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Harmony of Religion and Science: Philosophical Analysis of Scientific Integration with Integrated Twin Tower Paradigm UIN Sunan Ampel Surabaya

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Abstract
The dichotomy of religion and science stems from the assumption that the both cannot be integrated because they have different sources and methodologies. This dichotomous view makes Muslims experience a setback. That is why many figures and educational institutions are trying to reconcile the two. Secularisation of Islam, Islamisation of science, Islamic science and scientific integration are efforts to reconcile the two. State Islamic University (UIN) Sunan Ampel Surabaya developed the concept of scientific integration using the integrated twin towers paradigm. This article is analysed by using the stages of science developed by John F, Haught which includes the stages of conflict, contrast, contact and confirmation. Religion and science were initially in a position of conflict because they claimed each other's truth. At the contrast stage, religion and science have realised their respective positions and areas. In the contact and confirmation stage, religion and science will confirm, correct and greet each other. Islamic science and science can coexist harmoniously while still using their respective characters which at a certain time will greet each other and join hands so as to give birth to new science which is patterned after both, so the sociology of religion, Islamic economics, psychology of religion and so on were born.

Keywords:
Dichotomy, Secularisation of Islam, Islamisation of science, Islamic scholarship, Integrated Twin Towers.

Introduction

Discussing the harmonization of religion and science also means discussing the two sciences in the context of disharmony. One of the disharmonies between the two is the problem of the dichotomy of science. The emergence of the paradox of science is due to philosophical differences that include epistemology, ontology, and axiology between the two (Hanifah, 2018).

The difference at the philosophical level above is because the two sciences have different sources. Religious science is the knowledge that comes from God through revelations whose truth must be

believed by adherents of Islam. At the same time, general science is a science that comes from the west whose development uses an empirical approach and rationality (Masykur, 2019).

The philosophical differences above have sparked debate either scientifically or using one-sided claims that ultimately discretize each other between the two. The assumption that religion and science are two entities that cannot be reconciled continues to emerge because they have their areas regarding formal-material objects, research methods, and criteria of truth (Arifudin, 2016). So that the relationship between the two seems to be in two very distant places and is impossible to meet, let alone combine. Because combining the two some consider as a dwarfing of each of these sciences.

Religion, whose source is the revelation that refers to the absolute truth of God, when combined with science that is only obtained from human reason and thought through various methods, will make religion no longer sacred. Including, let alone integrating general science into religion means defiling religion. And anyone who makes religion dirty will get a sin. The side of general science also has its truth claims. Science obtained from the results of research using an empirical and rational approach cannot be combined with religion, which is obtained through doctrine and belief.

In addition to the two camps that continue to debate on behalf of general science and religion, it seems that there are also groups that try to discuss religion and science. This group tries to find opportunities for the meeting point of both and conceptualizes the cohesion of religion and science which is often referred to as scientific integration. This group considers that human development and progress cannot be separated from the influence of religion and science (Lesmana & Mahyudin, 2018). Two entities that both influence humans, then both will be able to find a moment of meeting and forming a unity or mutual disappearance of one another.

Based on the debate about the relationship between religion and science, Barbour categorized religion and science into four relationships: conflict, independence, dialogue, and integration (Barbour, 2000). From a conflictual relationship, religion, and science are always placed face to face, such as Copernicus' theory that the earth and other heavenly bodies revolve around the sun (heliocentric) against the group of scribes who think that heavenly bodies such as the sun revolve around the earth (geocentric). Independence considers that religion and science are two sciences that can live together as long as they maintain a safe distance so that there will be no conflict between them. Dialogue is a way to connect science and religion. Because there are some similarities between the two that can be dialogued (Lesmana & Mahyudin, 2018). While integration tries to find common ground between religion and science. So that both are more friendly and avoid conflict (Peters, 2017).

The integration of religion and science has many Muslim figures who try to dialogue the two with various concepts such as the concept of Islamization of science, secularization of Islam, criticism of Islamic reason, and so on. Some of these concepts of scientific integration inspired many Indonesian Muslim figures and have given birth to models of scientific integration in public Islamic higher education institutions. For example, Amin Abdullah developed an interconnection and interrelation model with a spider web pattern formed at the State Islamic University (UIN) Sunan Kalijaga Yogyakarta. UIN Maulana Malik Ibrahim Malang developed the concept of integration with the science tree model initiated by Imam Suprayogo (Muzakki et al., 2009). UIN Sunan Ampel develops science integration with an integrated twin towers model.

