

## Islamic Civilizations from the Lense of Advanced Scientific Legacies: Insights from Kitab Tabaqat al-Umam

Mohd Zamrus Mohd Ali<sup>1</sup>, Musa Mohamad<sup>2</sup>, Ahmad Fuad Mohamad Amin<sup>3</sup>, Ahmad Bazli Ahmad Hilmi<sup>4</sup> and Zulkarnin Zakaria<sup>5</sup>

### Abstract

*The manuscript Kitab Tabaqat al-Umam serves as a crucial reference due to Sa'īd al-Andalusi's writings on the conceptualization of science from both historical and philosophical perspectives, thereby providing a profound understanding of the term al-'ulum. The scientific advancements chronicled in this manuscript significantly contributed to the progress of civilizations in India, Persia, Chaldea, Greece, Rome, Egypt, Arabia, Andalusia, and Israel from the medieval period to the 10th century. This study investigates the early historical development of the nations documented in Kitab Tabaqat al-Umam, with the aim of identifying the initial stages of scientific knowledge development that played vital roles within these societies. Additionally, this research aims to propose strategies for the mastery of scientific knowledge through an in-depth epistemological analysis, focusing on the significance, functions, and contributions of science within these civilizations. The findings indicate that intellectuals in many advanced civilizations regarded science as a form of knowledge essential for nation-building and societal advancement. The study corroborates the view that Andalusia experienced a rapid development of science, establishing itself as a center of scientific knowledge for nearly 800 years in the European region. This is evidenced by the high literacy rates among its population, in stark contrast to the underdeveloped and largely illiterate populations in other parts of Europe during the same period.*

*Keywords: History of Civilization, Tabaqat al-Umam, Sa'īd al-Andalusi, History of Science.*

### INTRODUCTION

The *Kitab Tabaqat al-Umam* is a seminal manuscript in the historiography of civilizations, particularly focusing on the scientific achievements from Sa'īd al-Andalusi's perspective. This work documents the significant advancements made by civilizations such as India, Persia, Chaldea, Greece, Rome, Egypt, Arabia, Andalusia, and Israel from the medieval period to the 10th century (al-Andalusi, 1912). The success of these civilizations can be attributed to their high intellectual integration and rigorous academic disciplines (Khan, 1995). Moreover, their profound understanding of the functions of science, encompassing both physical and spiritual aspects, played a crucial role in their success. The belief in an afterlife instilled a consciousness to uphold positive values throughout their lives (al-Andalusi, 1912). The *Kitab Tabaqat al-Umam* thus serves as a foundational text for understanding the success of advanced civilizations, rooted not only in empirical scientific activities but also in detailed epistemological analysis of the philosophy of science, conceptual understanding, and the empowerment of science in the development of a civilization (Salem & Kumar, 1991).

### Significance of *Kitab Tabaqat al-Umam*

The *Kitab Tabaqat al-Umam* offers a unique historiographical perspective on civilizations and their scientific activities. M. S. Khan (1995), in the *Indian Journal of History of Science*, notes that *Tabaqat al-Umam* was extensively studied by many of Sa'īd al-Andalusi's students, including Ibnu Barral. Subsequent scholars, such as Abu 'Abdullah ibnu Marzuq al-Yasubi, also engaged deeply with this manuscript, which was later taught by al-Yasubi to Abu Tahir al-Silafi in Alexandria, Egypt. The manuscript covers a wide range of knowledge domains, including philosophy, religion, political science, geometry, mathematics, literature, pure sciences, geography,

<sup>1</sup> Kolej PERMATA Insan, Universiti Sains Islam Malaysia, 71800 Nilai, Negeri Sembilan, Malaysia.

<sup>2</sup> Kolej PERMATA Insan, Universiti Sains Islam Malaysia, 71800 Nilai, Negeri Sembilan, Malaysia.

<sup>3</sup> Kolej PERMATA Insan, Universiti Sains Islam Malaysia, 71800 Nilai, Negeri Sembilan, Malaysia.

<sup>4</sup> Kolej PERMATA Insan, Universiti Sains Islam Malaysia, 71800 Nilai, Negeri Sembilan, Malaysia.

