Moderatism Paradigm of COVID-19 Prevention: Religion-Science Integration Perspective

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Abstract: One of phenomena in the handle of Covid pandemic is the polarization of religionists and scientists. This polarization occurs because the difference of paradigms from them in understanding about COVID-19. The religionists, who leans towards orthodoxy and conservatism, emphasize literal dogmatic approach, whereas the scientists emphasize on scientific approach with the principle of positivistic-materialism. This study discusses the paradigm of moderatism in COVID-19 prevention from integration of science and religion perspective. By using qualitive research and in-depth analysis based on John F. Haugt's integration theory, this study found the idea of integration between science and religion as a paradigm of moderatism in COVID-19 prevention. This is an epistemological effort in order to create dialogical relationship between science and religion. It means that both fulfill and reinforce each other thereby augmenting the agenda of COVID-19 prevention. There is a need for epistemological transformation that both sides need to undergo to achieve the agenda. Religion, which has been embodied by a literal dogmatic perspective, needs to display dynamic and contextual. So, it can compromise with the reality especially in scientific approach. In the other hands, science which has followed positivistic-materialism principles. It should not be conducted free from all values but it should contain many values, especially spiritual and theistic. In contemporary religious discourse, the integration of science and religion in the context of COVID-19 prevention is a form of moderatism in responding the COVID-19 pandemic situation in terms of thinking, attitude, or behavior. Keywords: Moderatism Paradigm, COVID-19 Prevention, Integration of Science

and Religion.

Abstrak: Salah satu fenomena menarik di tengah upaya penanganan COVID-19 adalah terpolarisasinya kalangan agamawan ortodoks dan saintis. Polarisasi tersebut terjadi karena adanya perbedaan paradigma dalam memandang COVID-19, di mana kelompok agama yang cenderung ortodoks atau konservatif lebih menekankan pendekatan dogmatis literal, sedangkan saintis menekankan pada pendekatan ilmiah dengan prinsip materialisme-positivistik. Studi ini membahas paradigma moderatisme penanganan COVID-19 perspektif integrasi agamasains. Terdapat tiga permasalahan pokok yang dikaji dalam artikel ini, yaitu; paradigma moderatisme, penanganan COVID-19, dan konsep integrasi agama-

sains. Dengan mempergunakan jenis penelitian kualitatif dan analisa mendalam berdasarkan teori integrasi John F. Haugt, tulisan ini mendapati temuan bahwa gagasan integrasi agama-sains sebagai paradigma moderatisme penanggulangan COVID-19 merupakan usaha epistemologi dalam rangka menciptakan hubungan agama-sains yang dialogis, dengan arti saling mengisi dan menguatkan sehingga dapat memperkokoh agenda penanggulangan COVID-19. Untuk dapat mewujudkannya, perlu adanya transformasi epistemologi yang dilakukan oleh keduanya. Agama yang selama ini identik dengan cara pandang dogmatif literal harus ditampilkan lebih dinamis dan kontekstual, sehingga dapat berkompromi dengan realitas di luar dirinya, termasuk dengan pendekatan sains. Pun sebaliknya, sains yang selama ini menganut prinsip materialisme-positivistik, dirinya tidak boleh dijalankan atas dasar bebas nilai, melainkan harus memuat seperangkat nilai khususnya nilai spiritualitas dan ketuhanan. Dalam diskursus keagamaan kontemporer, pengintegrasian agama dan sains dalam konteks penangggulangan COVID-19 merupakan salah satu wujud moderatisme diri dalam merespon situasi pandemi COVID-19, baik dalam berpikir, bersikap maupun berperilaku.

Kata Kunci: Paradigma Moderatisme, Penanggulangan COVID-19, Integrasi Ilmu dan Agama

INTRODUCTION

One of the crucial issues that appear in the dynamics of COVID-19 prevention is the confrontative relationship between religion and science.¹ From the scientists perspective, COVID-19 is a deadly virus that can be transmitted quickly from one place to another place. Therefore, its spread and infection need to be suppressed as soon as possible.² There are the effective ways to prevent it, strengthening immune system, getting the vaccine, minimizing direct contact, avoiding crowds, and stringently regulating social activities that attracts the masses, especially in economic, education, or religious activities. To maximize this mitigation effort,

¹ Masdar Hilmy, 'Sikap Ilmiah Menghadapi Pandemi COVID-19', *Kolom UINSA* (blog), 4 April 2020, https://w3.uinsby.ac.id/sikap-ilmiah-menghadapi-pandemi-COVID-19/.

² Perdanakusuma, 'Menyikapi Kontroversi Informasi Ilmiah COVID-19.', *Suara Merdeka News* (blog), 31 March 2020, https://suaramerdeka.news/menyikapi-kontroversi-informasi-ilmiah-COVID-19/.

facilities that may attract such crowds such as places of worship, markets, and schools need to be sterilized to prevent the COVID-19 transmission.³

Contrary with the scientists who tend to be responsive, the orthodox or conservative religionists tend to resist the idea. The orthodox argues that COVID-19 prevention should not break the religion and it should not disturb the substantial ritual religion activities. Therefore, they often disregard the COVID-19 mitigation policies that restrict worship activities, such as Jumuah prayer congregation in mosques for Muslims or church service for Christians.⁴ According to Abd Hannan, religionists who show the resistants behavior are religionits who observe normative traditions in terms of religion, which is popularly known as conservatism, a traditional way of observing religion wherein the holy scriptures and sources of religious orthodoxy as the only correct references. Because of the orthodox tendencies, they are often indifferent to various modern thoughts and issues, including COVID-19 prevention. Generally, these conservative religious groups emerge in countries that culturally and religiously have fanatical traditions and strong sentiments such as Pakistan, India, and Indonesia.⁵

Many previous study that related to the phenomenon of strife between orthodox or conservative religionists and scientists in the dynamics of COVID-19 prevention. According to Masdar Hilmy in his article *Winning the Battle of*

³ T. M. Cook, 'Personal Protective Equipment During the Coronavirus Disease (COVID) 2019 Pandemic–a Narrative Review', *Anaesthesia* 75, no. 7 (July 2020): 920–27, https://doi.org/10.1111/anae.15071; Cook; Jie Li, James B. Fink, and Stephan Ehrmann, 'High-Flow Nasal Cannula for COVID-19 Patients: Low Risk of Bio-Aerosol Dispersion', *European Respiratory Journal* 55, no. 5 (May 2020): 2000892, https://doi.org/10.1183/13993003.00892-2020; Neville Lazarus, 'Coronavirus: Millions in India Facing Hunger During COVID-19 Lockdown Measures', Sky News, 26 April 2020, https://news.sky.com/story/coronavirus-millionsof-indians-facing-hunger-during-COVID-19-lockdown-measures-11978857.

