#### **CHAPTER I**

### INTRODUCTION

### A. Background of Study

The Qur'an is a holy book in Islam that was not revealed from a cultural vacuum but is a form of dialectic and response to social, political, and religious conditions and situations. It is relevant to the characteristics of the Qur'an that can be understood and applied throughout the ages. As understood, *tafsir* reflects the product of human thought and civilization. Therefore, it constantly undergoes development and is influenced by the dynamics of human society. However, the Qur'an can be met dialogically in science, with precise interpretation prerequisites.

In this phase of civilization, various methods and genres of Qur'anic exegesis emerged. In addition to finding a style of interpretation oriented to several aspects, there is also a method of *tafsir 'ilmi*, which is oriented towards utilizing findings in the field of science to prove the truth of various scientific facts that the Qur'an has mentioned.<sup>3</sup> Amidst the complexity of the relationship between the Qur'an and modern science, Nidhal Guessoum, a prominent Muslim scientist and philosopher whose name comes up quite often in discussions about this relationship, has put forward an interesting approach. His main challenge is how Muslims interpret the Qur'an appropriately in the context of contemporary scientific knowledge that continues to evolve.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Manna' Al-Qathan, *Mabāḥith fī ʿUlūm al-Qurʾān* (Riyadh: Darul ilmi wal iman, N.Y.).p.7

<sup>&</sup>lt;sup>2</sup> Abdullah Seed Ali Akbar, *A Critique of the Concept of Hakimiyya: Nasr Hamid Abu Zayd's Approach* (Basel, Switzerland: Religious, 2022).p.5.

<sup>&</sup>lt;sup>3</sup> Ahmad Sulandari Rasyid, *Qur'anic Exegesis and Classical Tafsir* (Islamic Quarterly, 1980).p.74.

<sup>&</sup>lt;sup>4</sup> Nidhal Guessoum dan Stefano Bigliardi, *Islam and Science: Past, Present, and Future Debates*, 1 ed. (Cambridge University Press, 2023), p.2-3.

As one of the figures who made essential contributions in the context of scientific interpretation, Nidhal Guessoum has developed a unique method of interpreting science by combining various aspects of science, ethics, and philosophy. The concept of God became the main foundation in his approach to discussing the integration between science and Islam. This is because there is no more fundamental and central principle in Islam than the concept of God, and there is no more fundamental rule in the structure of Islam than the Qur'an.<sup>5</sup> Clearly, he said:

"I will show that all we need to construct an evenhanded 'quantum' (dual) model of harmony is full knowledge of science and its philosophy and methods not to succumb to its positivistic and materialistic doctrines and a middle-ground approach to Islam, staying away from the traditionalist approach and resisting the ultra-liberal siren calls. A careful reconstruction will thus be needed".<sup>5</sup>

In this regard, Nidhal Guessoum offers a layered interpretation approach to understanding the Qur'an verses, especially those that contain scientific aspects. This approach aims to provide a deeper understanding by analyzing the verses from various perspectives according to the reader's perspective. In interpreting *kauniyyah* verses, Guessoum rejects the concept of *i'jaz ilmi* as unattainable. He argued that the approach seeks to integrate Islamic scientific traditions with modern scientific understanding, such as quantum mechanics theory, the Big Bang, evolution, etc.<sup>7</sup>

Furthermore, Nidhal Guessoum's thought describes the relationship between Islam and science in contemporary times and

<sup>&</sup>lt;sup>5</sup> Nidhal Guessoum, Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science (London: I. B. Tauris, 2011).p.22.

<sup>&</sup>lt;sup>6</sup> Nidhal Guessoum, *Islam's Quantum Question...*, p.14.