<sup>5</sup> Kolej PERMATA Insan, Universiti Sains Islam Malaysia, 71800 Nilai, Negeri Sembilan, Malaysia. E-mail: [zulkarnin@usim.edu.my](mailto:zulkarnin@usim.edu.my) (Corresponding author)

poetry, language, and human behavior (Singh & Kirmani, 2005). Due to its comprehensive coverage of historical and biographical details of scientists and their contributions, the manuscript has become a critical reference for scholars, including the renowned traveler Muhammad ibnu ‘Abdullah ibnu Battutah, who utilized it for early scientific data in Egypt (al-Andalusi, 1912). The book also provides scientific knowledge on topics such as astronomy, detailing the development, contributions, and biographies of key figures from various civilizations. As a result, it has inspired other publications emphasizing the importance of science as a foundation for societal advancement in Andalusia during the 15th century (Khan, 1995).

The *Kitab Tabaqat al-Umam* has been a pivotal reference for scientific history research and has been translated into several languages since its discovery and transcription by Al-’Ab Louis Shaykhu al-Yasu’i in 1912 CE. In 1935, Régis Blachère translated it into French as *Livre des Categories des Nations*, published in Paris by Larose. It was later translated into English as *Categories of Nations* in 1991 by the University of Texas Press. The manuscript was reprinted in Arabic as *Tabaqat al-Umam* in 1993 by Dar al-Ma’arif Press in Mansurah, Egypt. Additionally, it has been published in Persian and in an Arabic version in Lebanon (Salem & Kumar, 1991).

The dissemination and proliferation of knowledge through the *Kitab Tabaqat al-Umam* occurred directly from one scholar to another or to students (Singh & Kirmani, 2005). Abu Bakr ‘Abd al-Baqi taught the book to Abi Muhammad ‘Abd al-Haq ibnu ‘Atiyah (undated) and al-Qadi ibnu Abi ‘Amir ibnu Syarwiyah (d. 1153 CE). Subsequently, Abu Tahir al-Salafi al-Misri (d. 1181 CE) introduced *Tabaqat al-Umam* not only in Egypt but also throughout the Middle East, including Baghdad, Saudi Arabia, and Lebanon.

## RESEARCH METHODOLOGY

This paper employed a qualitative approach to analyze documents related to *Kitab Tabaqat al-Umam* and its significance in detailing the historical timeline and the development and achievements of scientific knowledge throughout Islamic civilization. The research team conducted a comprehensive literature review, examining primary and secondary sources such as historical texts, academic papers, and scholarly articles that discuss *Kitab Tabaqat al-Umam*. This review aimed to gather extensive information on the historical and scientific context of the manuscript.

In addition to the literature review, a detailed document analysis of *Kitab Tabaqat al-Umam* was performed to identify key themes, historical accounts, and scientific contributions documented by Sa’id al-Andalusi. This analysis focused on understanding the integration of scientific knowledge from diverse sources and its impact on Islamic civilization. The findings from the manuscript were then placed within the broader historical and cultural context of the medieval Islamic world. This involved correlating the content of the manuscript with historical events, political stability, and the role of educational institutions in promoting scientific inquiry.

Finally, the insights gained from the literature review and document analysis were synthesized to draw conclusions about the role of science in Islamic civilization. This synthesis aimed to highlight the contributions of *Kitab Tabaqat al-Umam* to our understanding of the historical development of science and its significance in nation-building. By applying these qualitative research methods, the study provides a nuanced understanding of the historical and scientific importance of *Kitab Tabaqat al-Umam* and its impact on the advancement of knowledge in Islamic civilization.

## DATA ANALYSIS AND DISCUSSION

The data for this study, derived from *Kitab Tabaqat al-Umam* by Sa’id al-Andalusi and secondary sources, highlights the integration of scientific knowledge, political stability, and cultural factors in advancing science during medieval times. This qualitative review emphasizes how medieval scientists, particularly in Islamic civilizations, successfully integrated knowledge from diverse sources such as Greek, Persian, and Indian works, leading to significant innovations and dissemination of scientific ideas (Gutas, 1998; Burnett, 2005).

Political stability is shown to be crucial for scientific progress. Stable governance facilitated the construction of educational facilities and research centers, promoting intellectual activities. Conversely, political turmoil hindered scientific advancements and led to the decline of civilizations (Nasr, 1968; Salem & Kumar, 1991).

The study highlights the successful integration of scientific and religious knowledge. Scientists adhering to Islamic principles aligned their work with ethical and spiritual values, thus preventing the misuse of science. Sa'īd al-Andalusi emphasized the importance of combining empirical (*ilmu aqli*) and revealed knowledge (*ilmu naqli*) for a holistic approach to scientific inquiry (Huff, 2003; Makdisi, 1981).