All the models above have the same goal, namely the realization of the unification of religion and science (Muzakki et al., 2009). So that the debate on the dichotomy of science is no longer prominent.

Although the goal is the same, the pattern between the campuses above is slightly different, especially in the model developed by UIN Sunan Ampel Surabaya with its twin towers.

At first glance, the form of scientific integration with the integrated twin towers model shows the existence of a dichotomy between religious science and science because both stand upright parallel and equally high. However, the twin towers have connecting stairs, which are then known as a form of mutual elimination between the two so that they can give birth to new disciplines such as religious sociology, Islamic psychology, Islamic economics, and so on. Therefore, the concept of scientific integration with the integrated twin towers model is interesting to study in terms of parallels and the same height between religion and general science, which the author then terms as the harmony of religion and science.

Method

Research Design

This study employs a qualitative approach using the library research method, in which data are collected and analyzed from written sources, including books, journal articles, and institutional documents. Given that the object of inquiry concerns epistemological and ontological questions about the relationship between religion and science, a philosophical approach is adopted. This is combined with a descriptive-analytical method to systematically present the concept of scientific integration under the Integrated Twin Towers paradigm before subjecting it to critical analysis using the four-stage typology of science-religion relations developed by John F. Haught — conflict, contrast, contact, and confirmation (Haught, 2004).

Data Sources

Data sources are divided into two categories: Primary sources: official documents and materials describing the Integrated Twin Towers model of scientific integration at UIN Sunan Ampel Surabaya, along with the foundational works of scholars addressing the relationship between religion and science — namely Nurcholish Madjid's concept of Islamic secularization, Syed Muhammad Naquib al-Attas's and Ismail Raji al-Faruqi's concept of the Islamization of knowledge, Kuntowijoyo's concept of Islamic scholarship (prophetic social science), and Haught's typology of science-religion relations (Haught, 2004).

Secondary sources: journal articles, books, and prior studies relevant to the theme of scientific dichotomy and integration, including comparative models developed at other Islamic higher education institutions, such as the interconnection-interrelation (spider web) model at UIN Sunan Kalijaga Yogyakarta and the "tree of knowledge" model at UIN Maulana Malik Ibrahim Malang.

Data Collection Technique

Data were collected through documentation, involving the systematic tracing, compiling, and recording of relevant written sources. Materials were organized thematically around three core areas: (a) the epistemological roots of the science-religion dichotomy, (b) efforts by Muslim scholars to harmonize religion and science, and (c) the concept and philosophical foundations of the Integrated Twin Towers model.

Data Analysis Technique

Data were analyzed using content analysis with a descriptive-interpretive character, following these stages: Data reduction — selecting and focusing on key concepts related to the science-religion dichotomy, harmonization efforts, and the Twin Towers model. Data display — organizing data

thematically so that the logical progression across concepts (secularization, Islamization of science, Islamic scholarship, and the Twin Towers integration model) can be traced coherently. Critical interpretation and analysis — applying Haught' (2004) four-stage framework (conflict, contrast, contact, confirmation) as the analytical lens to assess the philosophical position of the Twin Towers model within the broader science-religion relationship. Conclusion drawing — synthesizing findings regarding the philosophical foundations and implications of the Twin Towers integration model for the harmonization of religion and science.

Data Validity

To ensure the validity of the findings, this study employs source triangulation, cross-checking and comparing data drawn from institutional documents, primary scholarly works, and prior research to arrive at a comprehensive interpretation and to minimize the risk of single-source interpretive bias.

Result and Discussion

The Dichotomy of Science and Religion: An Epistemological Review

The conflict between science and religion that later gave birth to the dichotomization of science is a debate about secularism. Secularism is an understanding that teaches about the godlessness of humans in the life of the world. This understanding has the fundamental principle that humans, with their rationality, will be able to solve the world's problems (Wijaya, 2020). A person will find the final point of truth when rationality and faith are used to the best of their ability (Madjid, 2008). The use of ratio always negates the existence of God, so secularism is often referred to as godlessness, and it is the source of human morality chaos (Madjid, 2008). One of the entities labeled as secular is science.