⁴ Katherine Marshall, 'Beating Coronavirus Requires Faith Leaders to Bridge Gap between Religion and Science', The Conversation, 22 April 2020, http://theconversation.com/beating-coronavirus-requires-faith-leaders-to-bridge-gap-between-religion-and-science-135388; Marshall; Monique Deal Barlow, 'Christian Nationalism Is a Barrier To Mass Vaccination Against COVID-19', The Conversation, 1 April 2021, http://theconversation.com/christian-nationalism-is-a-barrier-to-mass-vaccination-against-COVID-19-158023.

⁵ Abd Hannan and Wafi Muhaimin, 'Teologi Kemaslahatan Social-Phsycal Distancing dalam Penanggulangan COVID-19', *KURIOSITAS; Media Komunikasi Sosial dan Keagamaan* 13, no. 1 (June 2020): 78–102; Lihat juga Abd Hannan and Heny Triyaningsih, 'Mitigasi COVID-19 melalui Kearifan Lokal Pesantren di Madura' 6 (2020): 30.

Authorities: The Muslim Disputes Over the COVID-19 Pandemic Plague in Contemporary Indonesia, he portrayed the phenomenon of strife between two opposing extremities of authority: inductive logic represented by scientist groups, and deductive logic represented by conservative religionists. He stated that this turmoil eventually reveals the reality that inductive logic represented by the scientist groups, is better at finding its space among the public than deductive logic (read: religion) that has so far chosen to defy scientific reasoning as well as its yields, such as medicine, technology, and science.⁶

Fitriyah Rahmawati, *Moderatisme dan Problem Konservatisme Beragama di Tengah Pandemi Global COVID-19* examined the existence of conservative religious group that frequently set religious sacredness against COVID-19 handling. She stated that the resistive behavior exhibited by this group arises as a consequence of their religious tradition that is normative, traditional, and exclusive, making them cloistered and apathetic to the development of science and all that is derived from it. Consequently, the COVID-19 prevention conundrum will not be resolved by relying on structural tools; instead, it needs to be balanced with a cultural religious approach by imparting religious moderatism values in the lives of the people.⁷ In this context, Abdul Syatar emphasized in their article, *Darurat Moderasi Beragama di Tengah Pandemi Corona Virus*

⁶ Masdar Hilmy and Khoirun Niam, 'Winning the Battle of Authorities: The Muslim Disputes Over the COVID-19 Pandemic Plague in Contemporary Indonesia', *QIJIS (Qudus International Journal of Islamic Studies)* 8, no. 2 (31 December 2020): 293, https://doi.org/10.21043/qijis.v8i2.7670.

⁷ Fithriyah Rahmawati, 'Moderatisme dan Problem Konservatisme Beragama di Tengah Pandemi Global COVID-19', *KURIOSITAS; Media Komunikasi Sosial dan Keagamaan* 13, no. 2 (Desember 2020): 31.

Disease 2019, that moderatism can be a middle ground that can unite and reconcile the two opposing perspectives, religion and science.⁸

If those studies are examined, studies about COVID-19 prevention that relate with religious issues, always focused on the religion aspect. Even if there are those that try to explore it from the perspective of science-religion relationship like Masdar Hilmy, they mostly discuss problems at the level of reality in the field, not on the theoretic and philosophic aspects. Contrasted with the two approaches, this study examines the paradigm of COVID-19 prevention from the perspective of religion-science integration, a form of approach not commonly exercised by most researchers to capture the dynamics of COVID-19 mitigation. This concurrently becomes a unique facet of this study that is not found in previous studies. Theoretically, this research will focus on the analysis by using John F. Haugt's theory regarding the relationship between religion and science. Using that theory, this study put its positions in a perspective that is not only focused but also comprehensive. It is because the study has two different perspectives, namely religious and science perspectives.

REASULTS AND DISCUSSION

Religion-Science Dialectics in Global COVID-19 Preventive : A Description

Since the COVID-19 pandemic, the strife between religionist groups and the science world is inevitable and can even be said to happen all over the world, mainly in countries that are known to have fanatical normative religious traditions and culture as most countries in the East.⁹ Intriguingly, this phenomenon happens not only to one religion or belief, but to almost all religions in the world. Islam, Hinduism, or even Christianity have their own religious factions or groups that

⁸ Abdul Syatar and Muhammad Majdy Amiruddin, 'Darurat Moderasi Beragama di Tengah Pandemi Corona Virus Desease 2019 (COVID-19) Abdul Syatar1, Muhammad Majdy Amiruddin2, Arif Rahman2', *KURIOSITAS; Media Komunikasi Sosial dan Keagamaan* 13, no. 2 (2019): 13.

⁹ Husni Husni et al., 'Religious Community Responses to COVID- 19: Case Study on Muslim Small Community', *International Journal of Psychosocial Rehabilitation* 24, no. 08 (2020): 8.

frequently exhibit resistive behavior towards medical endeavors to handle COVID-19.¹⁰

Pakistan is one of country that got conflicts between science and religion in handling COVID-19. The majority people in Pakistan are moslems. The resistance against COVID-19 prevention is performed by ultra-conservative Moslem groups from two Islamic sects, namely Shia and Sunni. Ironically, the local government claimed inability to act authoritatively, considering that in Pakistan the ultra-conservative Muslim groups, both Shia-based and Sunni-based groups, have significant power and standing. The leader of local religious opposed government and chose to mobilize the people to still continue the religious activities in public worship. In several regions in Pakistan, such as Lahore, Jumuah prayer still does normally despite the prohibition from the local government. Consequently, clusters and crowds in many places, which not only makes the process of handling COVID-19 harder, but also increases the rate of transmission.¹¹. Beside that, Malaysia, In the 15th of March 2020, 190 cases of COVID-19 were discovered, and after an investigation by local medical authority, it was found that most of the cases originated from a cluster of Moslems gathering for Tabligh Akbar in Sri Petaling Mosque in Kuala Lumpur which was held from 28th of February to the 1st of March.¹²

¹⁰ Charles Prempeh, 'Religion and the State in an Episodic Moment of COVID-19 in Ghana', *Social Sciences & Humanities Open* 4, no. 1 (1 January 2021): 100141, https://doi.org/10.1016/j.ssaho.2021.100141; A Perciaccante, A Coralli, and P Charlier, 'Which Saint to Pray for Fighting against a Covid Infection? A Short Survey', *Ethics, Medicine, and Public Health* 18 (September 2021): 100674–100674, https://doi.org/10.1016/j.jemep.2021.100674.

