

The Significance and Requirement of Accuracy in Selecting Titles in the Sciences, Scientific Branches, and Trends

Abstract

Over time and as a result of humans' development and gathering of mental information, scientists have retrieved and categorized information collections into distinct groups based on their differences and similarities; each group is called after a scientific specialty.

Furthermore, with the human need to develop information and deepen thoughts, the sciences were divided into sections and then into different trends.

Due to the recent importance and growth of the sciences, philologists have also had to split and categorize them. In this sense, the question of dividing the sciences into distinct departments and trends has attained a prominent position and had substantial civilization-building cultural and social impacts. "If a culture can bring its technique of dividing the sciences into another culture, it has conquered that entire civilization," says one of the leading theorists on this subject.

The title's relevance to the issues above is first discussed and evaluated in this article's topic description section, which also traces the history of science from its inception through the creation of branches and trends. Then, in the discussion section, a general impression of the set of themes is offered by assembling the findings, and lastly, in the conclusion section, the results of the discussed topics are summarized.

This article emphasizes their significance because the names of sciences or their branches and trends are the first and most essential communication channels between science producers and consumers.

Keywords: *Science, Classification of science, Branches, and tendencies of science, Titles of sciences*

Seyed Kamal Seyed Haghghat

Kamal_najmeh@yahoo.com

Graduated from :

1-Bachelor of Civil Engineering (Islamic Azad University, Iran)

2-Master of Supply Chain and International Procurement Management (Griffith College Dublin University, Republic of Ireland)

3-Master of Marketing and Sales Management (Rome business school University, Italy)

4-Master of Project Management (Rome business school University, Italy)

Student at :

1-Master of Psychology (Dublin Business School University, Republic of Ireland)

Introduction

This article examines humans' intellectual and mental concerns to analyze the significance of selecting the right titles for various scientific trends. First, the concept of science and its precise definition is discussed. Then, while looking at the history of science, the importance and method of organizing and classifying sciences and their branches and tendencies are examined.

The significance of assigning titles to various scientific trends has been explored in the next stage, and this decision has been reinforced by examining the significance of selecting the right titles.

As a result, the article started with the scientific concept and its significance. It concluded that science is a systematic process for the purposeful development and organization of valuable information in the world and that it takes the form of testable interpretations and reliable predictions.

Drucker (1999) concurs that science is information that transforms people or things. In other words, science is a structured combination of information within a meaningful context, internalized via the analysis and application of rules, processes, and operations. In other words, it is purposely stored in the mind of the individual or the system of the organization. In other words, science, in its peculiar connotation, is knowledge of a concept, phenomenon, or object inside a specialized and ordered cognitive framework that promotes decision-making.

It has led to the definition of science as knowledge, consciousness, or understanding acquired over time by study,

investigation, observation, and experience (Davarpanah, 2005: 20).

Consequently, science entails learning the world's facts regarding the underlying essence of items and the laws that govern them.

In the next stage, because human intellectual and mental structure requires order and human knowledge should always have order and clear communication, philosophers and scientists express their views on the sciences division at the beginning, middle, and conclusion of their study period.

Regarding this issue, the classification of sciences has always been of interest to philosophers and scientists, and since the beginning of recorded history, scientists, philosophers, and religious thinkers have had differing views regarding the classification of sciences.

The history of classification is intertwined with the history of science because classification is necessary for the classification of science and the acquisition of knowledge (Tredinnick, 2016: 56).

Classification is dividing the world into groups of entities whose members are similar.

One finds order in a complex environment by recognizing similarities between items and gathering related ones into categories.

Prior to the dominance of contemporary science and its confirmation in the world's educational and scientific centers, the classification of sciences was seen as more essential for scientists.

Accurate classification is essential to improve scientific competence and offer a foundation for more practical applications of the sciences.

In the opinion of eminent western and eastern scientists, the classification of the sciences is one of the most important and complicated topics to emerge from a survey of the history of science. In this sense, they have given a variety of hypotheses based on different approaches to science and its application (Gholami, 2016: 63).

Even though different viewpoints have been expressed on the division of the sciences and Greek scientists, Islamic scientists, and later European philosophers have provided comments and proposals for the division and classification of the sciences; the topic is still up for discussion.