Science is considered secular because it was born from philosophy-anthropocentrism, which rejects ethnocentrism that negates the existence of God (Wijaya, 2020). This understanding places humans in a very high position as the source of truth, wisdom, ethics, and knowledge. Because science is the result of human creation and does not come from God's revelation, science must be separated from religion (Wijaya, 2020). The science built on such thinking is very contrary to religion, which teaches that everything comes from God.

The dichotomy between science and religion is widening because of the mutual truth claims of each supporter of science and religion. Supporters of general science consider it the most correct because science is obtained from experience and based on specific methodologies. Supporters of religious science also consider it the most accurate because it comes from God. Four truths should be regarded so that there is no longer a conflict between supporters of science and religion. The four truths are ordinary, scientific, philosophical, and religious (Bakhtiar, 2007).

Ordinary truths are truths born from everyday experience and become common assumptions; almost everyone recognizes the truth of that reality (common sense) (Atabik, 2014). Like the truth of the color white because it is not red, and so on, this truth is considered a pre-scientific or non-scientific truth. The truth of science is a positive truth that refers to empirical facts and allows anyone to verify it with specific methods and will produce the same or relatively the same results (Idris & Ramly, 2016).

Science is essentially the result of daily human experiences and observations, which are then scrutinized using specific methods to form a complete science. Because it uses specific methods, other people can also prove and verify the science, the results of which are likely to be similar to the initial results.(Idris & Ramly, 2016) Philosophical truth results from rational thought based on critical judgment,

understanding, speculation, and interpretation that uses human reason and intellect (Rapar, 1996). The truth of philosophy cannot be proven empirically, but if someone understands the method of thinking philosophy, they will recognize the reality of philosophy (Idris & Ramly, 2016). Religious truth is the truth obtained from belief in God, whose truth is absolute. To find spiritual truth, the source is God's word and the prophet's word (Atabik, 2014). Therefore, religious truth is non-negotiable and dogmatic (Idris & Ramly, 2016).

From the explanation above, it can be seen that the debate about truth revolves around the issue of divine perspective (theocentric) and humanity (anthropocentric). Ordinary truth, science, and philosophy are truths obtained from human creations through experience, research, radical thinking, and using human reason. Meanwhile, religious truth is a theological perspective that assumes that truth, power, and strength come from God.

Science is knowledge gained from experience and observation of everyday events, so it is often referred to as anthropocentric. This knowledge is difficult or even impossible to accept truths that are not real in empirical facts, such as religion. Religion is a truth that can only be guessed by belief and cannot be reasoned with. Meanwhile, religion is a theocentric truth that must be fully believed and cannot be bargained back. In religion, theology is fundamental because, without theology which is the basis of belief or faith, religion also does not exist (Haq, 2020).

In the relationship between humans and God, theological studies are always theocentric, which states that God is the center of strength and power so humans must submit to and obey God (Haq, 2020). In theological studies, nature and humans are not necessary; the most important thing is God. Because it is from Him that all life begins (Pribadi & Haryono, 2002). According to Nur Kholis Majdid, the concept of theology like that has harmed humans because humans become shackled and negate the dignity of humanity (Madjid, n.d.-a).

According to Hasan Hanafi, the concept of theology that previous kalam thinkers have initiated is an idea that always negates human existence and is far from human progressivity. Humans are always seen as naive and passive entities before God, so humans will find it challenging to experience development because they are innocent and passive (Hanafi, 2003), So that humans will find it challenging to experience development because they only accept what God has outlined to humans; therefore, to make humans by their human nature, Hasan Hanafi formulated the concept of theology that is soaring into a more down-to-earth theology from a theology-theocentric approach to theology-anthropocentric..

The purpose of developing this theological perspective is to present a theological concept that is increasingly meaningful to human life because traditional theology has been known as an empty theology and is not meant for human development in everyday life (Falah & Farihah, 2016). Although Hasan Hanafi wants a change in perspective from theological-theocentric studies to anthropocentric, he still emphasizes that anthropocentric studies must still pay attention to theocentric (Idris & Ramly, 2016). The scientific building born from the world of reality is not merely pure science that has nothing to do with theology. But it is the result of the link between the natural world and its source (God).