¹¹ Deutsche Welle, 'Tolak Karantina, Pemerintah Pakistan Gugup Hadapi Ulama', detikNews, 1 April 2020, https://news.detik.com/dw/d-4961226/tolak-karantina-pemerintah-pakistan-guguphadapi-ulama.

 ¹² Aditya Jaya Iswara, 'Virus Corona Menyebar dari Tabligh Akbar, Malaysia Umumkan 190 Kasus Baru', KOMPAS.com, 15 March 2020,

Besides Pakistan and Malaysia, India is also strife between science and religion amidst COVID-19 mitigation. This Hinduism country, the conflict between religion and science was found in the stance of local religious leaders who chose to still conduct religious rituals amidst the threat of pandemic that was yet to be fully restrained. One of the rituals that attracted the most attention from the world is the festival of Kumbh Mela.¹³ In Hindu tradition, Kumbh Mela is the biggest yearly religious event spanning three days held in the Ganges by the village of Kumbh of the city of Allahabad.¹⁴ In every celebration, the festival attracts millions of pilgrims called Kalpwasis. The conducting of the great ritual of Kumbh Mela back in early April is claimed by many observers to amplify the rate of COVID-19 transmission in India. In the Kumbh Mela festival, million of people crammed the Ganges each day, bathing together with no regard for the existence and transmission of COVID-19. As a result, a few days after the ritual of Kumbh Mela, the number of positive cases of COVID-19 skyrocketed and even managed to record 400 thousand cases per day. Because of the situation, India underwent a state of emergency, starting from the crisis of medical personnel and facilities to the rise of the mortality rate.¹⁵

The religion-science conflict was also found in South Korea, specifically in the congregation of monks, nuns, clergymen, and clergywomen of a certain religious group called *Shincheonji Church of Jesus*, a cult claiming to be a part of Catholicity that have branches in 29 countries. North Korea, competitor country, was in the middle of a struggle against the assailing COVID-19, this religious

https://www.kompas.com/global/read/2020/03/15/180803970/virus-corona-menyebar-dari-tabligh-akbar-malaysia-umumkan-190-kasus-baru.

¹³ Tommy Beer, 'India's Daily Covid Cases Soar Past 400,000 As Crisis Deepens', Forbes, 1 May 2021, https://www.forbes.com/sites/tommybeer/2021/05/01/indias-daily-covid-cases-soar-past-400000-as-crisis-deepens/.

¹⁴ Lazarus, 'Coronavirus'; aljazeera.com, 'India Covid Cases Soar as Oxygen, Vaccine Shortages Persist', aljazeera.com, 3 May 2021, https://www.aljazeera.com/news/2021/5/3/india-covid-cases-soar-as-oxygen-vaccine-shortages-continue.

¹⁵ Beer, 'India's Daily Covid Cases Soar Past 400,000 As Crisis Deepens'; 'COVID-19: India Coronavirus Cases Soar Past 20 Million with Health System on Brink of Collapse', Sky News, accessed 11 May 2021, https://news.sky.com/story/COVID-19-india-coronavirus-cases-soar-past-20-million-with-health-system-on-brink-of-collapse-12294499.

group chose to refuse to cancel their congregation.¹⁶ In their belief, this ailment is a part of sin. People will be cured if they often go to Mass in Church. Some days after the congregation, 'Patient 31' in the country was confirmed to be a member of *Shincheonji Church of Jesus* who went to Mass. The positive COVID-19 cases in South Korea underwent a rise from 30 to 977 cases in the span of only eight days.¹⁷

In the United States, a country that hold rationality and secularism highly, there also emerges strife between religion and science in countering COVID-19. The Evangelicals, a local conservative Protestant sect, defy the advice and guideline issued by the government to avoid clusters and crowds in religious activities openly. They hold Mass in their church attended by hundreds of congregation members stubbornly.¹⁸ In the United States, the Protestant group, Evangelicals, is not only known to be a group that is resistant towards COVID-19 prevention programs but also deems COVID-19 as part of a global political conspiracy. So, this community instructs their followers not to participate in any form of COVID-19 prevention, the use of masks, social-distancing, and vaccination.

¹⁶ Min Joo Kim, 'South Korea Closes Shincheonji Church in Daegu Coronavirus Outbreak - the Washington Post', https://www.washingtonpost.com/, 23 February 2020, https://www.washingtonpost.com/world/asia_pacific/south-korea-orders-temporary-shutdown-of-messianic-church-linked-to-more-than-half-the-countrys-coronavirus-cases/2020/02/23/728278f0-5650-11ea-8efd-0f904bdd8057_story.html; Sungchan Kim et al., 'Evaluation Of COVID-19 Epidemic Outbreak Caused by Temporal Contact-Increase in South Korea', *International Journal of Infectious Diseases* 96 (1 July 2020): 454–57, https://doi.org/10.1016/j.ijid.2020.05.036.

¹⁷ Staff and agencies, 'South Korean City on High Alert As Coronavirus Cases Soar at "Cult" Church', the Guardian, 20 February 2020, http://www.theguardian.com/world/2020/feb/20/south-korean-city-daegu-lockdown-coronavirus-outbreak-cases-soar-at-church-cult-cluster; BBC News, 'Coronavirus: South Korea Church Leader Apologises for Virus Spread', *BBC News*, 2 March 2020, sec. Asia, https://www.bbc.com/news/world-asia-51701039.

¹⁸ Peter McLaren, 'Religious Nationalism and the Coronavirus Pandemic: Soul-Sucking Evangelicals and Branch Covidians Make America Sick Again', *Postdigital Science and Education*, 19 May 2020, 1–22, https://doi.org/10.1007/s42438-020-00122-7.