Human capital development is also identified as a crucial factor. Scientists from diverse backgrounds who prioritized environmental well-being and societal contributions promoted social harmony and innovation. Sa'īd al-Andalusi recognized the value of diversity in enriching scientific discourse and advancing knowledge (Saliba, 2007).

Educational infrastructure, including libraries and universities, played a significant role in the dissemination and development of scientific knowledge. These institutions served as critical hubs for learning and innovation, facilitating the transfer of scientific ideas (Burnett, 2005).

In short, the study underscores the multifaceted nature of scientific advancement in medieval civilizations, as documented by Sa'īd al-Andalusi. The integration of diverse knowledge sources, political stability, ethical considerations, and robust educational infrastructure are pivotal elements contributing to the holistic development of science and civilization. These findings offer valuable insights for contemporary discussions on the role of science in society and the factors that support its progress.

### **Biography and Background of Sa'īd al-Andalusi**

According to primary sources documented at the beginning of the *Kitab Tabaqat al-Umam*, Sa'īd al-Andalusi's full name was Qadi Abi al-Qasim Sa'īd ibn Ahmad ibn Sa'īd al-Andalusi. His lineage indicates that he was a member of the Taghlib tribe, a prominent military tribe known for its strength and respectability among Arab tribes. Some members of the Taghlib tribe entered Spain during the Arab conquest in 711 CE and established a presence there. His father, Ahmad ibn 'Abd al-Rahman, was a notable figure in Cordoba, while his grandfather, Abu al-Mutarrif 'Abd al-Rahman ibn Muhammad ibn Sa'īd ibn Wathiq, served as a judge in Medina-Sidonia, Andalusia (Richter-Bernburg, 2007; Ibn Basykuwwal, 1989). Sa'īd al-Andalusi was born in 1029 CE/420 AH and died in 462 AH (1069/1070 CE). According to Ibn Basykuwwal (1989), he passed away on 4 Shawwal 462 AH, corresponding to July 6, 1070 CE, at the age of 42 while still serving as a Qadi.

Research suggests that Sa'īd al-Andalusi received his early education in Cordoba, a city that, during his time, was a hub for European scholars who visited its libraries and universities to study various sciences and, indirectly, Islamic knowledge (Makdisi, 1981). In Toledo, he continued his education from a young age, traveling around Spain to further his studies, a tradition upheld by his scholarly lineage (Burnett, 2005).

With expertise in various fields such as the Qur'an, jurisprudence, astronomy, astrology, and philosophy, Sa'īd al-Andalusi gained the caliph's trust to serve as a Qadi (Rubin & Wasserstein, 1997). The intellectual culture in Andalusia and the surrounding society significantly influenced his education, enabling him to master various disciplines. He studied judicial sciences and languages through direct learning (*talaqqi*) with al-Walid Hisyam ibn Ahmad ibn Hisyam al-Kin'ani al-Waqqasyi (d. 1085 CE), a judge in Talbira (Talavera), a city in the Toledo region (Burnett, 2005; Makdisi, 1981).

Given his multifaceted abilities, Sa'īd al-Andalusi was well-suited for the position of Qadi in Toledo under the reign of Amir Abu al-Husayn Yahya ibn Israel. According to the *Kitab Tabaqat al-Umam*, he deserved the title of scientist for his research on the scientific development of more than nine nations, his expertise in theology and literature, and his enduring writings, including the *Tabaqat al-Umam* (Khan, 1996).

As a scholar of the 10th century, Sa'īd al-Andalusi contributed significantly to the philosophy of nation-building based on science. His comprehensive writings on the history of prominent civilizations remain influential today. The *Kitab Tabaqat al-Umam* reflects Sa'īd al-Andalusi's vision of building civilizations based on a scientific epistemology. He also played a crucial role in the development of science in Europe, particularly in France and England, through his writings, especially during the 11th to 13th centuries (Khan, 1996). Gabriel Martinez-Gros, a professor from Texas, USA, described Sa'īd al-Andalusi as a remarkable scientific figure, despite his official position as a Qadi (Martinez-Gros, 2000).

