Individuals or family members who have or who experience mental disorder will tend to have a family with mental disorders, will tend

to be higher with people who do not have genetic factors (Yosep H. , 2013).

2) Biological reasons.

a) Heredity.

The role of the cause is not clear who experiences mental disorder, but it is strongly supported by unhealthy mental environmental factors.

b) Temperament.

A person who is too sensitive or sensitive usually has problems with mental tension and has a tendency to experience mental disorders.

c) Physical.

The opinion of some investigators is that a person's body shape can be related to mental disorder, such as being overweight tends to suffer from manic-defective psychosis, while being thin tends to be schizophrenic.

d) Disease or injury to the body.

Heart disease, cancer and so on can cause gloomy and sadness. Also, certain injuries or disabilities can cause feelings of inferiority (Yosep H. , 2013).

3) Psychological reasons.

From the frustration experience, the successes and failures experienced will color their attitudes, habits and character in the future (Yosep H. , 2013).

4) Stress.

Developmental stress, psychosocial occurrences continuously will support the emergence of symptoms of manifestation of poverty, unemployment, feelings of loss, ignorance and social isolation (Yosep H. , 2013).

5) Socio-cultural.

a) The rigid way of raising children, the relationship between the child's parents becomes stiff and not warm. Children as adults

will be very aggressive, quiet and will not be sociable or will even become obedient children.

b) Value system, differences in cultural ethics and differences in moral value systems between the past and the present will often cause psychological problems.

c) Tensions due to economic factors and technological advance, in society need will increase and competition will increase. Encouraging people to work harder to have it, the number of people who want to work is greater so that unemployment increases (Yosep H. , 2013).

6) Wrong psychological development.

Individual immaturity fails to develop further. A weak and distorted place is when individuals develop inappropriate attitudes or reaction patterns, failing to achieve normal personality integration (Yosep H. , 2013).

### **2.1.2 Signs and Symptoms of Mental Disorder**

Signs and symptoms of mental illness are as follows:

a. Tension is gloomy or feeling hopeless, anxious, restless, feeling weak, hysterical, forced (Convulsive), afraid and unable to achieve the goals of bad thoughts(Yosep I. S., 2014).

b. Impaired cognition is a mental process where a person realizes, maintains a good environmental relationship, the environment inside and the environment outside (Knowing function) (Kusumawati, 2010).

The process of cognition is as follows:

1). Perception disorders.

Perception is awareness in an understandable stimulus. The sensation obtained from the process of association and interaction of various incoming stimuli. What included in the perception is:

a) Hallucinations

Hallucinations is someone who perceives something and that reality does not exist. Hallucinations are divided into visual

hallucinations, auditory hallucinations, tactile hallucinations, olfactory hallucinations, synesthetic hallucinations, kinetic hallucinations.

b) Illusions

Illusions are false or false perceptions (interpretations) that are wrong with an object.

c) Derealization,

Namely a strange feeling about the environment that does not match reality.

d) Depersonalization

Depersonalization is a strange feeling to yourself, the personality feels unusual and does not match reality (Kusumawati, 2010).

2) Impaired sensation.

A person has a disturbance of awareness of stimuli, namely touch, taste of soy sauce, sense of sight, taste of smell, sense of hearing and health (Kusumawati, 2010).

3) Personality disorders.

Personality disorders is a pattern of overall thoughts, behavior and feelings that is often used by a person as a continuous adaptation effort in his life. Personality disorders such as paranoid personality disorder, social, emotional instability. Personality disorders are included in the classification of mental disorders diagnoses (Maramis, 2009).

4) Disturbance of Lifestyle

Include disturbances in human relationships and nature in family, recreation, work and society. Mental disorders can be included in the classification of mental disorders code V, in other social relationships, for example feeling that they are being harmed or being routed continuously. For example, in a job with unrealistic expectations in work for future plans, the patient does not have any plans (Maramis, 2009).

5) Distraction of attention.

Distraction of attention is the concentration of energy and concentration, assessing a cognitive process that arises in an external stimulus (Direja, 2011).

6) Impaired volition.

Impaired volition is where the process of desire is considered and then decided until it achieves the goal. The form of volitional disturbance is as follows:

- a) A weak will (abulia) is a state of activity due to inability to make a decision to initiate a behavior.
- b) Strength is the inability to be flexible in deciding to change behavior.
- c) Negativism is the inability to act on suggestions and rarely occurs carry out conflicting suggestions.
- d) Compulsion is where the situation feels compelled to do something irrational actions (Yosep I. S., 2014).