In Indonesia, the phenomenon of religion-science conflict amidst COVID-19 countermeasure is reflected clearly in the frequency of religious activities despite other groups intense effort on handling COVID-19. Even when COVID-19 still exist in Indonesia, the problem of crowds formed from religious events drew special attention from the government, because worship activities were still being held despite the advice and recommendation to avoid crowding in public or places of worship. As a result, religious groups that were headstrong in holding religious rituals in public places eventually became a new cluster of virus transmission that contributed to the nationwide rise and widespread of COVID-19. In Indonesia's case, the strife between religion and science is considered to be complex since it involves not only one but also many religions, Islam, as the predominant religion, or other religions such as Christianity.

Among Muslims, the strife between religion and science in Indonesia can be found in the activity *Ijtima' Ulama*. The international congregation conducted by Tablighi Jamaat in Gowa, South Sulawesi. In this event, there were 8000 individuals from various backgrounds and countries. Eventhough, the event was terminated succesfully, according to the investigation carried out by the medical team on the participants who went to the event, a number of participants tested positive for COVID-19, thereby creating a cluster of nation-wide COVID-19 transmission.¹⁹ The most recent and scrutinized example is the celebration of Mawlid and the marriage event that was held by a non-active leader of the mass organization Islamic Defenders Front, Muhammad Rizieq Shihab, in the region of Petamburan, Central Jakarta (14/11).²⁰ Beside Pertamburan, the crowded religious events amidst the implementation of 'new normal' were also held in Bogor Regency, West Java, in *Markas Syariah Pesantran Alam Agrokultural*,

¹⁹ CNN Indonesia, 'Ijtima Dunia Di Tengah Corona, 5 Ribu Orang Tiba Di Gowa', CNN Indonesia, 18 March 2020, https://www.cnnindonesia.com/nasional/20200318213110-20-484752/ijtima-dunia-di-tengah-corona-5-ribu-orang-tiba-di-gowa; Rachmawati, 'Menyoal Klaster Ijtima Ulama Gowa, Dari Peserta, COVID-19 Menyebar Di Jawa Tengah Hingga Kalimantan', 25 April 2020, https://regional.kompas.com/read/2020/04/25/09390001/menyoal-klaster-ijtima-ulama-gowa-dari-peserta-COVID-19-menyebar-di-jawa?page=all.

²⁰ Arkhelaus Wisnu Triyogo, 'Kasus Kerumunan Petamburan, Polda Metro Jaya Resmi Menahan Rizieq Shihab', Tempo, 13 December 2020, https://metro.tempo.co/read/1413942/kasus-kerumunan-petamburan-polda-metro-jaya-resmi-menahan-rizieq-shihab.

Megamendung (Sharia Headquarters Agricultural Natural Boarding School, District of Megamendung).²¹ In the event, no less than 3000 people gathered without regard for health protocols, thereby making the spread and transmission of COVID-19 to worsen. As expected, a few days after the event, as many as 77 people that attended the event in Pertamburan, Tebet, and Megamendung were confirmed to have contracted COVID-19.²²

Besides Muslim religionists, religion-science conflict in Indonesia can also be found among the Christians. In Kupang, East Nusa Tenggara (NTT), more than 1500 people gathered to attend the ordination ceremony of Mgr. Sipianus Hromat as the Bishop of Ruteng. Similar problem also happened in Gowa and NTT also took place in a Catholic Church in Surabaya. The Bishop of the Church chose to hold Church service normally, stating that the congregation members already had strong immune system to do activities of worship in public.²³ As a result, a couple of day after the religious activity, the people who attended the ritual are confirmed to have contracted COVID-19, forming a new COVID-19 cluster and making the spread of COVID-19 in Surabaya even more rampant.

If the occurrences above are observed, be it those that happened on a global scale or inter-religiously, the phenomenon of religionists groups' resistant behavior towards endeavors in response to COVID that is implemented by the

 ²¹ Agie Permadi, 'Kasus Kerumunan Di Megamendung, Polisi Panggil Ahli Untuk Dimintai Pendapat', https://bandung.kompas.com/, 15 December 2020, https://bandung.kompas.com/read/2020/12/15/12454071/kasus-kerumunan-di-megamendung-polisi-panggil-ahli-untuk-dimintai-pendapat.
²² Rahman Cahyadi : Iman, 'Total Ada 77 Orang Positif COVID-19 Dari Kegiatan Di Petamburan,

²² Rahman Cahyadi : Iman, 'Total Ada 77 Orang Positif COVID-19 Dari Kegiatan Di Petamburan, Tebet Dan Mega Mendung', https://www.beritasatu.com/, 20 November 2020, https://www.beritasatu.com/kesehatan/700783/total-ada-77-orang-positif-covid19-dari-kegiatandi-petamburan-tebet-dan-mega-mendung.

²³ Robertus Belarminus, 'Ini Alasan Misa Penahbisan Uskup Ruteng Tak Bisa Ditunda', KOMPAS.com, 19 March 2020, https://regional.kompas.com/read/2020/03/19/12213691/ini-alasan-misa-penahbisan-uskup-ruteng-tak-bisa-ditunda.

governments through medical approach can be seen as a discord between religion and science. On the one hand, science that is represented by medicine and scientific knowledge sees COVID-19 as an infectious virus, capable of transmission from one place to another through contact, be it direct or indirect through nonliving mediums. Therefore, scientist groups thinks if vaccine is not yet found by the medical world, so the most realistic means of combating the virus' assault is by implementing health protocols, wearing masks, and socialphysical distancing in the form of avoiding and dispersing crowds in public or places of worship such as mosques, churches, shrines, temples, etc. On the other hand, for the religionist groups, what is done by scientist groups cannot be fully accepted because they think that it annuls the existence of religions. In their perspective, religion is the bastion that keeps all kinds of malady, including COVID-19, at bay. Therefore, the role of religion cannot be cast aside especially its learnings or its rituals.

COVID-19 and Religion-Science Relationship: A Theoretical Perspective

The research about religion and science relationship is not something new, especially in academics about reasoning.²⁴ However, the discourse about religion and science relationship has not ultimately found its point of convergence that can position it at the same perspective although such studies have been done before.²⁵ It can be expected from their attributes and characteristics, which have various differences epistemologically and ontologically.²⁶ Epistemologically, the conceptions of religion and science have a significant difference. Religion is believed to be a reality full of sacredness containing theological values and learnings that originate from divine passages in the form of holy scriptures.

²⁴ Islah Gusmian, 'Mengurai Benang Kusut Hubungan Sains dan Agama', n.d., 20.