<sup>&</sup>lt;sup>7</sup> Nidhal Guessoum, *Islam's Quantum Question...*, p.160.

presents the epistemological structure developed in that relationship. Therefore, Guessoum uses the concept of multi-level reading, which aims to provide a different foundation from previous thinkers in this dynamic and adapt to the conditions of the reader of the tafsir itself. Nidhal Guessoum's source of thought uses many ideas from Ibn Rushd that the teachings of religion, philosophy, and science are aligned, not contradictory. The teachings of Ibn Rushd's harmony occur in sources, goals, methods, and content. In addition, Nidhal Guessoum also adopts the hermeneutical theory of Muhammad Syahrour, who understands the Qur'an based on the principle that every word in the Qur'an has a proper and unique meaning. One of the main principles of syahrur is its mapping between the stipulation of the textual form of the Qur'an and the dynamism of its content.<sup>8</sup>

Before the advent of scientific interpretation, some verses of the Qur'an related to science were challenging to understand appropriately due to the lack of knowledge and understanding of science at that time. With the interpretation of science, these verses can be interpreted more accurately using current scientific advances. Thus, the treasure of Islamic science is not passive; it will continue to be dynamic, experience progress, and always carry out reconstruction as a responsibility to face the demands of life's reality.

As a Muslim scientist who studied science and religion, Nidhal Guessoum felt his academic anxiety after observing how science is

<sup>8</sup> Nidhal Guessoum, Islam's Quantum Question..., p. 64.

<sup>&</sup>lt;sup>9</sup> Mohammad Salama, *The Qur'an and Modern Arabic Literary Criticism* (London: Bloomsbury Publishing, 2018).p.4

<sup>&</sup>lt;sup>10</sup> Andi Rosa, Andi Rosa, Islam dan Sains dalam Kajian Epistemologi Tafsir Al-Qur'an: Al-Tafsir Al-'Ilmi Al-Kauni (Penerbit A-Empat, 2021).p.45.

<sup>&</sup>lt;sup>11</sup> Zulfis, Sains Dan Agama Dialog Estimilogi Nidhal Guessoum Dan Kel Wiber (Ciputat: Sakata Cendekia, 2019).p.337.

understood in the Islamic world, as well as amazing phenomena in science itself. For him, human science is constantly moving, changing, and evolving. However, on the contrary, it is often viewed and believed that religions in general, including Islam, are absolute, unchanging, and undeveloped. The basic principles related to the issue of divinity are then formulated within a rigid framework of scientific reference. However, religion as a whole, including Islam, can no longer maintain a static attitude and position. Suppose modern science does not want to contradict or displace their understanding. In that case, this can lead to the view that basic religious principles look strange, outdated, or no longer relevant or applicable.<sup>12</sup>

The Nidhal Guessoum method offers a new paradigm in integrating religion and modern science. However, this approach to scientific interpretation faces significant challenges, such as criticism of the tendency of scientific overreach in interpreting the Qur'an. On the other hand, the gap between interpretation and scientific approaches analyzes the Guessoum method, which is important to evaluate its strengths and weaknesses. The researcher's reason for choosing the theme of Nidhal Guessoum's Scientific Interpretation Method is due to several things:

First, the researcher is interested in studying and researching the methodological aspects more deeply, including sources of interpretation, advantages and disadvantages, and verification of interpretation. Second, this research intends to respond to challenges and paradigm shifts in the modern scientific world. By examining Nidhal Guessoum's Scientific Interpretation Method, this research seeks to answer the question of what new contributions this method can make to the current understanding of

<sup>&</sup>lt;sup>12</sup> Nidhal Guessoum, *Islam's Quantum Question...*, p.6.

science. *Third*, although Guessoum presents an interesting and in-depth approach to this methodology, it is still limited. Therefore, a more in-depth analysis of Nidhal Guessoum's Scientific Interpretation Method is needed to explain his emphasized steps and their implications in modern science. In addition, it is important to criticize some ideas inconsistent with the Qur'anic text.

#### B. Formulation of The Problem

Based on the background of the study that the researcher has put forward, it is necessary to limit the problem so this research is more focused and systematic in its discussion. Then, the formulation of the problem will be written, namely:

- 1. How is Nidhal Guessoum's Scientific Interpretation Method?
- 2. How are the steps or processes Nidhal Guessoum emphasizes in interpreting Qur'an according to his approach?
- 3. How is Nidhal Guessoum Interpreting Al-Āyah al-Kauniyyah?

# C. Research Purposes

The purpose of this study is to find out the methodology of Nidhal Guessoum's Scientific Interpretation of the Quran and the various problems he faced. On the other hand, to prove that every interpretation of the Qur'an, from the method of interpretation to the style of interpretation, is influenced by the scientific background, life experience of a *mufassir*, and the purpose of the *mufassir* in interpreting the Qur'an.

