
HARMONIZATION OF SCIENCE AND RELIGION IN THE CONTEXT OF MULTISTRUCTURAL SOCIETY: BUILDING TOLERANCE AND HARMONY

Dyah Kusuma Dewi

K.H. Abdurrahman Wahid Pekalongan State Islamic University, Indonesia
Email: dyah.kusuma.dewi@mhs.uingusdur.ac.id

Ahdana Sabila Dini

K.H. Abdurrahman Wahid Pekalongan State Islamic University, Indonesia
Email: ahdana.sabila.dini@mhs.uingusdur.ac.id

Hana Tsuroya Tsabita

K.H. Abdurrahman Wahid Pekalongan State Islamic University, Indonesia
Email: hana.tsuroya.tsabita@mhs.uingusdur.ac.id

Abstract

In the era of globalization and a multi-structural society full of diversity, the relationship between science and religion is crucial in forming social and spiritual harmony. This article discusses how harmonization between science and religion can be realized in a pluralistic society that is vulnerable to identity conflict, discrimination, and intolerance. Through a descriptive qualitative approach based on literature studies, this article examines the views of thinkers such as Stephen Jay Gould, Ian Barbour, and M. Amin Abdullah, who support an integrative and dialogical model between science and religion. It is emphasized that science answers “how” the world works, while religion answers “why” life is meaningful. This study also formulates concrete strategies such as the development of an integrative curriculum, technology-based education, religious moderation classes, and socio-educational activities that instill Islamic values, Indonesianness, and scientific progress. It is hoped that the integration of these values can strengthen tolerance, overcome multicultural challenges, and form an inclusive and harmonious society spiritually and scientifically.

Keywords: *Harmonization, Science and Religion, Multicultural, Tolerance, Value Integration*

INTRODUCTION

In the complex dynamics of modern life, society is not only faced with rapid advances in science but also with the reality of the diversity of religious and cultural values that interact with each other (Mediyanti et al., 2025). A multi-structural society consisting of various social, cultural, religious, and belief system backgrounds demands an inclusive approach in responding to differences (Azhari & Albina, 2024). Amidst the rapid flow of globalization and technological developments, new challenges have emerged that demand synergy between science and religion as two important pillars in shaping human perspectives on the world.

However, the relationship between science and religion is often seen as contradictory, even mutually exclusive. This view is not only historically wrong but also counterproductive in building a harmonious society (Hidayatullah, 2019). In fact, history records many moments where science and religion supported each other in the search for truth and the improvement of human life (Saad, 2016). In the context of a multi-structural society, efforts to harmonize the two become increasingly urgent to prevent value polarization, identity conflict, or the dominance of a single narrative.

This article aims to explore how harmonization between science and religion can be realized in a pluralistic society and how such integration can be the foundation for building tolerance and social harmony. By understanding each other's meeting points and limits, it is hoped that a collective awareness will emerge that differences are not threats, but rather riches that need to be maintained through dialogue, collaboration, and mutual respect.

METHOD

This research is a qualitative descriptive literature study. Literature study research is conducted using literature (library) in the form of books, notes, or previous research reports (Mahanum, 2021). The object of research in this article is the relationship between science and religion, especially in the context of a multi-structural (socially, culturally, and religiously diverse) society. The data sources in the study are secondary data obtained from various sources, including documents, government publications, industry analysis by the media, websites, and the internet. Researchers use documentation methods to collect secondary data, such as searching for and analyzing documents relevant to the research topic. In addition, researchers also use references from books, journals, and the internet to obtain the necessary secondary data.

RESULTS AND DISCUSSION

The concept of harmony between science and religion

Harmonization between science and religion involves two main elements, science and religion itself, both of which have a broad and complex scope so that the discussion cannot be done briefly. This harmonization refers to efforts to create harmony between scientific knowledge and religious values. Although they have differences in approach and purpose-science is empirical and religion is transcendental-both can still support each other in understanding the reality of life (Hidayat, 2024). Science and religion are the results of human achievements born from the same drive: to maintain human existence amidst the challenges of life. In other words, both science and

religion emerged as a response to the basic needs of humans in answering various problems and controversies in life (Solihin et al., 2025).