²⁵ Syarif Hidayatullah, 'Relasi Agama dan Sains dalam Pandangan Mehdi Golshani', *Jurnal Filsafat* 27, no. 1 (31 March 2017): 65, https://doi.org/10.22146/jf.21972.

²⁶ Samsul Hidayat, 'Sacred Science vs. Secular Science: Carut Marut Hubungan Agama dan Sains', *KALAM* 8, no. 1 (1 July 2014): 87, https://doi.org/10.24042/klm.v8i1.169.

Conversely, science is more of a product of human's realm of thoughts, a laical reality conceived from the reasoning process of man.²⁷

If religion is identical with anything of transcendental nature, so science is identical with profane realities. Because of contrasting natures, science and religion are frequently in dialectic relation. At certain times, especially in medieval and preceding eras, science underwent periods of ostracization due to authoritative religious pressure.²⁸ The same applies to religion, when it was cast aside due to the domination of science during the renaissance and aufklarung in the 17th and 18th centuries.²⁹ And now, amidst a multifaceted social crisis due to COVID-19 onslaught, the dialectics of religion and science once again finds their space, specifically in the heated dispute between medical perspective and religionist groups, namely conservative-fundamentalist groups. In general, the aforementioned dialectics encompasses the stances and approaches of the two sides in response to COVID-19, that on the one hand, emphasizes medical paradigms such as social and physical distancing, while on the other hand casting aside religious roles. Masdar Hilmy (2020) identified such phenomenon as a struggle between two logics of thought, namely scientist's inductive logic and religionists' deductive logic.³⁰

Theoretically, John F. Haugt's explained that the relation between religion and science essentially has four patterns; conflict, contrast, contact, and confirmative patterns.³¹ Based on their dispositions, the four patterns can be

²⁷ Donny Gahral Adian, *Percik Pemikiran Kontemporer* (Yokyakarta Bandung: Jalasutra, 2005).

²⁸ Listyono Santoso, *Epistimolofi Kiri* (Yogyakarta: ar-Ruzz Media, 2012).

²⁹ Wira Hadikusuma, 'Mendialogkan Sains dan agama dalam Upaya Resolusi Konflik', *Syi'ar* 17, no. 1 (2017): 12.

³⁰ Hilmy and Niam, 'Winning the Battle of Authorities'.

³¹ John Braverman, 'Science and Faith: A New Introduction by John F. Haught', *Theology Today* 72 (1 July 2015): 236–37, https://doi.org/10.1177/0040573615578383a.

divided into two categories, namely collaborative, in the sense that there is a synergy between the two; and confrontative, wherein the two negates each other.³² In conflict pattern, science and religion is seen as realities that are not only different but also the exact opposite of each other so it cannot be unified.³³ Religion always has normative values that produced by holy scriptures. Conversely, science has a dynamic nature, originating from traditions and customs conceived through social activities in daily human life. Due to such stark difference, religion and science are constantly at odds. Similar to the conflict pattern is the contrast pattern. In this relationship pattern, religion and science are perceived as two differences in various aspects although they do not necessarily negate or oppose each other, especially in the conflict approach.³⁵

If the assumption of conflict and contrast theory are applied in this study and they are related to the relationship of science and religion in the dynamics of COVID-19 prevention, it can explain the phenomenon of religion and science dialectics actually emerged in COVID-19 countermeasure endeavors. In this context, resistive behavior, both in the form of thoughts or actions that are shown by religionist groups in many countries all over the world. This behavior can be perceived as part of the conflicted relationship between the assumption of conflict and contrast theory that is applied in this study. Meanwhile, the relationship of science and religion in the dynamics of COVID-19 prevention can explain the phenomenon of religion and science dialectics actually that emerged in COVID-19 countermeasure endeavors. As indicated earlier, on a lot of occasions the responses from religion and science towards COVID-19 countermeasures are not

³² Robert J. Deltete, 'John F. Haught: God and the New Atheism: A Critical Response to Dawkins, Harris, and Hitchens', *Philosophy in Review* 30, no. 6 (October 2010): 404+.

³³ Matthew Rellihan, 'John F. Haught: Making Sense of Evolution: Darwin, God, and the Drama of Life', *Philosophy in Review* 31, no. 1 (February 2011): 42+; Maksudin Maksudin, 'Transformasi Pendidikan Agama dan Sains Dikotomik ke Pendidikan Nondikotomik', *Jurnal Pendidikan Islam* 4, no. 2 (1 December 2015): 277, https://doi.org/10.14421/jpi.2015.42.277-298.

³⁴ John F Haught, *Is Nature Enough?: Meaning and Truth in the Age of Science* (Cambridge: Cambridge University Press, 2006).

³⁵ Paul J. Cech, 'John F. Haught: Deeper Than Darwin: The Prospect for Religion in the Age of Evolution', *Isis* 96, no. 3 (1 September 2005): 467–68, https://doi.org/10.1086/498810.

merely different but hey are opposing and aggravating each other. In certain moments, science through sophistication and its modern nature perceives COVID-19 as an infectious disease that threatens human wellbeing, therefore it needs extra stringent countermeasure and response, likes the implementation of large-scale restriction on social activities, including socio-religious affairs. At the same time, leaders and followers of religion consider the handling of COVID-19 by limiting and constricting religious events is exaggerated. According to this group, religion is a sacred and superior reality that cannot be cast aside, moreover, if it is regarding principles such as prayer in mosques, mass in church, etc. As indicated earlier, on a lot of occasions the responses from religion and science towards COVID-19 countermeasures are not merely different, they are opposing and aggravating each other.³⁶

Different from the two previous approaches (conflict and contrast) are the contact and confirmation approaches. In the contact approach, despite the difference of religion and science, there are certain boundaries wherein they share similarities thereby allowing them to establish contact. Such similarities arise due to both of them being perceived as social realities that take place amid people's life, be it as systems, values, or outlooks on life. Relatively similar to the contact pattern is the approach of confirmation.³⁷ Linguistically, confirmation means consent, ratification, accentuation, and or corroboration. In this sense, science and religion not only have similarities, they also corroborate each other. Religion and all its moral teachings, on one hand can be used as a counterbalance to science.

³⁶ Abdul Mu'ti, 'Religious Communities Join Fight against COVID-19 - Opinion - The Jakarta Post', The Jakarta Post, 12 June 2020, https://www.thejakartapost.com/academia/2020/06/12/religious-communities-join-fight-against-COVID-19.html.