7) Impaired feelings or emotions (Affect and mood)

Feelings and emotions are spontaneous human reactions which if the behavior is not followed then they will not remain permanent colors a person's perception of his surroundings or his world. Feelings in the form of normal emotional feelings (adequate) in the form of positive feelings (joy, pride, love, admiration and pleasure). Feelings of negative emotions in the form of anxiety, anger, suspicion, sadness, fear, depression, disappointment, loss of pleasure and unable to feel pleasure (Maramis, 2009).

The form of affective and emotional disorders according to (Yosep H. , 2013) can be:

- a) Euphoria is an emotion that is joyful and happy that is excessive and does not match the circumstances, happy joy, it can indicate mental disorders. Usually a euphoric person is confident, assertive in his attitude and optimistic.

- b) Elasi is an efficiency that is accompanied by motor often becoming irritable.
  - c) Excitement or eclation is excessive passion accompanied by a sense of peace, security and calm with strong religious feelings.
  - d) Eksaltasi, which is excessive and usually accompanied by an attitude of greatness or great understanding.
  - e) Depression and anxiety are symptoms of sad facial expressions and behavior.
  - f) Emotions that are blunt and flat are reduced or absent signs of affective expression.
- 8) Disturbance of thoughts or thought processes (thinking).

Thoughts are the relationships between the various parts of one's knowledge. Thinking is the process of connecting ideas, forming new ideas, and forming understanding to draw conclusions. The normal thought process is containing ideas, symbols and goals of directed or coherent associations (Kusumawati, Farida & Hartono, 2010).

According to (Prabowo, 2014) disturbances in the form or process of thinking are as follows:

- a) Mental disorders are clinical behaviors that are accompanied by disability and are limited to the relationship between a person and society.
  - b) Psychosis is the inability to distinguish reality from fantasy, disturbance in the ability to judge reality.
  - c) Formal thought disorders are disturbances in the form of problems with thought content and disturbed thought processes.
- 9) Psychomotor disorders

Psychomotor disorders is the movement of the body which is influenced by the state of the soul so that it has a simultaneous effect on the body and soul, also includes motor behavior which includes



conditions or motor aspects of a behavior. Psychomotor disorders in the form of decreased activity, increased activity, then those that are not mastered, repetitive activities. Movement of one body is in the form of repetitive or aimless movements and is against or against what is ordered(Yosep I. S., 2014).

10) Impaired memory.

Memory is the ability to store, record or produce contents and signs of consciousness. This process consists of recording, retrieving data and storing data (Kusumawati, 2010).

11) Associated disorders.

Association is a mental process in which feelings, impressions or memory images tend to generate impressions or recollections of responses or other concepts that were previously related to them. The incident that occurred, the environment at that time, violations or previous experiences and emotional needs (Yosep H. , 2013).

12) Disturbance of consideration.

Judgment disorder is a mental process of comparing and assessing several options within a framework of providing value in deciding activities (Yosep H. , 2013).

### **2.1.3 Classification of Mental Disorder**

Mental disorders are a collection of conditions that are not normal. This abnormality can be divided into:

a. Neurosis or mental disorders.

Neurosis or mental disorders are mental disorders characterized by anxiety, usually other symptoms of restlessness and stress. Meanwhile the reality check remains intact (O'Brien, 2013). People who are affected by neurosis still feel difficulties, knowing and their personality is not far from reality and still living in reality in general(Yosep I. S., 2014).

Neurosis has the following characteristics:

1) Complete reality test.

2) Group symptoms that disturb and are known as something foreign and unacceptable to the individual.

3) The disorder is long enough or recurs without treatment, it is not a reaction to stressors, the behavior does not interfere with social norms and there are no visible causes and organic factors (Stuart, 2013).

b. Psychosis or mental disorder

Psychosis or mental disorder is a mental disorder that can cause individuals to experience real disruption in severe personality disintegration, reality checks and barriers to fulfilling their daily needs (O'Brien, 2013). People who suffer from psychosis do not understand its events and feelings, in terms of response, encouragement, disturbed motivation, difficulties and lack of integrity, they live far from the realm of reality (Yosep I. S., 2014).

Psychosis has the following characteristics:

- 1) Integration of personality.
- 2) A significant decrease in the level of consciousness.
- 3) Aggressive behavior.
- 4) Great difficulty in functioning adequately, obvious or heavy on reality (Stuart, 2013).