From the description above, it can be concluded that science and religion operate in different domains but have the same goal, namely to understand the nature of life and human existence. Science focuses on the working mechanisms of the universe that can be proven empirically, while religion examines the meaning, purpose, and spiritual relationship of humans with the Creator (Rofikoh et al., 2024). This view is in line with the concept of “Non-Overlapping Magisteria” (NOMA) introduced by Stephen Jay Gould, which states that science and religion do not need to be positioned as opposites because each has a different area of authority (Gould, 2021). In this context, science is not meant to explain the meaning of life or morality, and conversely, religion is not required to unravel the scientific process. For example, the theory of evolution should not be seen as a threat to religious faith but rather as God’s way of creating diverse life.

The issue of the relationship between science and religion is not new. Since the 17th century, this topic has become a serious concern, especially after the emergence of Descartes’ idea that the center of truth lies in individual consciousness, through his famous phrase “I think, therefore I am.” Descartes transferred the authority of truth from God to human consciousness. This shifted the paradigm of absolute truth from God to truth based on human rationality. This shift then gave birth to various schools of thought such as humanism, rationalism, and empiricism, which tend to limit the understanding of reality to aspects that can be calculated and tested mathematically (Rahman & Layyinah, 2018). Since then, the debate on the separation of science and religion has grown. However, in the 20th century, a number of thinkers began to criticize this approach because it was considered unable to represent the complexity of human life.

In the history of Islamic civilization, many scholars have believed that science and religion should not be separated. One of them is Bruno Guiderdoni, a Muslim scientist and theologian, who believes that even though the methods used are different, science and religion can work together to find a more complete truth (Kuswanjono, 2007). In the Islamic view, studying the laws of nature is part of worship and a form of approaching God. Scientific knowledge in Islam is not only aimed at revealing physical phenomena but also as a means of approaching God, showing that there is no dichotomy between the two.

The Qur’an itself contains many verses that encourage its people to reflect on God’s creation as a form of strengthening their faith. Therefore, science is an important tool for understanding the signs of Allah’s greatness in the universe (Amini et al., 2024). Scientific concepts such as the Big Bang theory or evolution can be understood as God’s way of organizing the process of creation, not as a substitute for religion. Science provides explanations of the mechanisms of

nature, while religion provides direction about the purpose and meaning of the process itself. Many scientists and theologians agree that despite their differences in approach, science and religion can be constructively reconciled.

Ian G. Barbour, a physicist and theologian, is an important figure in discussing the relationship between science and religion. He explains that science can explain the physical process of the creation of nature, such as through the Big Bang theory, while religion helps answer questions about the meaning of that creation (Febriyanti, 2024). Thus, science and religion should not be positioned as competitors but as partners in the search for complete truth. In the context of Islam, science becomes a bridge between rational knowledge and a spiritual approach in understanding God's creation. Figures such as Ibn Sina and al-Farabi argued that rationality and revelation can mutually perfect human understanding of the universe and God (Herman et al., 2024). This opens up a great opportunity for Muslims to maintain religious values while remaining active in the development of modern science.

One of the contemporary figures who discusses the integration of science and religion is M. Amin Abdullah. He proposed an interconnected model that allows these two fields to work together to solve humanitarian problems. He divided the relationship between science and religion into three models: the single entity model, the isolated entity model, and the interconnected entity model. The single entity model considers science and religion as an inseparable and complementary unity. The isolated model sees both as two separate domains that do not intersect, such as the approach taken by Galileo Galilei. While the interconnected model offers cooperation between the two to answer complex issues, for example, in the case of bioethics, where moral principles from religion are used to guide the application of science ethically (M Amin Abdullah, 2003).

From Amin Abdullah's explanation, it can be concluded that science and religion can be connected through various approaches. However, to answer big questions comprehensively, an open dialogue is needed between the two. In principle, science and religion have different but complementary roles. Science answers "how" the world functions, while religion answers "why" life exists. Science reveals the laws and mechanisms of nature, while religion provides direction and existential meaning. Thus, the two can coexist in forming a complete understanding of life and the universe.