## **Advancement of Civilizations through the Integration of Knowledge**

The direct analysis encompasses the development of science and the construction of civilizations beginning in the 9th century. The study also seeks to uncover why Sa'īd al-Andalusi did not include the Chinese and Turkish civilizations, which were also developing and contributing to scientific advancements. The findings reveal that a precise understanding of the term science had a positive impact on the aspects of civilization building. Additionally, the analysis reinforces the integration between natural sciences and social sciences through the inspiration of ideas adapted through the writings and innovations of prominent figures within each civilization.

The analysis of scientific achievements aims to clarify the acceptance of a clear definition of science and its implications for nation-building. Furthermore, this analysis reinforces the concept of synergy between natural sciences and social sciences, leading to an integrated civilization through the inspirational contributions of notable figures within each nation.

According to Sa'īd al-Andalusi, the nations listed in the *Kitab Tabaqat al-Umam* were categorized as the most advanced civilizations of their time, each ranked accordingly. Sa'īd al-Andalusi measured the success of a civilization through several criteria: the nation's history, stable governance, scientific innovation, integrated and continuous education, and the contributions of scientific scholars who transformed knowledge within their communities. Consequently, he confidently placed India as the first nation on the list, based on its early exploration, dissemination, and contribution to scientific activities such as astronomy, mathematics, and astrology. Scholars from Andalusia, like Khawarizmi, traveled to India to learn about numbers and numeration. Thus, all aspects contributing to the culture of science influenced the status of a nation in achieving advancement and civilization.

The scientific achievements varied among different civilizations. The chapters in the *Kitab Tabaqat al-Umam* depict that the scientific achievements of civilizations began with India, followed by Persia, Chaldea, Greece, Rome, Egypt, Arabia, Andalusia, and Israel. Sa'īd al-Andalusi arranged these nations based on their historical exploration of science, with Indian civilization once again leading due to the hereditary influence of governance supporting scientific knowledge development.

The analysis reveals that the construction of civilizations also encouraged innovative scientific activities. Innovation represents the creation of technology resulting from the impact of scientific research processes. For example, the Persians, who were keen on astronomy, often observed stars to study their movements. Consequently, Abu Ma'shar Ja'far ibn Muhammad ibn 'Umar al-Balkhi developed a method or system for calculating the movement of stars, allowing them to determine the movement of the sun and the annual number of days. Therefore, serious scientific development helped other countries benefit collectively, and the nation itself demonstrated its potential for advancement.

The analysis of scientific development finds that scholars with expertise in various fields were commonplace during the medieval period. This advantage grew into a culture of knowledge within society, influencing individual personalities and education levels. Sa'īd al-Andalusi also demonstrated high scientific discipline by exploring various civilizations and their scientific achievements. Sa'īd al-Andalusi himself was a prominent figure in astronomy and an expert in Islamic affairs, eventually appointed as a Qadi in Cordoba, Andalusia. This marked a significant shift in the history of scientific civilization. The civilization and scientific development in Andalusia, particularly in Islam, proved to rival previous civilizations such as India, Persia, Greece, Rome, and Egypt. The contributions of earlier civilizations inspired Muslims to absorb, assimilate, and refine the scientific heritage achieved by past nations.

## **Factors Contributing to the Advancement of Science**

One of the key factors contributing to the development of science is the sharing of expertise and knowledge exchange between individuals or organizations. The transfer of knowledge from one civilization to another through writing, translation, and migration for the sake of knowledge has been a significant driver of scientific development, as evidenced in the *Tabaqat al-Umam* (Al-Andalusi, 1912). For instance, Sa'īd al-Andalusi and other Islamic scholars expanded philosophical knowledge by adapting Greek philosophy and integrating it with

Islamic philosophy and theology. The transmission of philosophical knowledge from Greek civilization to the Islamic community prompted Muslim scholars to take initiatives to protect their community from the influence of other religious beliefs. This highlights their intellectual openness and foresight (Nasr, 1968).

Research indicates that successful civilizations are those that reject racial or nationalistic sentiments. This positive ideology has led to a broader understanding of science and motivated many scientists to delve deeply into the functions of science, adapting it to their religion, culture, and nation (Saliba, 2007). Sa'īd al-Andalusi also contributed to the rise of scientific knowledge in astronomy, philosophy, jurisprudence, and astrology in Andalusia, even though the scientific advancements there often surpassed those of other nations such as Greece and Persia. He introduced the philosophical thoughts of Aristotle, Plato, and Socrates in the *Tabaqat al-Umam*, demonstrating that scientists could broaden societal understanding of knowledge for the purpose of national development (Gutas, 1998).