#### **2.1.4 Types of Mental Disorder**

The following are types of mental disorders that are often found in society according to (Abdul, 2011), which are as follows:

a. Schizophrenia is a mental disorder that indicates a disturbance in cognitive function or thought in the form of disorganization, so the disorder is about the formation of content and flow of thoughts. There is another opinion which states that schizophrenia is a mental disorder that occurs in the long term. This disorder causes sufferers to experience hallucinations, delusions or delusions, thinking confusion, and behavior changes. These symptoms are a symptom of psychosis, which is a condition in which the sufferer has difficulty distinguishing reality from his own thoughts.

b. Depression is a mental disorder in the realm of affective feelings and moods characterized by depression, lack of enthusiasm, lethargy, hopelessness, feelings of uselessness and so on. Depression is a mental disorder that is determined by many people who experience economic difficulties. This is closely related to disability, poverty or people's ignorance.

c. Anxiety is a symptom of both chronic and acute anxiety which is a major component in all psychiatric disorders. Anxiety components can be in the form of phobic disorders, panic, obsession with complications and so on.

d. Drug abuse and HIV / AIDS.

In Indonesia, the misuse of narcotics has now become a very serious threat to the life of the State and the nation. The picture of the magnitude of the problem in drugs is known that the cases of drug use in Indonesia have increased by an average of 28.95 per year. The increase in the use of narcotics is also directly proportional to the increase in facilities and funds. There are 80 thousand to 120 thousand HIV or AIDS epidemiologists in Indonesia, of which 80% are infected through needles.

e. Suicide

Under normal circumstances the suicide rate is between 8 - 50 per 100 thousand people. With economic hardship this figure increases 2 to 3 higher. The number of suicides in the community will increase, due to the rapidly growing population, economic difficulties and health services. Suicide should have become a major health problem in society (Abdul, 2011).

## **2.2 A Beautiful Mind Film**

A Beautiful Mind is a 2001 American biographical drama film based on the life of the American mathematician John Nash, a Nobel Laureate in Economics and Abel Prize winner. The film was directed by Ron Howard, from a screenplay written by Akiva Goldsman. It was inspired by the bestselling, Pulitzer Prize-nominated 1997 book of the same name by Sylvia Nasar. The film stars Russell

Crowe, along with Ed Harris, Jennifer Connelly, Paul Bettany, Adam Goldberg, Judd Hirsch, Josh Lucas, Anthony Rapp, and Christopher Plummer in supporting roles. The story begins in Nash's days as a graduate student at Princeton University. Early in the film, Nash begins to develop paranoid schizophrenia and endures delusional episodes while watching the burden his condition brings on his wife Alicia and friends.

The film opened in the United States cinemas on December 21, 2001. It went on to gross over \$313 million worldwide and won four Academy Awards, for Best Picture, Best Director, Best Adapted Screenplay and Best Supporting Actress. It was also nominated for Best Actor, Best Film Editing, Best Makeup, and Best Original Score.

It was well received by critics, but has been criticized for its inaccurate portrayal of some aspects of Nash's life, especially his other family and a son born out of wedlock. However, the filmmakers have stated that the film was not meant to be a literal representation of Nash's life.

### **2.2.1 Story Synopsis**

In 1947, John Nash arrives at Princeton University as co-recipient, with Martin Hansen, of the prestigious Carnegie Scholarship for mathematics. He meets fellow math and science graduate students Sol, Ainsley, and Bender, as well as his roommate Charles Herman, a literature student. Determined to publish his own original idea, Nash is inspired when he and his classmates discuss how to approach a group of women at a bar. Hansen quotes Adam Smith and advocates "every man for himself," but Nash argues that a cooperative approach would lead to better chances of success, and develops a new concept of governing dynamics. He publishes an article on his theory, earning him an appointment at MIT where Sol and Bender join him.

In 1953, Nash is invited to the Pentagon to crack encrypted enemy telecommunications, which he manages to decipher mentally. Bored with his regular duties at MIT, including teaching, he is recruited by the mysterious William Parcher of the United States Department of Defense with a classified assignment: to look for hidden patterns in magazines and

newspapers in order to thwart a Soviet plot. Nash becomes increasingly obsessive in his search for these patterns, delivering his results to a secret mailbox, and comes to believe he is being followed.

One of his students, Alicia Larde, asks him to dinner, and they fall in love. On a return visit to Princeton, Nash runs into Charles and his niece, Marcee. With Charles' encouragement, he proposes to Alicia and they marry. Nash fears for his life after surviving a shootout between Parcher and Soviet agents, and learns Alicia is pregnant, but Parcher blackmails him into continuing his assignment. While delivering a guest lecture at Harvard University, Nash tries to flee from people he thinks are Soviet agents, led by psychiatrist Dr. Rosen, but is forcibly sedated and committed to a psychiatric facility.