Challenges of Harmonization in a Multicultural Society

1. Identity Conflict and Intercultural Tensions

Identity conflicts, especially those related to ethnic, tribal, or religious identities or what are often referred to as primordial conflicts, are the cause of the absence of recognition and appreciation from other parties. Meanwhile, intercultural conflict is defined by Samuel P.

Huntington as a clash between civilizations that he said would dominate global politics. Quoting an article he wrote, “The identity of civilizations will be increasingly important in the future; the most important conflicts in the future will occur between cultural lines that separate one civilization from another.”

Various cultural identities compete to maintain their authenticity, which is one of the biggest things we face. In this context, the issue of identity is more than just cultural and historical heritage; it is about individual and collective identities that often compete for recognition and legitimacy. Differences in beliefs, values, and interests between cultures often lead to conflict. This creates tensions that have an impact on social and political processes in society (Maesurah, 2025).

2. Discrimination and Inequality

Discrimination and inequality are serious challenges that hinder the progress of multicultural harmony in society. According to Fulthoni et al., discrimination is unfair treatment that has been felt by an individual or group. Some of the most common types of discrimination include tribe or ethnicity, race, religion and belief, sex and gender, people with disabilities, people with HIV/AIDS, and social caste. While inequality, also known as social stratification, refers to significant differences in the rights, access, and opportunities that individuals or certain groups have in a society. The term “social stratification” comes from the term “social stratification,” which refers to a stratified system in society (Ivana Lidya Hasibuan, 2024).

Discriminatory actions against certain cultural groups trigger serious consequences in the effort to create multicultural harmony. When one group is considered inferior or neglected in social, economic, or political aspects, it disturbs the balance that should exist in a multicultural society. The inequalities that arise from this discrimination create chasms that are difficult to overcome, deepening divisions between cultures and hindering the integration process that should unite society in diversity (Siti Kholidah Marbun, 2023).

3. Ignorance and intolerance

In an effort to build a harmonious multicultural society, misunderstanding and intolerance towards cultural differences are challenges that require special attention. This phenomenon not only has an impact on social interaction but can also cause conflict and tension that are detrimental to relations between individuals and countries. Intolerant attitudes and the formation of negative stereotypes towards groups or individuals from different cultural backgrounds are often caused by a lack of understanding of other cultures. Intolerant

attitudes and the formation of negative stereotypes towards groups or individuals from different cultural backgrounds are often caused by a lack of understanding of other cultures.

Not having direct exposure or experience with cultural diversity is one of the reasons why people do not understand other cultures. Often people have a narrow perspective on the diverse cultural realities around them. For example, only seeing one aspect or representation of a particular culture through mass media or limited experience can lead to incorrect stereotypes and simplify the true complexity of culture. As a result, understanding of cultural diversity becomes worse, which makes differences between cultures greater.

Strategy for Building Tolerance through Harmonization

Some of the strategies we found in the research conducted by Prayitno related to mainstreaming moderation and tolerance through alignment between Islam, national identity, science, and technology include:

1. Preparing a curriculum that combines Islamic, national, science and technology values

This curriculum is designed to teach students about the application of technology in conveying Islamic teachings and national values. In addition, this curriculum will also provide an understanding of the principles of science and technology that can be used to improve the quality of life. Through this curriculum, students will gain insight into how technology can play a role in continuing Islamic and national values and improving the standard of living. This curriculum will also provide opportunities for students to improve their skills and knowledge related to technology and science. Strengthening the mastery of religious material can be done by implementing a curriculum that integrates science and technology.

In this curriculum, students will be exposed to Islamic and national values that will be linked to aspects of science and technology. This allows students to better understand and appreciate religious values while deepening their knowledge of how to utilize technology for the benefit of society. This curriculum also provides opportunities for students to gain practical skills in various fields of science and technology in preparation for facing global challenges.