³⁷ Muhammad Yunus, 'Integrasi Agama dan Sains: Merespon Kelesuan Tradisi Ilmiah di PTAI', *INSANIA : Jurnal Pemikiran Alternatif Kependidikan* 19, no. 2 (1 January 1970): 284–313, https://doi.org/10.24090/insania.v19i2.717.

Similarly, science as the incarnation of human mind's creativity can be used as a medium of the transformation of religious values. The dimension in religion that are previously characterized with things that are mystic, abstract, and unseen, can be made sense, or even proven through logical reasoning. With that proof, religion and science will no longer be in a confrontative relationship, but a dialogic and corroborative relationship.³⁸

Different from the two previous approaches (conflict and contrast), in the contact approach, there are certain boundaries wherein they share similarities despite the difference between religion and science, thereby allowing them to establish contact. Such similarities arise due to both of them being perceived as social realities that take place amid people's life, be it as systems, values, or outlooks on life. Meanwhile, the contact pattern is relatively similar to the approach of confirmation. Linguistically, confirmation means consent, ratification, accentuation, and or corroboration. In this sense, science and religion not only have similarities, but they also corroborate each other. Religion and all its moral teachings, on one hand, can be used as a counterbalance to science. Similarly, science as the incarnation of the human mind's creativity can be used as a medium of the transformation of religious values. The dimension in religion that is previously characterized with things that are mystic, abstract, and unseen, can be made sense, or even proven through logical reasoning. With that proof, religion and science will no longer be in a confrontative relationship, but they are more like a dialogic and corroborative relationship.

Religion-Science Integration as the Ideal Type of COVID-19 Preventive

As part of contemporary scientific epistemology, the discourse of religionscience integration is not a new topic. There are countless intellectuals, both theologs, and pure scientists, that have studied it thoroughly. Several of those intellectuals are Mehdi Gholzani, Ismail Rajih al-Fariqo, Armahedi Azhar, John F.

³⁸ Hadikusuma, 'Mendialogkan Sains dan agama dalam Upaya Resolusi Konflik'; Chanifudin Chanifudin and Tuti Nuriyati, 'Integrasi Sains dan Islam dalam Pembelajaran', *ASATIZA: Jurnal Pendidikan* 1, no. 2 (12 May 2020): 212–29, https://doi.org/10.46963/asatiza.v1i2.77.

Haugt, and Mohammed Arkoun. In Indonesia, the discourse regarding the integration of religion and science emerges mostly from academists under the wings of Islamic higher education institutions. An example of such discourse is the integration-interconnection idea by Amin Abdullah which eventually became the scientific paradigm in the State Islamic University Sunan Kalijaga, Yogyakarta. Nevertheless, many figures have discussed the concept of religion-science integration, in the context of the religion-science relationship in COVID-19 countermeasure. Therefore, this study will focus on using the concept proposed by Ian G. Barbour.

In the study of contemporary epistemology, Ian G. Barbour is known as a scientist who dabbles in two areas as both a doctor of theology and a scientist. With such background, Ian G. Barbour devotes his time to examining and formulating religion-science relations. In his book titled When Science Meets Religion, Barbour formulated the relationship between religion and science into four (4) patterns, one of which being integration patterns.³⁹ According to Barbour, in the integration pattern, both science and religious doctrines contain truth, and therefore both are relevant as guidelines to solve problems in human life. Even though science and religion occupy different epistemological spaces, both share similarities that enable them to meet at the same point and even fulfill and corroborate each other. To achieve this harmonious relationship, Barbour proposed two important concepts, 1) natural theology, derived from the

³⁹ F. LeRon Shults, 'When Science Meets Religion: Enemies, Strangers or Partners? By Ian G. Barbour San Francisco, HarperSanFrancisco, 2000. 205 Pp. \$16.00', Theology Today 58 (1 October 2001): 434-35, https://doi.org/10.1177/004057360105800318; Mahfudz Junaedi, 'Mengkritisi Tipologi Hubungan Sains Dan Agama Ian G. Barbour', Manarul Our'an: Jurnal Ilmiah Studi Islam 18 (1 December 2018): 36–63, https://doi.org/10.32699/mg.v18i2.939; Willem Drees, 'Fifty Years in Science and Religion: Ian G. Barbour and His Legacy', Ars Disputandi: The Online Philosophy Journal for of Religion 6 (1)Januarv 2006). https://doi.org/10.1080/15665399.2006.10819936.

assumption that the existence of God can be manifested in the present nature. It means that everything in the universe, its complexity, beauty, uniqueness, and all the dynamics, and problem possesses hint at the existence and attribute of God. Therefore, everything that is set in motion in the universe needs to represent and pay heed to the values of religion as a form of reverence and obedience towards God; 2) theology of nature, is a model of theology that is open and welcoming to scientific concepts and theory obtained from human interpretation and analysis which is contained in the universe. It means that every religious doctrine can be formulated into science and its derivatives. This type of theology enables religion to be inclusive of the capability of mind along with what it produces. Thus, religion within which contains a set of moral teachings can be used as a controller, so that science can be conducted on the right track.⁴⁰

In the context of the discourse of religion and science relationship, there is an outlook that one of the contrasting fundamental aspects between religion and science is located in the aspect of methodology, namely the literal normativism in religion and the scientific materialism in science. In the normative and literal perspective, religion positions as the sole authoritative guideline of living which science and all its derivatives should obey as the supreme law.⁴¹ Conversely, scientific materialism paradigm claims to be the core of truth, concentrating on the objectivity of the concept of positivism thereby annulling the existence and meaning of religion. In the perspective of positivism, science and its group always discuss using the framework of logic and rationale, while religion tends using otherworldly semantics and submission to abstract power, which makes one out to be weak and powerless.⁴² Responding to this epistemological difference, Barbour emphasizes that there is no fundamental issue in terms of methodology because

⁴⁰ Frederick Ferré, 'Ian G. Barbour: Technology, Environment and Human Values', *Environmental Ethics* 5 (1 January 1983): 367–70, https://doi.org/10.5840/enviroethics19835419; J Monserrat, 'Science, Process Philosophy and God in the Thought of Ian G. Barbour', *Pensamiento* 60 (1 January 2004): 33–66.