It will be important to explain the objectives of this research process to emphasize and limit this research. The objectives of this research are:

- 1. To Reveal Nidhal Guessoum's Scientific Interpretation Method.
- 2. To Reveal the steps or processes emphasized by Nidhal Guessoum in interpreting Qur'an according to his approach.

3. To Reveal and criticize Nidhal Guessoum's Interpreting *Al-Āyah al-Kauniyyah*.

### D. Significance of Research

The significance or benefits of this research are:

- a) Theoretical
  - Expected to provide a scientific understanding of Nidhal Guessoum's method of interpreting scientific literature for universities and all people interested in science.
  - This study analyzes the Guessoum method to evaluate the scientific interpretation approach so that researchers can develop a more relevant framework later.
  - This study opens an academic discussion room for comparing and evaluating the Guessoum method with other interpretation approaches.

#### b) Practical

- Expected to be utilized by various parties as one of the references and materials for consideration of the existing concept of scientific interpretation.
- The following researchers can also use this research as a starting material to explore the existence of the character's thoughts on modern science.
- 3. To increase the faith and awareness of Muslim people to the authenticity and truth of the Qur'an, as well as fortify themself from the influence discourse of Western science.

#### E. Literature Review

In this study, the researcher conducts a literature review to see findings from previous studies related to the same topic. Some research has provided a comprehensive view of Nidhal Guessoum's thoughts.

- 1. Thesis was written by Anik Damayanti, Department of Islamic Education, Faculty of Teacher Training and Education, University of Muhammadiyah Surakarta 2019, with the title "Pemikiran Nidhal Guessoum Dalam Integrasi Islam dan Sains Modern: Implementasi Pada Pembangunan Modul ajar IPA "Ekosistem" untuk Kelas VII Tingkat Sekolah Menengah Pertama (SMP)." In her thesis, she explains Nidhal Guessoum's views on the unification of Islam and Modern Science and the development of science learning modules that integrate Islam and Modern Science, using Guessoum's recommendations. Specifically, Guessoum provides input to revise the education curriculum by including and strengthening the teaching of the history and philosophy of science, starting from the secondary school level, and improving the teaching methods in universities.<sup>13</sup>
- 2. The Thesis was written by Selvia Santi, Magister Program in Interdisciplinary Islamic Studies, State Islamic University of Sunan Kalijaga in 2019 with the title "Sains Modern Dan Dunia Arab: Tantangan Pendekatan Islam Terhadap Sains Alam Oleh Seyyed Hossein Nasr, Zaghloul Al-Najjar Dan Nidhal Guessoum. "Her thesis explains the Islamic approach to science and the strategy of integration and harmonization in the theme of cosmology. The attitude towards

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<sup>&</sup>lt;sup>13</sup> Anik Damayanti, DR Sudarno Shobron, dan Ari Anshori, "Pemikiran Nidhal Guessoum Dalam Integrasi Islam Dan Sains Modern: Implementasi Pada Pengembangan Modul Ajar IPA Untuk Kelas VII Tingkat Sekolah Menengah Pertama (SMP)" (PhD Thesis, Universitas Muhammadyah Surakarta, 2017).

Darwin's theory of evolution, as shown by the three figures, has influenced modern Muslims' views on science and also influenced the general direction of thought, either towards conservatism or moderation.<sup>14</sup>

- 3. The journal by Salman Hameed has the title "Walking the Tightrope of the Science and Religion Boundary" 2012 in Journal: Zygon. This research examines the Quantum question written by Nidhal Guessoum in his book, which offers a sophisticated approach to reconciling the results of modern science with Islamic tradition. It provides a valuable critique of the existing literature on Islam and Science and supports promoting good science and science education in the Muslim world. 15
- 4. Ilyas Daud writes the journal with the title "Islam dan Sains Modern: Telaah Pemikiran Nidhal Guessoum Dalam Karyanya Islam's Quantum Question, Reconciling Muslim Tradition and Modern Science" in Al-Mutaaliyah Journal: Journal of Pendidikan Guru Madrasah Ibtidaiyah. This journal discusses Guessoum, who expresses his opinion on "Islamic/theistic cosmology." Cosmology discussion is placed in the frame of *tawhid*. According to him, scientific problems such as cosmology cannot be answered by science but need collaboration between scientists and philosophers or science and religion. Additionally, Guessoum showed his identity as a Muslim who studied science but still believed in the existence of God. He also emphasizes that this Islamic cosmology

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<sup>&</sup>lt;sup>14</sup> Selvia Santi, "Sains Modern dan Dunia Arab: Tantangan Pendekatan Islam Terhadap Sains Alam Oleh Seyyed Hossein Nasr, Zaghloul Al-Najjar dan Nidhal Guessoum" (PhD Thesis, Universitas Islam Negeri Sunan Kalijaga Yogyakarta, 2019).