2. Conducting technology-based education programs

Schools can offer courses or classes that focus on the latest technology for students. This program will help them broaden their understanding of technology and science and see how both can promote moderation in religion. In addition, schools can use technology to enhance conventional learning by using media such as videos, e-books, and other media.

Schools can also use technology to provide services such as computer training, distance learning, and so on. In this way, students can learn technology and apply it in practice.

In addition, schools can create information centers that can be accessed by students and the community. This center can contain various information, such as study materials, current news, and other important issues, making it easier for students and the community to get the information they need.

3. Holding special classes on moderation in religion

Schools can open classes that emphasize the importance of moderation in religion. The material that will be taught in this class can include tolerance, living in harmony, and diversity. This class will also show how religious moderation can bring a healthy, safe, and peaceful atmosphere to the community. Activities in this class can also focus on how humans live side by side with a spirit of equality and tolerance. The topic of interfaith dialogue can also be part of the learning in this class so that participants can understand how to communicate with people who have different religious backgrounds.

4. Implementation of various social, religious and educational activities connected with science and technology

a. Educational activities at school

Activities such as seminars and workshops related to specific issues on the integration of Islamic values, national identity, and science and technology can be implemented in schools. Implementation of social and educational activities for students who combine Islamic and Indonesian values with science and technology. Activities such as discussion groups, debate competitions, essay competitions, and various competitions that integrate these values can be carried out in schools. Seminars and workshops that invite experts from various fields to share knowledge on how to integrate Islamic values, nationality, science, and technology in life.

b. Research and development in schools

Research and development programs can be held to find innovations in integrating Islamic, Indonesian, science, and technology values in the learning process at school. This activity can be carried out through collaboration with educational and research institutions such as universities, research centers, and others to support the development of Islamic, Indonesian, science, and technology values in schools.

In addition, research and development activities to explore innovative ways to harmonize these values in school learning can also be realized through activities such as

- 1) Holding workshops, seminars, and panel discussions to discuss innovations and techniques in harmonizing Islamic, Indonesian, scientific, and technological values in the learning environment at school.

- 2) Conducting studies and evaluations on innovations and methods to harmonize these values in the learning process at school.
- 3) Compiling books, modules, and other learning resources containing information on innovations and techniques to harmonize Islamic, Indonesian, scientific, and technological values in learning at school.
- 4) Organizing cooperation with related parties such as the government, community organizations, and others to support the development of innovations and ways to harmonize these values in learning at school.
- 5) Holding community service programs to provide education on innovations and ways to harmonize Islamic, Indonesian, scientific, and technological values in education at school.
- 6) Organizing competitions to raise awareness of innovations and techniques in harmonizing Islamic, Indonesian, scientific, and technological values in school learning.

c. Training for teachers and educators in schools

Conducting courses or workshops for teachers and educators in schools that focus on ways to harmonize Islamic values, Indonesianness, science, and technology in the learning process. Workshop and discussion activities in schools that aim to produce creative and innovative learning methods. This workshop will provide material on how to integrate Islamic values, Indonesianness, science, and technology in the learning process by providing appropriate examples. Organizing workshops guided by experts and practitioners in the field of creative and innovative learning. This workshop will discuss ways to integrate Islamic values, Indonesianness, science, and technology in the learning process.

CONCLUSION

The relationship between science and religion is not contradictory; instead, they can complement each other in addressing both existential and empirical human questions. In a multi-structured society, harmonizing science and religion is essential for fostering tolerance and social cohesion.

Although they operate in different domains—science through empirical inquiry and religion through transcendental insight—both contribute to a holistic understanding of human life. Challenges such as identity conflicts, discrimination, and intolerance may be mitigated by integrating religious, national, and scientific values into education and broader social systems.

Strategies such as implementing an integrative curriculum, offering religious moderation courses, utilizing technology-based learning for students, and conducting teacher training programs represent concrete steps toward building a peaceful, adaptive, and open-minded society. Such harmonization fosters constructive dialogue and encourages collaboration across diverse cultural and religious backgrounds, thereby contributing to the development of a more enlightened and inclusive civilization.

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