Efforts to Harmonize Religion and Science

Many Muslim thinkers such as the secularization of Islam by Nurcholish Madjid, the Islamization of science by Naquib al-Attas and Raji al-Faruqi, and the scientificization of Islam by Kuntowijoyo have made efforts to harmonize religion and science.

a. Secularization of Islam

According to Madjid, humans must go through four stages to achieve happiness: intuitive, sensory, reason, and revelation.(Madjid, 2008) Epistemologically, the four stages are the tools of human knowledge (Wijaya, 2020). The instinctive stage is the first stage of life, the beginning of a new human being. The second stage is the sensory stage, where humans have begun to carry out sensory activities to fulfill the desires of human instincts. However, sensory activities still often make mistakes because they are not through any consideration, so in the next stage, humans are equipped with reason to consider sensory activities. Intellect also has limitations, so humans need revelation as the perfect weighing agent for happiness (Wijaya, 2020).

Regarding normative and actual things, humans need revelation to find them. But at the operational level, humans can develop as widely as possible by mobilizing all forms of power (Madjid, 2008). However, humans are often wrong in thinking and assuming that everything must be returned to revelation (God) and may not develop knowledge for fear of violating God. This is where the confusion and confusion of human thinking begins, and the dichotomy of religion and science occurs.

The widening dichotomy of religion and science is also caused by the confusion of Muslim thinking about divine things (transcendental) and worldly (temporal) (Effendi, 1998). Many Muslims are wrong in placing the two. Items that should be included in the transcendent realm are then put into the earthly domain and vice versa. This static thinking has made Indonesian Muslims lose their psychological drive to fight (Madjid, n.d.-b). So that to develop this psychological breakthrough power, a renewal in thought is needed, one of which is the development of the concept of secularization.

In Nurcholish Madjid's view, secularization is not intended to implement secularism, which means a closed ideology whose function is similar to religion. Nor is it intended to turn Muslims into secularists. However, secularization is intended for liberating development for Muslims by placing values that should be worldly into the worldly, where it is often put into matters that are ukhrawi.(Madjid, 2008) This secularization has two dimensions: the downward dimension, where material and not holy things must be grounded and kept away from sacred things. The upward extent is to sacralize something sacred and holy (Setiadi et al., 2020).

Secularization, as above, wants to function humans in their proper function, where God has assigned humans as leaders in the world. So that humans are free to choose and independently determine ways to improve the world's life, humans are given the responsibility by God to develop the world, and all actions on earth will be held accountable by God.

The impact of Madjid's secularization concept above can closely connect religion and science because humans are given several tools of knowledge, such as instincts, senses, and reason, to develop and improve the order of world life so that sciences emerge. But the results of human creation must still be accountable to God. For Madjid, Islam is a religion that has a close relationship with science and can place science in the concept of human faith in Allah (Madjid, 1992).

b. Islamization of Science

Syed Muhamad Naquib al-Attas rejects the idea of secularization and secularism because both want humans to be free from religion which is then free from metaphysical values (Al-Attas, 1993). Humans and nature will be separated from religious authority so that humans have the freedom to do anything to fulfill their desires (Wijaya, 2020). Secularization will release the world from the values of

religiosity so that the sacred values of world life will be lost by the propaganda of secularization and secularism developed by the West through science projects.

For al-Attas, modern science is knowledge built on doubt and conjecture in the scientific realm of science. The West views doubt as an excellent epistemological path to discovering truth or science (Al-Attas, 1993). Naquib al-Attas considers that science is not value-free but a value-laden entity (Al-Attas, 1993). Science developed by the West has western cultural content, so it is not worth reading, let alone being used by humans before going through a rigorous selection process (Na'im et al., 2003). Therefore, the Islamization of science needs to be done.

Islamization of science, according to al-Attas, will free humans from two things: human freedom from magical, animistic, mythological, and national-cultural traditions. Second, humans must be free from the influence of secularization and secularism developed by the West (Daud, 1998).