<sup>&</sup>lt;sup>15</sup> Salman Hameed, "Walking the Tightrope of the Science and Religion Boundry," *Zygon*®, Vol. 47, no. 2 (June 2012).

should not be in *tafsir ilmi* or scientific interpretation as glorified by some *mufassir*.<sup>16</sup>

After reviewing previous research, which has been described previously, no research similar to that conducted by this researcher has been found. However, there are similarities between the research to be carried out with existing research, namely the use of the thematic (Maudhu'i) method. Besides, there are differences in the problems studied, where the object of study differs from the research the researcher is doing. This research mainly focuses on analyzing the scientific interpretation method proposed by Nidhal Guessoum. To conduct the analysis, the researcher will use the theory of Zaghlul Al-Najjar as a basis for understanding and analyzing Nidhal Guessoum's thoughts and the scientific interpretation method that he carries.

#### F. Theoretical Framework

As an important basis for proper research, researchers need a theoretical framework that provides a strong foundation. One crucial aspect of the research process is a deep understanding of the dominant meanings and terms in the field of study, both linguistically and conceptually.<sup>17</sup>

This study focuses on analyzing Nidhal Guessoum's scientific interpretation method. The researcher will use the theory of Zaghlul Al-Najjar to perform a binocular analysis of Nidhal Guessoum's thoughts and scientific interpretation method. Zaghlul Al-Najjar believes that the Qur'an has *I'jaz ilmi* in it, and to know it is necessary with scientific tools so that

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<sup>&</sup>lt;sup>16</sup> Daud, "Islam dan Sains Modern (Telaah Pemikiran Nidhal Guessoum Dalam Karyanya Islam's Quantum Question, Reconciling Muslim Tradition and Modern Science)." Jurnal Al-Mutaaliyah: Jurnal Pendidikan Guru Madrasah Ibtidaiyah, (2019).

<sup>&</sup>lt;sup>17</sup> Rahmadi, *Pengantar Metodologi Penelitian*, 1 ed. (Banjarmasin: Antasari Press, 2011), p.37.

many people understand well what the Qur'an wants. So, on that basis, he wrote tafsir with the Scientific Method (*Manhaj 'Ilmi*) to help many people know the scientific nature of the Qur'an.<sup>18</sup>

In his tafsir, Zaghlul Al-Najjar selects the surahs in the Qur'an and arranges them in the order of the *Mushaf*, starting from Surah Al-Baqarah (Juz 1) to Surah An-Nas (Juz 30). From these surahs, Al-Najjar selects one or more verses that show scientific indications and makes them the headline of each chapter title. Each verse can discuss various themes, which are then divided into different subsections depending on the content of the verse.<sup>19</sup>

The approach used by Al-Najjar is an objective perspective based on empirical principles related to scientific interests alone. This approach emphasizes the relationship between the verses of *kauniyah* and modern science, which is currently developing. It discusses the extent to which these scientific paradigms provide support in understanding the verses of the Qur'an as well as the exploration of various types of science, new theories, and discoveries after the revelation of the Qur'an, such as in the fields of natural law, astronomy, chemistry, physics, zoology, botany and other fields of science.<sup>20</sup>

After cataloging all the *kauniyah* verses that he found in the Qur'an, he tried to give an overview of the surah that he would discuss by mentioning the scientific phenomena in it, after which Zaghlul Al-Najjar began to place the verses he chose to interpret. For every chosen verse, of course, he will immediately put forward the scientific argument so that the reader can immediately know the essence of the discussion of each verse.

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<sup>&</sup>lt;sup>18</sup> Zaglul Raghib Al-Najjar, *Tafsīr al-Āyāt al-Kawniyyah fī al-Qurʾān al-Karīm*, Vol. 1 (Bairut: Maktabah al-Tsarwah al-Dauliyyah, 2001).p.33.