The development of science was supported by Muslim scientists who valued knowledge and maintained an open-minded approach (Huff, 2003). Sa'īd al-Andalusi's openness to sharing the scientific achievements of other nations and Islam's acceptance of foreign civilizations' scientific accomplishments underscore Islam's receptivity to the absorption and transfer of scientific knowledge. This contradicts the claims of Western orientalist Ignaz Goldziher (1967), who asserted that Islamic science and philosophy emerged only after encountering foreign cultures, particularly Greek. Western scholar Lindberg (1978) also believed that Greek science was the highest and most influential, permeating Islamic scientific culture. Such assumptions fail to reflect the quality of historical scientific scholarship, as evidenced by Sa'īd al-Andalusi's *Tabaqat al-Umam*, which proves the historical importance of past scientific developments for current and future scientists. The work of Islamic scholars through their research and inventions laid the foundation for the modernization of European and Western science, facilitated through translation activities (Ragep, 2001). For example, the *Kitab Tabaqat al-Umam* has been translated into French, Urdu, and English for broader benefit (Salem & Kumar, 1991).

Research shows no gap between scientific studies and Islamic studies; instead, their integration is fundamental to knowledge advancement, particularly in Muslim societies (Makdisi, 1981). In other words, Muslims must be proficient in religious matters and simultaneously possess expertise in scientific fields. Sa'īd al-Andalusi provided a clear perspective on the relationship between science and Islamic studies, emphasizing their mutual intellectual and practical benefits. In the *Kitab Tabaqat al-Umam*, he leveraged his expertise in jurisprudence to serve as a Qadi, coordinating Islamic affairs, while his proficiency in astronomy facilitated administrative tasks (Burnett, 2005). Thus, the functional role of science is to provide benefits and support scientific progress.

Science and Islam continue to underpin the excellence of civilizations. Without science, infrastructural and technological advancements would not occur, and without religion, scientific activities would lack ethical constraints, leading to unchecked pursuits of progress. Sa'īd al-Andalusi exemplified the integration of science and Islam in his educational system. He demonstrated in Islamic civilizations like Andalusia how knowledge transformation through scientific activities in urban planning and state administration contributed to the civilization's success. Science and Islam established Andalusia as a model civilization for Europe and other countries, proving that the combination of science and Islam is a key formula for a civilization's success (Nasr, 1968).

he analysis further reveals that the development of science requires political stability within a country to function optimally. A chaotic political environment hinders the progress of scientific activities, leading to the collapse of civilizations and resulting in disasters and destruction for both the environment and humanity (Goldziher, 1967). The *Kitab Tabaqat al-Umam* exemplifies how the culture of knowledge in civilizations such as India, Persia, Egypt, and Andalusia relied on political stability and governance to expand their knowledge culture (Salem & Kumar, 1991). The orderly education of the populace, along with the provision of public facilities such as schools, research centers, and employment opportunities, were essential. However, conflicts and power struggles in governance could disrupt intellectual activities and ultimately lead to the downfall of civilizations and the regression of nations (Nasr, 1968).

The harmonious development of science was also supported by scientists who adhered to Islamic beliefs, serving as a defense against ideologies worshipping beings other than Allah. Scientists who believed that Allah

is the Lord of all creation would align scientific activities with the principles of Shariah law (Nasr, 1968; Makdisi, 1981). Conversely, science that develops without the boundaries of Islamic law leads individuals to accept all knowledge uncritically, including activities such as divination, idol worship, or star worship (Gutas, 1998). Thus, it is essential for everyone, whether Muslim or not, to understand the role of science in harmonizing human relationships and the relationship between humans and the environment (Huff, 2003).

This study finds that understanding the function and objectives of science requires knowledge of its epistemology and philosophy. It is essential for students in educational institutions to learn this to appreciate the noble functions inherent in scientific activities. It also serves as a commendable manifestation for researchers who understand the theory of scientific knowledge (Lindberg, 1978). Sa'īd al-Andalusi highlighted various characters from different nations with their scientific and technological skills in the *Kitab Tabaqat al-Umam*. Based on these achievements, it is necessary to understand the philosophy of scientific truth to distinguish between Muslim and non-Muslim beliefs, particularly regarding the philosophy of divinity or object worship (Burnett, 2005). Learning the philosophy of science enables individuals to comprehend the true nature of the universe and its creation, as well as the ultimate goals of science.