The process of Islamization that al-Attas wants is to change modern science, which is built based on western culture and replaced with Islamic principles and values (Al-Attas, 1993). The Islamization of science begins by separating the elements of science derived from the West, such as ideology, epistemology, and so on, then replaced with ideology and epistemology by Islamic principles (Wijaya, 2020).

Naquib al-Attas's opinion on the Islamization of science gets support from Ismail Raji al-Faruqi. Al-Faruqi calls the Islamization of science with the Arabic term *Islamiyatul Ma'rifah* (Islamization of Knowledge); he explains that all contemporary science and Islamic traditions must be Islamized (Harmonika, 2019). He said that the Islamization of science is an effort to Islamize science by pouring modern science back into Islamic insights (Abbas, 2010). The emergence of al-Faruqi's thought stems from an assumption that the progress of modern science using a secular paradigm will impact the dryness of knowledge from religious values. Faruqi asserts that modern science has detached itself from divine values (Harmonika, 2019).

The separation of western science from theological values will impact several things; first, at the applicative level, modern science views humans, nature, and its laws as something material-incidental that lives and develops without divine intervention. So that humans can exploit natural resources as much as possible without taking into account spiritual values. Secondly, social sciences are challenging to apply to read the reality of Muslim societies with a different perspective from Westerners (Harmonika, 2019). Thus, Western science has negated the existence of revelation and focused on the power of reason alone in discovering knowledge. The contradiction between revelation and reason is incompatible with Islamic reasoning and methodology. So Faruqi concluded that Western science is imperfect because it contains secular Western cultural values and severely violates the Islamic method, which recognizes the unity of truth (Farida, 2014). Therefore, it is necessary to Islamize science.

Islamization of science, according to al-Faruqi, is to Islamize modern science by rebuilding modern science by providing a foundation and orientation by Islam (Farida, 2014). The process of Islamization of science, according to al-Faruqi, is to Islamize the science itself, not to Islamize the people who carry knowledge or seek knowledge, so that people who learn science are directly patterned in their thoughts and behavior by Islamic values (Wahyuni, 2018).

The basis of al-Faruqi's Islamization of science stems from the concept of tawhid (Umma Farida, 2014). All knowledge must be built on the initial principle of tawhid because the science released on the concept of tawhid will give birth to science that contains secularism. Other images

emerge from tawhid, among others: First, the unity of God, all the life of the world, and its dimensions originate from one, namely God. There is no nature and its contents, including science, if it does not begin with God..

Second, the unity of creation, the existence of the universe, both material and non-material such as psychic, space, time, social, and culture, is a fact that binds one to another and is an integral unity that cannot be separated. Third, the unity of truth and knowledge begins with reality or reality, and all reality begins with one, namely God, so it can be ascertained that truth and knowledge cannot be more than one because it starts with one, namely God. Fourth is the unity of life; for Faruqi, God has two wills outlined in revelation (religion) as a source of human morals that must be known and natural law (*sunnatullah*). From these two wills, life grows with its two dimensions, namely material and spiritual or physical and spiritual dimensions. Fourth, human unity in Islam does not distinguish humans from their social and geographical backgrounds but only in terms of their faith and piety (Farida, 2014).

c. Islamic scholarship

Kuntowijoyo initiated Islamic scholarship as a response to the Islamization of science (Wijaya, 2020). According to him, the Islamization of science, although designed to eliminate the dichotomy of science and religion, will eventually create another dichotomy. This is because the Islamization of science uses an inappropriate approach, namely from context to text (Kuntowijoyo, 2006). Context to text indicates that all forms of intellectual work must be measured based on Islamic values so that there will be some parts of science that are not by Islam so that a dichotomy of science and religion emerges.

The dichotomy of science, according to Kuntowijoyo, stems from the approach used by Western science (secular science), namely from philosophy-anthropocentrism-differentiation-secular science. Secular science departs from modernism in philosophy, where philosophy always uses rationalism. The view of rationalism will automatically reject theocentrism. From here comes the difference in science (dichotomy), which ultimately creates the label of secular science (Abidin, 2016).