<sup>&</sup>lt;sup>19</sup>Zaglul Raghib Al-Najjar, *Tafsīr al-Āyāt al-Kawniyyah fī al-Qurʾān al-Karīm...*, p.62-71.

<sup>&</sup>lt;sup>20</sup>Zaglul Raghib Al-Najjar, *Tafsīr al-Āyāt al-Kawniyyah fī al-Qur 'ān al-Karīm...*, p..36.

At the end of each discussion, Zaghlul presents pictures of scientific explanations related to the verses.<sup>21</sup>

In the book of interpretation, we find that in each chapter, Al-Najjar begins by placing a preamble and mentioning the *I'jaz* of the Qur'an, followed by the development of scientific interpretation. He also expresses his opinion on how to answer those who reject scientific interpretation while summarizing scientific interpretation and the Qur'an at the end of his introduction. Then, after that, he mentions the verse that he will interpret by first mentioning the description of the surah where the verse is taken, and finally, Al-Najjar explores the scientific concept in the verse.<sup>22</sup>

Besides, in scientific interpretation study, *masadir at-tafsir*, or sources of interpretation, become the main footing for *mufassir* in compiling their interpretations. There are two types of sources of interpretation: *tafsir bi al-ma'thur*, which refers to the Qur'an, Hadith, and the opinions of the companions and *tabi'in*, and *tafsir bi al-ra'yi*, which involves *ijtihad* and the thoughts of the *mufassir* by considering Arabic language, methods, and legal arguments.<sup>23</sup>

Research methods in tafsir include various approaches, including the tafsir *tahlili* method, tafsir *ijmali*, tafsir *maudhu'i*, and tafsir *muqorin*. This research will use the *maudhu'i* interpretation method, which examines the verses of the Qur'an with a particular theme, tracing the causes of its decline and considering the concept of *nasikh mansukh* and other related aspects.<sup>24</sup>

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<sup>&</sup>lt;sup>21</sup> Zaglul Raghib Al-Najjar, Tafsīr al-Āyāt al-Kawniyyah fī al-Qur'ān al-Karīm..., p.63-64.

<sup>&</sup>lt;sup>22</sup> Zaglul Raghib Al-Najjar, *Tafsīr al-Āyāt al-Kawniyyah fī al-Qur ʾān al-Karīm*, Vol. 2 (Bairut: Maktabah al-Syuruq al-Dawliyyah, 2007).p.21-51.

<sup>&</sup>lt;sup>23</sup> Afrizal Nur, *Muatan Apikatif Tafsir Bi Al-Ma'tsur & Bi Al-Ra'yi* (Yogyakarta: Kalimedia, 2020).p.27-43.

<sup>&</sup>lt;sup>24</sup> Ahmad Izzan, Metodologi Imu Tafsir (Bandung: Tafakur, 2022).p.98.

Each interpretation also has a specific style or tendency, which reflects the *mufassir's* background and knowledge. Although an interpretation may dominate one style, it does not rule out the possibility of other style elements. There are several styles in the science of interpretation, such as *fighi*, *falsafi*, *ilmi*, *lughowi*, *adab al-ijtima'i*, and *sufi*.<sup>25</sup>

#### G. Research Methods

This research is qualitative, and more specifically, it will use library research, which is an activity of searching, analyzing, and synthesizing information from literature sources to support research. Moreover, this research was conducted using library data (literature) in the form of books, notes, and previous research reports. This means that all data in this study comes from written sources. Data search steps are carried out by reviewing books on the research theme, focusing on Nidhal Guessoum's works and other works closely related to the theme being studied.

The data used is divided into two categories: primary and secondary data. Primary data includes books that discuss the topic of study, while secondary data are taken from research journals relevant to the focus of the study. Data analysis uses text analysis about Nidhal Guessoum's scientific interpretation method.

#### 1) Data Sources

Since the research method that the researcher will carry out is Library Research or through library research, the following data will be used by the researcher in this research:

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 $^{25}$  Husein Adz-Zahabi, al-Tafsīr wa-al-Mufassirūn (Kuwait: Dar Al-Nawadir, 2010).p.114.