Dr. Rosen tells Alicia that Nash has paranoid schizophrenia and that Charles, Marcee, and Parcher exist only in his imagination. Alicia informs Nash that the Department of Defense does not employ a "William Parcher" and reveals the unopened documents he delivered to the secret mailbox. Nash is given a course of insulin shock therapy and eventually released. Frustrated with the depressive side effects of his antipsychotic medication, he secretly stops taking it and relapses, "meeting" Parcher again.

In 1956, Alicia discovers Nash has resumed his "assignment" in an abandoned shed near their home. Realizing he has relapsed, Alicia rushes to the house to find Nash had left their infant son in the running bathtub, believing Charles was watching the baby. Alicia calls Dr. Rosen, but Nash believes Parcher is trying to kill her and accidentally knocks her and the baby to the ground. As Alicia flees with their baby, Nash jumps in front of her car and affirms: "Marcee can't be real! She never gets old!", finally

accepting that Parcher and other figures are hallucinations. Against Dr. Rosen's advice, Nash chooses not to restart his medication, believing he can deal with his symptoms himself, and Alicia decides to stay and support him.

Nash returns to Princeton and approaches his old rival Hansen, now head of the mathematics department, who allows him to work out of the library and audit classes. Over the next two decades, Nash learns to ignore

his hallucinations and, by the late 1970s, is allowed to teach again. In 1994, Nash wins the Nobel Prize for his revolutionary work on game theory, and is honored by his fellow professors. At the Nobel ceremony, he dedicates his prize to his wife. As Nash, Alicia, and their son leave the auditorium in Stockholm, Nash sees Charles, Marcee, and Parcher watching him, but looks at them only briefly before departing.

### 2.3 Semiotic

Semiotics is the study of signs in human life. When talking about semiotics, we cannot talk about a semiotic, but a semiotic introduced by a number of scientists. Broadly speaking, their view of the sign can be classified into two, namely the dichotomous view and the trichotomic view. Sign is seen as a model of the dyad and triadic or also structural semiotic (based on structuralism de saussure) and pragmatic semiotic.'

Semiotics comes from the Greek word semeion, which means sign. Semiotics has its roots in the classical and scholastic studies of the arts of logic, rhetoric and poetics.

Etymologically, semiotics comes from the Greek word semeion which means the interpreter of a sign or sign where something is known. The sign itself is defined as something which, on the basis of previously developed social conventions, can be considered to represent something else. The term semeion appears to have been derived from hypocratic or asclepiadic medicine with its concern for symptomatology and inferential diagnostics.

In terms of terminology, semiotics can be defined as a science that studies a wide range of objects, events, and entire cultures as signs.

Semiotics as the most basic discourse analysis, its method and work is to observe signs (icons, indexes, symbols) with the aim of finding the meanings of signs (with the help of the triangle of meaning theory). Semiotics has been used as an approach in examining something related to signs, for example literary works and news texts in the media. Semiotics is a variant of the structuralism theory. Structuralism assumes that text is a function of content and code, while meaning is a product of a system of relationships.

Semiotics sees media texts as a whole structure. John is looking for latent or connotative meanings. Semiotics is rarely quantitative and often rejects quantitative approaches. Semiotics emphasizes the significance that arises from the "meeting" between the reader and the signs in the text.

The semiotic theory that has been developing so far is based on two views, namely structuralism and pragmatism.

#### a. Structural semiotics

The basics of structural semiotics are as follows:

1. Sign is something that is structured in human cognition in social life, while the use of signs is based on the existence of rules that govern (langue) the practice of language (parole) in social life or how parole changes langue.
2. When humans perceive a cultural phenomenon as a sign, then they see it as a structure consisting of a marker (ie: its abstract form) which is associated with a sign (ie: meaning or concept).
3. Humans, in their lives, see signs through two processes, namely syntagmatic (juxtaposition of signs) and associative (relationships between signs in human memory that form systems and paradigms).
4. The theory of signs is dichotomous, that is, in addition to seeing signs as consisting of two aspects related to each other, they also see the relationship between signs as a differentiating relation of "meaning" (meaning derived from differentiation).
5. The analysis is based on part or all of the principles of structural analysis, namely immanence, pertinensi (efficiency; accuracy; usability, dictionary), commutation (substitution), compatibility, integration (unification, amalgamation), synchrony as the basis for diachronic, and functional analysis.