As a correction to the concept of Islamization of science, Kuntowijoyo offers the concept of Islamic science. This concept states that all intellectual works from other civilizations (western) can be converted and integrated with theoretical paradigms that are by Islamic values (Abidin, 2016). Kuntowijoyo offers an approach from text to context using a synthetic-analytic method to realize Islamic scholarship (Kuntowijoyo, 2006). The synthetic approach starts from the assumption of the Qur'an, which contains normative concepts that aim to give Muslims a comprehensive understanding of Islamic values so that people have a Muslim personality (psychological transformation). The second content of the Qur'an is proverbs, history, and stories. From this content, Muslims are expected to be able to take lessons so they can be transformed in social life (Wijaya, 2020).

The analytical approach views the Qur'an as a historical document that must be analyzed in the present context. Therefore, the normative al-Qur'an must be made objective and empirical so that humans can construct the theoretical al-Qur'an (Wijaya, 2020). With this approach, intergalactic science will be born where its development uses the stage of religious studies-anthropocentrism-dedifferentiation-integral science (Wijaya, 2020).

Philosophical Foundation of Scientific Integration of Integrated Twin Towers Model

UIN Sunan Ampel's effort in harmonizing the relationship between religion and science is by integrating the two with the integrated twin towers model. This model is a synthesis of scientific integration models developed by several state Islamic campuses, such as UIN Sunan Kalijaga Yogyakarta, with the concept of interconnection-interrelation with the spider web model, the science tree model developed by UIN Maulana Malik Ibrahim Malang and several other campuses that have first developed scientific integration both conceptually and developmentally.

Looking at the scientific integration models developed by several campuses above, there are many differences at first glance. However, the substance has something in common: to create Islamic knowledge integrated with several general sciences such as science, society, and humanities (Syam, n.d.). Several approaches to scientific integration have been developed by several experts, one of which is by John F. Haught.

John F. Haught developed four approaches: conflict, contrast, contact, and confirmation (Haught, 2004). The conflict approach views religion and science are two entities that cannot be united because both have fundamental differences. Namely, religion is based on revelation and how to obtain it using belief, while science is based on the world of reality obtained from observations and research using scientific methodology (Huda, 2017). Difficulty in combining or integrating religion and science because both negate each other (Syam, 2010). Religion does not want to be touched by a sophisticated approach, and science cannot be obtained from believing something.

The contrasting approach sees religion and science as having their territory and autonomy (Syam, 2010). So efforts to unite the two will only give birth to conflict. The difference between religion and science is also at the methodological level, where religion uses the method of belief and science uses the scientific method. Terms of the object of study are also different; for religion, the object of study is divine, mystical things, while the object of study of science is empirical (Huda, 2017).

The contact approach views religion and science as having a dichotomous dimension that cannot be united, but both have other dimensions that can be brought together (Zainiyati, 2016). In theoretical terms, religion and science do have differences, but at the level of applicative praxis in real life, the two cannot be separated anymore (Huda, 2017). In this approach, Haught wants religion and science to be aligned, juxtaposed, correlated, dialogued and interacted so that both live together in harmony (Haught, 2004). The confirmation approach views that religion and science can complement and strengthen each other (Zainiyati, 2015), (Huda, 2017). Religious beliefs can be further enhanced by using scientific explanations and discoveries, and scientific research can be developed based on religious beliefs (Syam, 2010).

Haught's scientific integration approach above apparently inspired the initiator of the integrated twin towers of UIN Sunan Ampel Surabaya. The two towers that were connected were originally two towers that stood alone. In the conflict approach, these two towers are presupposed as religion and science, which negate each other. Attempts to bring the two towers closer together only resulted in conflict because both felt the most right and the other was wrong. In the contrast approach, the two towers (religion and science) are assumed to have their autonomy and territory. Faith cannot take over the empirical realm of science and cannot encroach on the mystical-theological domain of religion. On this basis, the two towers can live close together but cannot be dialogued.

The contact approach, where two towers can coexist, then dialogue with each other. Each tower is still placed in its own strong and established autonomy, but they can be dialogued in certain situations

and conditions. At this stage, Haught does not want religion and science to merge because they have different areas and methodologies (Haught, 2004).