 ⁴¹ Zulkifli Zulkifli et al., 'Plural Conceptions of Integration of Science and Religion', *TARBIYA Journal of Education in Muslim Society* 7 (28 December 2020): 142–57.
⁴² Hidayat, 'SACRED SCIENCE vs. SECULAR SCIENCE'; Hadikusuma, 'Mendialogkan Sains

⁴² Hidayat, 'SACRED SCIENCE vs. SECULAR SCIENCE'; Hadikusuma, 'Mendialogkan Sains dan agama dalam Upaya Resolusi Konflik'; Haught, *Is Nature Enough?: Meaning and Truth in the Age of Science*.

both religion ands science acknowledges the plurality of methodology based on the two aforementioned integrative concepts, namely natural theology and theology of nature. Therefore, the variety of methods in both science and religion cannot be perceived as a form of opposition and dissention. It should rather be seen as mutualistic realities that corroborate and complement each other in order to achieve a shared goal, which is to create sustenance for the continuation of humankind (*rahmatan lil'alamin*).⁴³

The explanation above is problem in this study, the idea of sciencereligion integration can be the ideal concept essentially to formulate a model for handling COVID-19. In Corona case almost every all scientists agree that this disease is an infectious virus that can be transmitted from one individual to another. To prevent it, we amidst the scarcity of medical equipment and vaccine, some of the means are implementing health protocols, maintaining hygiene by washing hands, and so on. From the perspective of religion-science integration, the recommendation to maintain hygiene in response to COVID-19 is not anything new, because it is stated theologically that maintaining purity of self is part of religious teachings and in some occasions may be imperative (*wajib*).⁴⁴ In Islam, for example, before one prays to the Almighty, people must cleans themselves of all impurities (*najis*) light or extreme. The urging to abide by the health protocol cannot be understood simply as obedience to medical advice, instead it needs to be recognized as a form of self-awareness in actualizing

⁴³ Monserrat, 'Science, Process Philosophy and God in the Thought of Ian G. Barbour'; Robert Russell, 'Launching the Ian G. Barbour Lectureship in Religion and Modernity', *Theology and Science* 6 (1 May 2008): 123–25, https://doi.org/10.1080/14746700801976809.

⁴⁴ Wa Ode Zainab Zilullah Toresano, 'Integrasi Sains dan Agama: Meruntuhkan Arogansi di Masa Pandemi COVID-19', *MAARIF* 15, no. 1 (30 June 2020): 231–45, https://doi.org/10.47651/mrf.v15i1.87; Abdul Rosyid, 'Pergeseran Paradigma Agama dan Sains di Tengah Pandemi Covid Dalam Kaca Mata Thomas Kuhn' 4 (2020): 21; Lihat juga Hannan and Triyaningsih, 'Mitigasi COVID-19 melalui Kearifan Lokal Pesantren di Madura'.

religious values and teachings. Therefore, the implementation of health protocol regulations in the COVID-19 handling and countermeasure agenda cannot be dominated by the use of a singular approach in the form of science, rather it needs to consider spiritual approach based on religious values and learnings.

The endeavor to integrate religion as a role model for handling COVID-19 is not a simple task although judging on the response of religionists in the last few months. In practice, this idea is confronted by various problems, specifically it related to religionist groups that are still stuck in dogmatic-traditionalist mindset. Religious paradigm that is rather rigid makes this group frequently exhibit exclusivist behavior, suspecting science as part of secularist project that is put into action by certain group(s) to encroach upon the existence of religion (read: conspiracy).⁴⁵ Because of this perspective, it is no wonder that this group is having a hard time making peace with the current reality as well as the social changes that happened within it, including several health protocols in the midst of a pandemic-borne social crisis. In many countries, dogmatic-traditionalist behavior in adhering to religion often leads to arrogant behavior like stubbornly forcing to conduct religious activities in public despite the prohibition by the authority. Responding to such situation, various religious ideas are proposed, one of which is to strengthen moderatism values. It is believed that the unique characteristics of moderatism embodied by dynamic, inclusive, and contextual religious behavior can be a solution to the problem of relationship between religion and science that surface in the global effort to handle COVID-19.

Moderatism Paradigm of COVID-19 Prevention, Religion-Science Integration's Perspective

Conceptually, the term paradigm has been introduced for the first time by Thomas Kuhn with title The Structure of Scientific Revolution (1962). According to Kuhn, paradigm is a way of comprehending social reality constructed using

⁴⁵ Hannan and Muhaimin, 'Teologi Kemaslahatan Social-Phsycal Distancing dalam Penanggulangan COVID-19'; Lihat juga Rahmawati, 'Moderatisme dan Problem Konservatisme Beragama di Tengah Pandemi Global COVID-19'.

certain mode of thought or mode of inquiry which will then yield a specific mode of knowing.⁴⁶ Different than Thomas Kuhn's opinion, George Ritzer (1975) stated that paradigm is a fundamental outlook on what is the crux of the matter that needs to be studied. Paradigm acts as a window for scientist to examine a matter systematically and in a structured manner, how they objectively comprehend and interpret certain concepts, assumptions, and categories so that they obtain the as objective an answer as possible.⁴⁷ Therefore, understanding moderatism as a paradigm, it means that positioning moderatism as the most basic religious foundation. It as a way of thinking, acting, or behaving. The big question is how to comprehend moderatism as the paradigm of COVID-19 prevention?

Moderatism means the state of being moderate. In the Great Dictionary of the Indonesian Language, the term moderate has three definitions which are always avoiding extreme behavior or dialogue; tendency towards neutrality or the middle ground; capable of compromising with other point of view.⁴⁸ In a religious context, the term moderate indicates the religious tradition that doesn't adopt the normative dogma of the right-wing radical fundamentalist groups and the extreme-leftist teachings of secular-liberalist groups.⁴⁹ In Islam, religious

⁴⁶ Gopesh Anand, Eric Larson, and Joseph Mahoney, 'Thomas Kuhn on Paradigms', *Production and Operations Management* 29 (1 April 2020), https://doi.org/10.1111/poms.13188; Malcolm Forster, *Précis of Thomas Kuhn's The Structure of Scientific Revolutions*, 2021, https://doi.org/10.13140/RG.2.2.14896.48646; Ismail Mseer, 'Escaping Patterns; Reading in Thomas Kuhn Paradigm', *Review of Arts and Humanities* 3 (1 January 2014), https://doi.org/10.15640/rah.v3n3-4a5.