First, primary sources are the main references that the researcher will use in this study. Some of the sources that will be used in this research are:

# a. Primary Data

- Islam's Quantum Question-reconciling Muslim Tradition and Modern Science by Nidhal Guessoum.
- Kalam's Necessary Engagement with Modern Science by Nidhal Guessoum.
- 3. Islam and Science by Nidhal Guessoum

Second, secondary data sources, as a complement to primary data needs, include:

### b. Secondary Data

- Tafsīr al-Āyāt al-Kawniyyah fī al-Qur'ān al-Karīm by Zaghlul Raghib Al-Najjar.
- 2. Tafsīr min Āyāt al-I'jāz al-'Ilmī fī al-Qur'ān al-Karīm by Zaghlul Raghib Al-Najjar.
- 3. Tafsīr al-1'jāz al-'Ilmī fī al-Sunnah al-Nabawiyyah by Zaghlul Raghib Al-Najjar.
- Islamic literature books and journals, theories, and opinions related to the thoughts of Nidhal Guessoum.

# 2) Data Analysis Methods

This research is library research because the sources used to complete the data are literature, such as data from various written sources or reading materials such as books (textbooks, dictionaries, encyclopedias, and others), journals, magazines, and research reports (theses and dissertations).<sup>26</sup> This study uses the Descriptive Analysis method.

A researcher uses this analysis method to analyze the data collected according to the theme so that it can solve a problem in the study.<sup>27</sup> In addition, the descriptive approach is a research method that collects and analyzes data to explain social and natural events specifically. This approach focuses on data collection and lengthy and in-depth analysis to explain the data collected. In descriptive methods, researchers analyze data to understand and explain the phenomenon under study.<sup>28</sup>

Descriptive analysis involves a deep understanding of current phenomena. It involves collecting and organizing data and explaining the data descriptively. This approach can provide a reflective picture or compare specific cases or phenomena to highlight similarities and differences.<sup>29</sup> The researcher chose this approach to analyze Nidhal Guessoum's strategies for understanding Qur'anic verses. In addition, the approach to his biography uses a descriptive approach, which involves explaining the figure's biography and his research on the level of education and organizations he followed during his life. This is reflected in exploring Nidhal Guessoum's background and the reasons behind his works.

<sup>&</sup>lt;sup>26</sup> Rahmadi, *Pengantar Metodologi Penelitian*, 1 ed. (Banjarmasin: Antasari Press, 2011).p.72.

<sup>&</sup>lt;sup>27</sup> Abdul Fatah Nasution, *Metode Penelitian Kualitatif*, 1 ed. (Bandung: Harva Creative, 2023).p.131.

<sup>&</sup>lt;sup>28</sup> Sandu Siyoto, *Dasar Metodologi Penelitian*, 1 ed. (Yogyakarta: Literasi Media Publishing, 2015).p.121.

<sup>&</sup>lt;sup>29</sup> Samsu, Metode Penelitian Teori dan Aplikasi Penelitian Kualitatif, Kuantitatif, Mixed Methods, serta Research Development, 1 ed. (Jambi: Pusat Studi Agama dan Kemasyarakatan (PUSAKA), 2017).p.111

# H. Systematics of Study

The systematic discussion or research framework used in this study generally consists of four chapters.

The first chapter contains an introduction to the background of the study, formulation of the problem, research purposes, significance of research, literature review, theoretical framework, and research methods, including data collection methods, data analysis methods, and data sources.

The second chapter contains the biography of the figure Nidhal Guessoum, which includes three sub-chapters. The first sub-chapter is about the biography of Nidhal Guessoum. The second sub-chapter contains the intellectual history of Nidhal Guessoum, including Nidhal Guessoum's education history and works. The third sub-chapter includes Nidhal Guessoum's ideas about Modern Science in the Our'an.

The third chapter contains an Analysis of Nidhal Guessoum's scientific interpretation Method, which includes three sub-chapters. The first sub-chapter includes the background of writing Nidhal Guessoum's scientific interpretation. The second sub-chapter discusses the Analysis of Nidhal Guessoum's Scientific Interpretation Method. The third sub-chapter discusses the steps taken by Nidhal Guessoum in interpreting science according to his approach.

The fourth chapter, in this chapter, which is closing, contains a brief description of the conclusions of the research and the closing of the report, which contains suggestions and recommendations. It ends with a bibliography that includes all the references used in the study.