The next stage is the use of the inter-tower confirmation approach. Religion and science do have their basic foundations and can develop according to the character and object of study that religion and science have. But in the subsequent development, religion and science can greet each other, meet and relate to each other in a connected development (Muzakki et al., 2009). Religion and science will complement each other where there is a development of research based on faith at any given time, and religious beliefs can also be enhanced by using scientific emphasis (Zainiyati, 2016). With this way of greeting each other, religion plays its role in the development of science, which is more meaningful, and vice versa; the findings of science will increase belief in God (theological) (Huda, 2017). The form of mutual greeting can be done by seeing that one tower becomes the object of study (subject matter) and the other is used as an approach (Muhid, 2016). For more details, the following is a chart of the scientific integration process of UIN Sunan Ampel Surabaya which uses the integrated twin towers model.

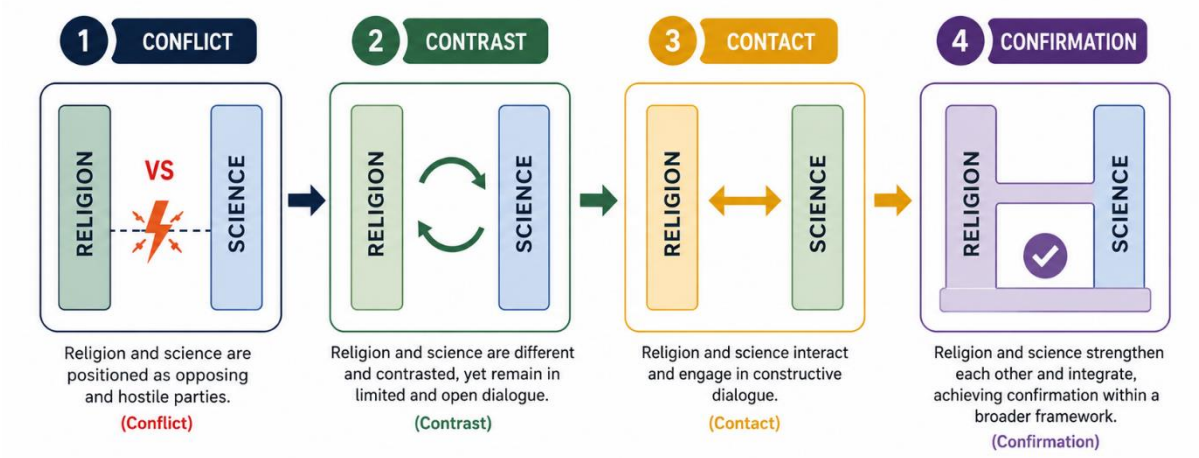


Figure 1. Models of the Relationship Between Religion and Science

From the picture above, it can be seen that at first glance, the concept of the twin towers of UIN Sunan Ampel shows the dichotomy of religion and science because the two towers look separate, giving rise to dichotomous interpretations. However, it turns out that the two towers are still connected, which indicates a close relationship between religion and science. The integrated twin towers model shows that religion, social science, science, technology, and humanities can run in balance without being superior and, under certain conditions, can greet each other and give rise to new sciences such as the sociology of religion, Islamic economics, and so on (Zainiyati, 2016).