Examining the importance of classification and creation of branches and trends of science, and the historical review of different sciences and the classification of sciences for various reasons, this awareness is created of how science should be divided into separate branches and trends. How close the branches and tendencies are to each other makes us aware of the progress of human knowledge. At the same time, this division can help correctly understand and teach these sciences.

The title is one of a scientific subject's most crucial and valuable components, even if it is only a few words long. It was discovered when the material was continued, and the significance of scientific titles was investigated.

The title of a science or its branches or developments is one of the most crucial aspects of that science.

In this study, while explaining science and its trends and their significance, the significance of scientific titles has been analyzed, and it has been emphasized that the scientific community should pay more attention to the correct selection of science titles and branches, as well as its different trends.

Findings

1- Definition of science and its importance:

The classical age of science is characterized as a sort of knowledge with tight ties to philosophy. In early modern English, the phrases science and philosophy were utilized interchangeably. In the 17th century, Natural Philosophy (called Natural Science today) increasingly became distinct from philosophy. Nonetheless, science has many applications for describing specific subject-matter knowledge.

Until the Age of Enlightenment in Europe, the word science meant any systematic knowledge. Science had a broad meaning and was often equivalent to "philosophy." During this time, distinctions between Natural Science and Moral Science were examined. Moral Science was what we now call philosophy.

Physical and natural sciences express science and are associated with teachings that allude to the facts and rules of

the material world in the present period. This definition represents the whole meaning of science in everyday use.

In general, science is "the role and presence of the forms of objects in the mind and intellect." Ancient thinkers embraced this concept, which is influenced by Aristotelian logic.

This concept holds that the world is made up of sensuous, material creatures and that when we comprehend the presence of an object, knowledge is produced inside of us by the nature of that object, and we then ask, What is this? Where did it originate? How did it get here? When we inquire about a thing's nature, we seek to comprehend its essence. However, when we inquire, "From where did this object originate?" We think that another object existed before this one, from which this one originated. When we inquire, "How did it come?" The laws that formed this phenomenon will be highlighted. We get information about that object when we find the right and accurate answer to these questions and other questions that come after them. Therefore, it causes us to know about that object, where it will go, and in what form it will go, and this knowledge ultimately shapes our knowledge of that object or topic (al-Tahanawi, 2008: 66).

Therefore, science entails being familiar with the world's facts regarding the nature of things and the rules that govern them (Fadaei Araghi, 2010: 314).

In a narrower sense, science refers to all things grouped along a single axis (Abbas Nejad, 2013: 37).

It should be remembered that science is complex and that the ability to present a clear description of it is controversial.

The word science has a Latin origin and refers to a methodical approach to the human perspective of nature, attained via specific methodologies, to establish solid relationships between phenomena.

Science means the systematic study of new knowledge about nature.

Some scientists assert that accurate knowledge and descriptions of the world are attainable through the scientific method, which entails the scientific observation and examination of hypotheses based on experience. Nevertheless, they do not claim that they can prove everything in the absolute sense, but based on common observations and experiences, everything can be stated with an acceptable degree of certainty with science.

In the difference between knowledge and ignorance, it was formerly believed that the world was flat and situated in the middle of the universe, perched on a cow's horn, or that a raindrop created a pearl when it entered an oyster's mouth. In the past, people believed that stones transformed into gold due to experiencing adversities; some individuals retained these beliefs as science, created books about them, and added additional irrelevant details. However, when the truth was revealed, their whole body of knowledge took on the hue of

ignorance, and it became evident that they were in severe darkness.

Many scientific categories risk becoming ignorant if they are incompatible with modern science in today's era.

Consequently, the accumulation of useless stuff in the brain is not science.

The modern world, however, is not one in which one can state that they do not believe in "science."

Various criteria have been offered to determine if a particular speech is scientific or non-scientific. The following are some of the most important criteria:

1. The first condition for phenomena to be considered scientific is its verifiability. Those who discuss "science" and "scientific method" do not assert that anything that is not scientific must therefore be incorrect; instead, they highlight that not all facts are "scientific."

2. A phenomenon's repeatability is the second scientific criterion. If an experiment is performed once and its findings are reported, it must be "reproducible" regardless of the times it is repeated in a controlled setting and under close supervision.