This study demonstrates that separating knowledge derived from revelation and rational knowledge results in conflict within the philosophy of knowledge. Such conflict leads to the secularization of knowledge, diminishing the universality of science (Nasr, 1968). The term "muqaddas" (sacred) applies only when there is harmony between revelation and reason. Sa'īd al-Andalusi exemplified this integration in the advanced civilization of Andalusia. The universality of science emerges when reasoning and thinking methods are based on a clear philosophy to address the well-being of humanity and society as a whole (Saliba, 2007).

Analyzing the achievements of civilizations based on science reveals that national unity and harmony contribute to the progress of civilizations (Ragep, 2001). Unity also facilitates systematic scientific education for the populace. Intellectual activities are adversely affected by political disputes and power struggles. Disunity and tribalism lead to economic decline and the destruction of knowledge centers such as libraries, schools, and observatories (Nasr, 1968). In the beginning of each chapter, referring to advanced nations, Sa'īd al-Andalusi used narratives of courageous rulers and harmonious people. He conveyed that national harmony is crucial for the development of a civilized society in his *Kitab Tabaqat al-Umam* (Gutas, 1998). The detrimental effects of weak governance and severe economic downturns include disrupted educational and research funding, further hindering scientific activities (Huff, 2003).

The study also analyzes that science flourishes and attracts public interest when scientific activities address contemporary issues and provide daily life comforts. Opportunities for scientific activities expand in the absence of restrictions. The democratization of science, meaning the freedom of society to engage in serious scientific activities, represents a form of intellectual struggle (Lindberg, 1978). Sa'īd al-Andalusi opened minds to the potential of science as a catalyst for unifying diverse beliefs within a nation for the prosperity of society. The *Kitab Tabaqat al-Umam* also highlights the democratization of science, with scientists playing a significant role in the development of civilization (Makdisi, 1981). Scientists from various nations and civilizations empowered scientific ideologies, ultimately aiding national prosperity. Specifically, this means that the public can engage in any scientific activity or research that benefits society. Science's progress and success become the primary objective for scientists. However, politics can negatively impact scientific progress due to divisions and power struggles, weakening governance and exposing the nation to warfare (Ragep, 2001).

The study analysis also found that the development of science acts as a medium for human capital development in society. Human capital, in this context, refers to the characteristics of scientists who prioritize environmental well-being, have the ability to better understand God by establishing places of worship, and contribute positively to both nature and humanity. This represents a high personal quality for individuals with knowledge and skills in various branches of science. This discipline is formed based on their ability to develop a civilization that is holistically based on science.

In *Tabaqat al-Umam*, Sa'īd al-Andalusi not only highlights the scientific achievements of nations but also includes the background of each nation and the role of science within them. Sa'īd al-Andalusi demonstrates the high quality of the work of scientists whose contributions are still beneficial today. Although their individual

capabilities in science and religious beliefs may differ, the formation of human capital among these nations has the potential to bring about social harmony.

From various perspectives, the study concludes that science during the era of Sa'id al-Andalusi directly refers to all knowledge and skills acquired by individuals through systematic processes. These include research, learning, and education through disciplines of knowledge based on spirituality, which are fundamental manifestations in the effort to build a civilization.