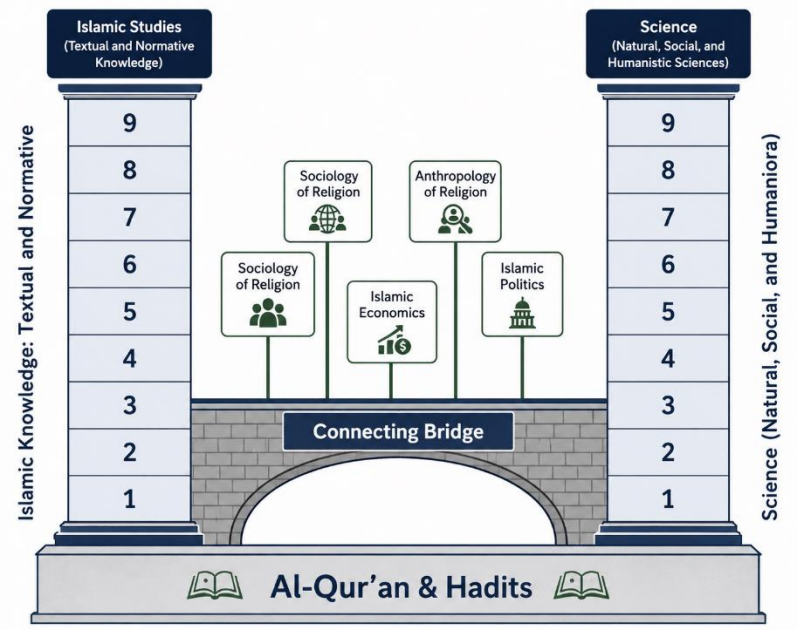


Figure 2. The Connecting Bridge Model for the Integration of Islamic Studies and Science

From the chart above, it can be explained that the two towers of religion and science are built on the sources of Islamic law, namely the Qur'an and Hadith (Zainiyati, 2015). The use of the Qur'an and hadith as the foundation of the two sciences is because, in the future social, cultural, political, natural, and humanities sciences will be developed based on prophetic values (Zainiyati, 2016).

The right tower is a tower that represents religious sciences (pure and applied Islamic sciences) such as kalam science, tafsir, hadith, da'wah science, tarbiyah science, and so on. At the same time, the left tower represents the sciences (natural sciences, socio-cultural, and humanities) (Zainiyati, 2015). Then, the two towers above were connected using a connecting ladder, later known as the connecting bridge. The connection of the two towers shows that the sciences of religion and science are greeting, mutual correction, mutual improvement, and cooperation to make new scientific breakthroughs. The form of greeting is through approaches where one discipline is used as an approach, and other disciplines are used as study targets (Muzakki et al., 2009). With this approach, science will develop, and there will be no dichotomization of science. The sciences that result from combining religion and science are multidisciplinary, interdisciplinary, and transdisciplinary (Muzakki et al., 2009). The sciences resulting from the dialogue of religion and science include religious psychology, sociology of religion, Islamic economics, religious anthropology, Islamic politics, etc (Zainiyati, 2016).

From the chart above, it can also be seen that each tower has nine floors, so when juxtaposed, the number 99 (Ninety-Nine) will be formed. It shows that all scientific processes at UIN Sunan Ampel Surabaya will be developed concerning good values as listed in the good names of Allah (asmaul husna). In addition, the paradigm of interrelated twin towers is also by the concept of the unity of knowledge as stated in the concept of tawhid (Zaman, 2019).

The goal of the development of scientific integration of UIN Sunan Ampel is the creation of graduates who are ulu al-albab (Muhid, 2016). This goal is then explained in the competency standards of graduates with intellectual wealth, spiritual maturity, and behavioral wisdom (Shubhie, 2021).

Conclusion

Scientific integration is an effort to eliminate the scientific dichotomy (religion and science). The wide separation between religion and science is because each camp claims the truth. Religion is a science that comes from revelation and how to get it through the process of belief and how to teach it with doctrine. Meanwhile, scientific knowledge results from empirical experience using specific ratios and methodologies.

The dichotomous view will continue if no way is found to reconcile it. So the concept of Islamic secularization initiated by Nurcholish Madjid, Islamization of science developed by Naquib al-Attas and Ismail Raji al-Faruqi, Islamic science initiated by Kuntowijoyo and integration of science developed by UIN Sunan Ampel Surabaya.

Scientific integration developed by UIN Sunan Ampel Surabaya carries the harmonization of religion and science with an integrated twin towers model. Religion and science are aligned at the same height. This shows that religion and science have the same degree and have their advantages and scientific autonomy. But in certain situations and conditions, the two can meet and greet each other. So from the process of greeting each other, multidisciplinary, transdisciplinary, and interdisciplinary science emerges, such as the sociology of religion, psychology of religion, Islamic economics, religious anthropology, and so on.

The concept of scientific integration was then implemented at the institutional level by giving the faculty name with an integrative character. The terms of the faculties are Faculty of Tarbiyah and Keguruan, Ushuluddin and Philosophy, Adab and Humanities, Da'wah and Communication, Sharia and Law, Faculty of Science and Technology, Faculty of Psychology and Health and Faculty of Social and Political Sciences.

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