From ancient to classical and contemporary times, the significance of science, the scientific nature of an event, and its distinction from ignorance appear inevitable.

2- Classification of science and its necessity:

In Ancient Greece, science was known as philosophy, which referred to all human knowledge (theoretical and scientific).

Greek scientists contemplated the separation of the sciences, and Aristotelian philosophy was the pioneer in this regard.

The collection, counting, and classification of sciences is the problem that follows the development and branching of the sciences.

Classification has been compelled by the desire to comprehend and recognize things and facts (Moghadam, 1994: 225). The difficulties of such a task have, however, long been acknowledged.

Classification and division are inter-scientific relationships that simultaneously show the true unity of science.

In general, the degrees and classification of sciences may be traced back to the major philosophical arguments of science, wherein the essence of science and its many principles are also explored.

This division is based on characteristics such as the significance and method of subjects and concerns, aims and objectives, application and outcomes, and the technique of studying and processing sciences.

Some Eastern and Western philosophers and academics have made attempts on this subject. The classification of the sciences has been a long-standing and enduring preoccupation of philosophers and intellectuals. They have offered many

categories of plans with distinct criteria and strategies (Ahmadi Mirghaed, Jabari 2020: 64).

As science progressed, the division and classification of human knowledge to facilitate its development became crucial. Every person who can think must have a clear mental structure; if a person can think, he must have discipline. Because discipline demonstrates the unity that the human mind seeks.

Since one should not look for thinking in a disordered mind and think, the classification of sciences has been done seriously.

Therefore, the accurate classification of human knowledge enables unity and provides scientists with the information required to divide the sciences (Yaqub Nejad, 2012: 137).

Each of these techniques, according to Yurland, attempts to provide a different answer to the question, "What is knowledge organization?"

The organization of knowledge as a field of research has a special relationship with the nature and quality of its processes. Based on the theory of knowledge, Yurland has developed a comprehensive concept of knowledge organization.

Philosophers and scientists began to classify to organize their minds and thoughts, and lexicographers compiling knowledge for its use also felt the need for science because it is necessary to prioritize things like knowledge and human learning.

It is still relevant after centuries to compile the encyclopedia of the division of sciences.

The classification is obtained from the scientific and philosophical perspective of its creators, and this issue helps to understand, believe and think about it, or the interest and professional influence it has had on special issues.

On this basis, the classification of sciences has always been and continues to be significant since it is the herald of the unity that the human mind seeks.

3- Choosing the title and its characteristics:

Choosing a title is certainly one of the most difficult aspects of a scientific topic.

The title may be compared to a hint that immediately takes readers to the objective, major theme, and, to some extent, the issue's significance. Therefore, the title should be truthful, specific, appealing, and able to attract the reader's attention to its content.

The title should be:

- Simple, comprehensible, transparent, and manageable.
- Due to the title's significance, it should be as succinct as feasible and thoroughly handled.
- As specific as possible.
- Avoid using abbreviations and sophisticated phrases.
- No unnecessary, duplicated, or unclear terms.
- No use of words and phrases that are biased, prejudiced, or emotionally charged.

- To explain the subject's topic as fully and appropriately as feasible.

- Use a few conjunctions and punctuation marks.

The preceding content demonstrates the significance of choosing an appropriate title and its characteristics. The title will be able to draw attention and drive readers to the discussed content if it is chosen with the characteristics above in mind.

Discussion Review

According to our findings in the section on the concept of science, its branches, its trends, and its significance, we recognize the significance of assigning titles to scientific topics and their enormous impact on attracting readers' attention and directing them directly to the topic under discussion.

The correct and incorrect choices of titles for scientific courses have enormously influenced how students perceive those subjects throughout history.

Britannica 1998, in the division of knowledge, in the tenth part of Propædia, entitled "Knowledge becomes self-aware" in the article by Dr. Adler j. Mortimer notes that about the division of knowledge, we must ask ourselves three crucial questions:

According to Adler, the first extremely significant point that has always been debated is: should the classification of sciences be hierarchical according to Aristotle? In the following stage, it is said that this issue has been rejected today, and a circle of knowledge with no beginning and no end is described.

In response to the first question, choosing a title can also be non-hierarchical, and there is no need to follow the sequence of branching and branches of science; rather, it is possible to escape the hierarchical system by constructing a ring connection of sciences in the selection of titles to promote maximum comprehension.