#### b. Pragmatic Semiotics

Pragmatic semiotics originated in Peirce (1931-1958). For Peirce, a sign is "something that represents something." Danesi and Perron write that such a semiotic theory have existed since Hippocrates (460-377 BC)

who defined a “sign” from the field of medicine as a physical symptom that represents (stand). for) a disease.

According to Danesi and Perron, semiotic research includes three domains related to what humans absorb from their environment (the world), namely those concerned with their “body”, their “mind”, and their “culture”. parallel to Peirce's theory of the representation process of the representament.The representation of the sign concerns the relationship between the representament and its object.

### **2.3.1 Semiotic by Charles S Peirce**

Semiotics Charles S Peirce is a philosopher and logician. Peirce proposed the word semiotic (which was actually used by the German philosopher Lambert in the eighteenth century) as a synonym for logic.

According to Peirce, all phenomena (natural and cultural) must be seen as signs. His view is called "pansemiotic". Peirce's model of signs is trichotomic or triadic. The basic principle is that a sign is representative, that is, a sign is "something that represents something else", (something that represents something else).

Peirce's theory says that something can be called a sign if it represents something else. The symbol that represents it is called the represent a men (referent). So if a sign represents it, this right is the main function of the sign. For example, a nod represents approval, a shake represents disapproval. In order for it to work, the sign must be caught, understood, for example with the help of codes. This representative process is called semiosis, which is a process in which a sign functions as a sign, that is, it represents something that is marked.

Peirce distinguishes the relationship between signs and their references into three types of relationships, namely:

1. The icon, if it is a likeness relationship. Icons can be, photos, geographic maps, mentions or placements.
2. Index, if it relates to the closeness of existence. For example, thick black smoke rises to indicate a fire, a gloomy face indicates a sad heart, and so on.

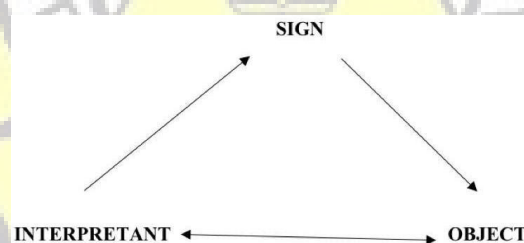


3. Symbol, if it is a relationship that has been formed by convention.

The process of meaning sign in Peirce follows a processual relationship between three points, namely the representamen [R] of the object [O] interpretant [I]. R is the part of the sign that can be perceived [physically or mentally] which refers to something that is represented by it [O]. Then I is part of the process of interpreting the relationship of R to O. Therefore, for Peirce, signs are not only representative, but also interpretive. Peirce distinguishes three types of signs, namely index, icon and symbol.

In the book *Semiotics and Socio-Cultural Dynamics* by Benny H. Hoed, quoted from W. Noth, distinguishes three types of signs in relation to objects (things referred to), namely index, icon and symbol. Index is a sign that the relationship between the representative and the object is direct, even based on a contiguity or causal relationship. An icon is a sign whose representation is a copy of the identity of the object it is referring to. Symbol is a sign whose relationship between the representative and the object is based on convention.

Peirce proposes the triangle meaning theory which consists of three main elements, namely the sign, object, and interpretant.



A sign is something that has a physical form that can be grasped by the human senses and is something that refers (represents) other things outside the sign itself. The sign according to Peirce consists of a Symbol (a sign that emerges from a deal), an Icon (a sign that emerges from a physical representative) and an Index (a sign that arises from a cause-effect relationship). Meanwhile, the reference to this sign is called an object. The object or sign reference is the social context that is the reference of the sign or something that the sign refers to.

Interpretant or sign user is the concept of thinking of a person using a sign and lowering it to a certain meaning or meaning that is in someone's mind about the object that a sign refers to. The most important thing in the semiosis process is how meaning comes from a sign when the sign is used by people when communicating.

Peirce appears with a triadic scheme, namely ground, object and interpretant. On the basis of this relationship, Peirce signified the classification of signs. The marks associated with the ground are divided into qualisign, sinsign, and legisign. Qualisign is a quality that is in the sign, for example words are harsh, loud, soft, melodious. Sinsign is the actual existence of objects or events that are in the sign, for example the word fuzzy or cloudy in the word order turbid river water which indicates that there is rain in the upper reaches of the river. Legisign is a norm that is contained by a sign, for example traffic signs that indicate what humans can and cannot do.