### Framework of Analysis for *Kitab Tabaqat al-Umam*

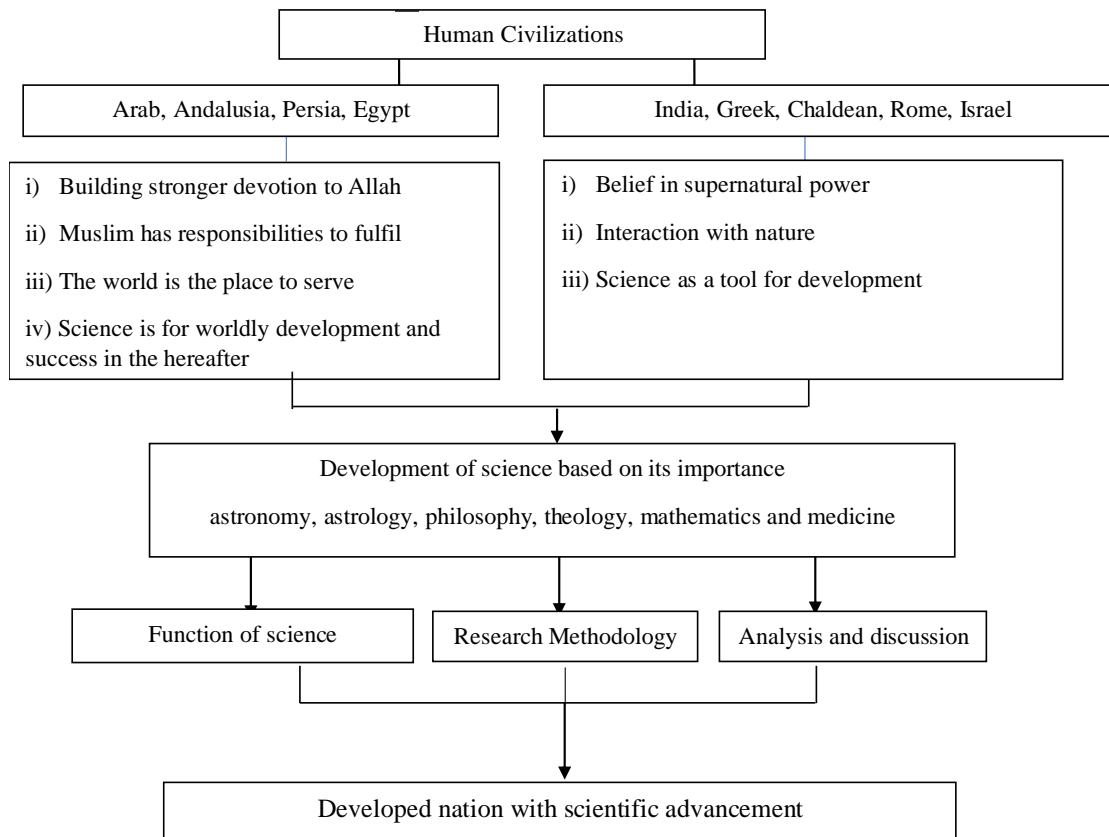


Diagram 1: Model of scientific advancement according to Sa'id al-Andalusi.

## CONCLUSION

The contributions of scientists have significantly transformed the landscape of science, enhancing community well-being and national stability. Innovations and observations by scientists have led to new advancements in science, which have been applied as technology, providing contemporary benefits based on scientific principles. These advancements were achieved rapidly during the medieval era through the integration of expertise from diverse linguistic, ethnic, and cultural backgrounds.

The study of *Kitab Tabaqat al-Umam* by Sa'id al-Andalusi illustrates that a civilization-building model based on science emphasizes holistic scientific contributions. This model not only fosters the development of scientific knowledge but also cultivates humanitarian traits and spiritual tranquility among individuals. The scientific contributions are deeply philosophical and wise, promoting harmony between humanity and nature.

Sa'īd al-Andalusī's work reveals that political stability is crucial for the flourishing of scientific activities. A stable governance system ensures orderly education, the establishment of public facilities like schools and research centers, and the provision of employment opportunities. Conversely, political turmoil hinders intellectual activities and can lead to the collapse of civilizations.

The study also highlights that science, when harmonized with Islamic beliefs, can act as a defense against ideologies that deviate from monotheism. Scientists who align their work with Shariah principles ensure that scientific activities are beneficial and ethical. However, without the boundaries of Islamic law, scientific endeavors can lead to unethical practices.

Sa'īd al-Andalusī emphasized the importance of integrating empirical knowledge (*ilmu aqli*) with revealed knowledge (*ilmu naqli*). This integration fosters a comprehensive understanding of the universe and aligns scientific pursuits with spiritual and ethical values. His *Kitab Tabaqat al-Umam* showcases the achievements of various nations, highlighting the importance of unity and harmony in advancing scientific knowledge.

Moreover, the democratization of science, allowing society to engage in scientific activities freely, represents a significant intellectual endeavor. Sa'īd al-Andalusī's work underscores the potential of science as a unifying force for diverse beliefs within a nation, contributing to societal prosperity. The contributions of scientists across various civilizations, as documented in *Kitab Tabaqat al-Umam*, have played a crucial role in the development of civilizations, fostering a knowledgeable and ethical society that understands the divine mandate to govern the world wisely.

In short, the integrated application of empirical and revealed knowledge, facilitated by political stability and ethical considerations, is fundamental to the advancement of science and the development of a harmonious civilization. Sa'īd al-Andalusī's *Kitab Tabaqat al-Umam* remains a testament to the enduring impact of scientific contributions on the progress of humanity.

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