It is noteworthy that, contrary to his beliefs about the division of Britannica's contents, the issue is evaluated hierarchically.

He then expresses his views as follows:

The second question that has received an answer is the interaction between sciences and how they work together to find the truth.

Adler feels there is a widespread dispute over the unity of scientific truth and ultimately concludes that everything has the truth. However, different facts should not be incorporated; they must be separate to avoid collision and conflict.

Consequently, according to the preceding argument, comprehending the same meaning of the existing facts should not contribute to the harmony of the names since this proximity of meanings would cause a contradictory interpretation. One of the most noticeable occurrences in this section is the separation of titles with titles such as positive and negative, which produces the idea of meaning conflict. This conflict was not only not intended by the title's creator but also did not exist.

However, owing to a wrong choice of title, the two are shown as being in conflict in the title.

According to the article's author, the issue of whether human sciences should be positioned alongside other sciences has lately been addressed as the third question. Human sciences should be placed on one side (literature, history, art, religion, and philosophy), and natural sciences should be placed on the other. Adler wonders if these two can be separated because their respective examination differences differ. Exist several worlds? It concludes that scientific science is a unified forum for discussion and exchanging ideas. Therefore, selecting a title based on the belief that science pertains to the human or natural sciences should not undermine the spirit of science.

The author draws the attention of title pickers to the fact that the division of sciences into two halves, human and natural, should not have a substantive impact on the selection of the title of a scientific branch or trend. An integrated perspective on science will lead to the selection of universal titles that accurately and attractively reflect the text's hidden ideas and reasoning.

Based on the offered explanations, it was determined that significant problems are raised about the categorization of sciences and the selection of titles. Therefore, the question arises whether the hierarchy in the selection of titles and classification of sciences has been rejected. Has the unification of science been abandoned in pursuit of the truth? Are human sciences and natural sciences incompatible? Is the categorization scheme of titles largely based on Aristotle's ideas exhaustive and flawless? Can a new approach for picking the title and categorization not be developed? Such inquiries highlight the need to select the title from the specialists' perspective carefully.

Conclusion

Certainly, all classifications are impacted by scientific and philosophical knowledge, which clarifies belief, understanding, and cognition, or it is influenced in some way by his perspective on the topic and his interest in the subject's particular concerns.

Considering the preceding content and the relevance and requirement of titles for various sciences, branches, and trends, it is vital to carefully select the opinions and viewpoints of researchers and scientists on that subject. Therefore, despite being exhaustive, it reflects the subject's broad substance to perform its vital duty of guiding readers to their destination and advancing human knowledge.

It is hoped that this essay effectively draws the attention of more thinkers to the extremely significant issue of title in scientific talks and emphasized the issue's sig

Funding :

This article is written by personal expense.

Acknowledgement:

It should be mentioned that I am very grateful to the eminent and thoughtful teacher Mr. Mostafa Malekian, who has always guided the writer with his valuable articles as a guide.

Conflict of interest:

There is no conflict of interest.

References

1-Ahmadreza Ahmadimirghaed, Leila Jabbari, 2020, Necessity, application and effectiveness of classification in the development of science, Journal of the Popularization of Science, [Volume:12 Issue: 20, 2021](#)

2-Fadaei Araghi, Gholamreza (2010). New Scheme For Classification Of Knowledge. Tehran: National Library of Iran

3-Soroush, Abdolkarim, What is Science, what is Philosophy?

4-Fattahi, Rahmatollah. (2005). New Approach to The Functions of Libraries In The Age of New Technology, Tehran: Iranian Library & Information Science Association, National Library of Iran,2005: Volume 1:58.

5 Tredinnick, Luke (2016) [Digital information contexts: theoretical approaches to understanding digital information](#), Translated by Ali Farsinejad- Tehran: Chapar

6- Abbasnejad, Mohsen (2014), Science and Phenomenology; A research on the relationship between science and values, metaphysics, society and culture, Mashhad: Quranic Research Foundation, first edition.

6- Yagoubnejad, Mohammadhadi (2012), Classification of Sciences and Future Challenges, "Journal of Philosophy and Theology Research, "Volume 16, Number 4, 2012