Peirce's theory becomes a grand theory in semiotics. The idea is a comprehensive, structural description of all marking systems. Peirce wanted to identify the base particle from the sign and recombine all the components in a single structure.

The essence of Peirce's thinking is that the universe consists of signs. This is a pansemiotic view of our universe. Semiotics for Peirce is an action (action), influence (influence), or cooperation of three subjects, namely a sign (sign), object (object), and interpretant (interpretant).

According to Peirce, as quoted by Eco, "something which stands to somebody for something in some respect or capacity" (a sign is everything that a person has to express something else in some way or capacity).

Peirce's definition does not demand the quality of the state that is deliberately established and artificially pursued. Moreover, Peirce's triade can also be used for those that are not produced by humans, but which are acceptable to humans; for example, meteorological symptoms and other types of index.

Based on the object, Peirce divides signs into icons, indexes, and symbols. Icons are signs that the relationship between the marker and the marker is simultaneously natural, the natural form or the object is similar. For example, shoot on a map. Index is a sign that shows a natural relationship between signs and signs that are causal or a cause and effect relationship, or signs that directly refer to reality. For example, smoke indicates that there is a fire. Symbol is a sign that shows the natural relationship between the sign and the sign. This relationship is based on a community agreement.

#### **2.4 Mental Disorder in Relation to the Concept of A Beautiful Mind in the Film**

When viewed from the behavior and symptoms of John Nash, he is included in the classification of a paranoid schizophrenia mental disorder. Schizophrenia is a mental disorder that occurs in the long term. This disorder causes sufferers to experience hallucinations (Auditory and visual hallucinations), delusions (false belief), thinking confusion, and behavior changes. As stated by Zahnia and Sumekar (2016) in their research on schizophrenia that the most common type of schizophrenia is paranoid schizophrenia, while the prevalence of schizophrenia in Indonesia is highest in D.I Yogyakarta and Aceh at 2.7%.

This symptom is a symptom of psychosis, which is a condition in which the sufferer has difficulty distinguishing reality from his own thoughts. The main symptom is the pursuit of greatness or the notion of greatness where the individual feels being chased by something. This happens because something that happens is considered sensitive and egocentric, as if other people will do bad to him. The paranoid type usually has irrational, irrefutable thoughts that are very dominant.

There are hallucinations that enveloped John Nash. John Nash had hallucinations when he met three people who were actually absent, namely Charles Herman (his roommate), William Parcher (a government agent) and Marcee (Charles Herman's nephew). In addition, there is also a secret laboratory, and also a code number attached to his hand. the belief that outside forces are trying to control his thoughts and actions. One example is when John Nash was ordered to kill his wife.

He also believes that certain people or groups are threatening or planning to endanger him. In the film, John feels that government agents and Russian spies are stalking him. This concept makes him paranoid, suspicious of everything and is in fear because he feels cared for, followed, and watched.

As for previous researcher Dahlia (2018) who examined about John Nash's Hallucination in A Beautiful Mind Film could see hallucination, what caused him to exclude dan how he controlled the hallucination. The researcher Dahlia (2018) makes conclude that John Nash's hallucinations is listening, seeing and feeling. John often sees, hears and feels things that are not real, but John Nash thinks that what he experienced was truly real, like John Nash get see Charles, Marcee and Parcher.

Dahlia (2018) also says the cause of John Nash's hallucination because of dreams, ideals and illnesses experienced, like John Nash was eager to launch his work but he could not do that yet. Controlling hallucination is one way to get John Nash back to normal like everyone else, like see the doctor, non-medical interventions and use distraction. Non-medical interventions by John Nash got support and helped him to be able to know the real and the unreal things of his wife.

This is line with other researchers Kurniawati (2008) who examined a schizophrenia analysis of John Nash in A Beautiful Mind film. In the research Kurniawati (2008) said that in the film John Nash as the main character tries to reach his goal by finding his own original idea. At same point he does not realize his goal. He overcomes schizophrenia and attains a true sense of accomplishment by winning a Nobel Prize.

In A Beautiful Mind film, I found the mental disorder experienced by John Nash based on the signs and symptoms of mental disorders such as tension, impaired cognition, perception disorder, sensation disturbance, personality disorder, lifestyle disorder, attention disorder, disturbance of will, feelings or emotional disorders (affect and mood), disorders of thought or Thought processes (thinking), psychomotor disorder, association disorder, and impaired consideration. Which of these sign and symptoms can be seen mental disorder in relation to the concept of a beautiful mind film.