⁴⁷ Oliver Dimbath, 'George Ritzer, Introduction to Sociology', *Soziologische Revue* 37 (8 July 2014), https://doi.org/10.1515/srsr-2014-0060; Suci Fajarni, 'Integrasi Tipologi Paradigma Sosiologi George Ritzer Dan Margaret M. Poloma', *Jurnal Sosiologi Agama Indonesia (JSAI)* 1 (31 July 2020): 132–47, https://doi.org/10.22373/jsai.v1i2.554.

⁴⁸ Abd Hannan, 'Moderatisme dan Problem Konservatisme Beragama di Tengah Pandemi Global COVID-19', *Jurnal KURIOSITAS; Media Komunikasi Sosial dan Keagamaan* 13, no. 2 (Desember 2020): 31.

⁴⁹ Zainuddin Syarif and Abd Hannan, 'Islamic Populism Politics and Its Threat to Indonesian Democracy', *Al-Tahrir: Jurnal Pemikiran Islam* 20, no. 2 (2020): 251–77.

moderatism is generally identified by religionists as the religion practice that highly advocates four essential values, namely *al-adâlah* (just), *al-tawassut* (median), *al-tawâzun* (balance), and lastly *al-tasâmuh* (tolerant).⁵⁰

Related to this study, the definition of moderatism in an effort to mediate the polemic or contradiction between religion and science consists of two points. First, moderatism as a way of thinking, in relation to how one should perceive the COVID-19 prevention endeavor. Amidst the threat of multifaceted social crisis due to COVID-19, it is essential for society to construct the same perception that COVID is a disastrous threat to the existence and continuation of the order and life of mankind. Thus, the awareness and synergy from all parties or society to restrain their own ego is necessary. Both scientific and religious approaches must not try to dominate or belittle the role of each other. If, the philosophical construct of science has built upon scientific materialism that upholds value-free principle adopted by positivist-modernist groups, then in this moderatism paradigm, science must contain a set of values, be it oriented in humanity, moral, virtue, or even religion, without casting away its objectivity. In the case of religionist groups, religion has been synonymous with literal-traditionalist dogma needs to be comprehended in a more critical and contextual manner. So, the lessons and teachings contained within can be made more relevant with the development of the era, including science. Ian G. Barbour's perspective about integration theory, this effort is known by the term theology of nature, a model of theology that is open and welcoming of scientific concept that is obtained from human interpretation and study of their environment and the universe.⁵¹ Religious and godly values instilled in science and religion being open to science and its products will make their relationship more dialogic and harmonious.

⁵⁰ Greg Barton and Greg Fealy, "Introduction". In Nahdlatul Ulama, Traditional Islam and Modernity in Indonesia, Edited by Greg Barton and Greg Fealy (Clayton: Monash Asia Institute, Monash University, 1996); Nurul Faiqah and Toni Pransiska, 'Radikalisme Islam Vs Moderasi Islam: Upaya Membangun Wajah Islam Indonesia yang Damai', Al-Fikra: Jurnal Ilmiah Keislaman 17, no. 1 (3 July 2018): 33, https://doi.org/10.24014/af.v17i1.5212.

⁵¹ Shults, 'When Science Meets Religion: Enemies, Strangers or Partners? By Ian G. Barbour San Francisco, HarperSanFrancisco, 2000. 205 Pp. \$16.00'; G. Yarnold, 'Book Review:Issues in Science and Religion Ian G. Barbour', *Journal of Religion* 48 (1 April 1968), https://doi.org/10.1086/486124.

Secondly, moderatism as a guideline for disposition and demeanor. Regarding how people should act or behave following the implementation of health protocols during the COVID-19 pandemic. It is imperative that amidst the state of emergency due to the COVID-19 plague, the concept of religion-science integration in the effort to handle COVID-19 should be applied in daily life. Both religionists and scientists must pioneer or spearhead the battle against COVID-19. Religionists have the theological responsibility to enlighten the masses. There is no inconsistency between COVID-19 countermeasure system and religious scriptures. Religion advises its followers to maintain hygiene and avoid all forms of malady and harm. Through this theological explanation, there is a chance that the people may develop better awareness in the implementation of health protocols in all activities that they do, including religious rituals. That is also the case for scientists. In modern era, whether acknowledged or not, scientists play a central role and function in the social transformation process of the people. Regarding COVID-19 prevention, scientists need to emerge along with their objectivity while also adopting spiritual and humanitarian values. Harmony between religion and science in the process of COVID-19 mitigation is one manifestation of the integration, which will lead to the conception of a moderate mindset in responding to COVID-19 handling.

CONCLUSION

It should be acknowledged that the polarized relationship between religion and science while countries all over the world are undergoing crisis due to the COVID-19 pandemic has created a separate problem to the process of handling COVID-19. Science and its materialistic outlook views COVID-19 as an infectious disease that can be transmitted from one place to another. The most effective way to prevent it is vaccination, avoiding crowds, and calling off social

activities that may potentially attract crowds, such as religious social activities. Conversely, at the same time, orthodox religionist groups with their literal dogmatic paradigm deems that science is exaggerating the matter, since their outlook overlooks religion, as well as its rituals. To mediate the polarization of these two perspectives, the concept of religion-science integration is conceived with its one and only aim being harmonization so that the two perspectives break out of their confrontational deadlock. Theoretically, the concept of religionscience integration paradigm is based on the fact between science and religion innately share similarities. It can be found in the functions of religion, one of which is to act as the theology of nature. From the perspective of theology of nature, religion will have better capability in dialogically relating to all the social reality and changes developing in its environment, including the development of scientific concepts and theories pertaining COVID-19 preventions. Religious values is being instilled in science and all its derivatives will have significant implications on the creation of an integrated relationship between religion and science. In contemporary socio-religious discourse, the integration of religion and science in the endeavor against COVID-19 is one of the embodiments of moderate behavior in the midst of social crisis caused by the threat of COVID-19. In the context of COVID-19 prevention, behaving moderately means that not egotistically forcing one's own perspective but combining the differing viewpoints and finding the middle ground. In this regard, it is achieved by using a scientific approach based on scientific characteristics and religious approach with religious and spiritual values as its foundation. For scientists, being moderate necessitates the presence of values, in the sense that science and its products, such as medicine and technology. It must not be devoid of values and must instead contain values, especially in the aspect of spirituality and theology. Whereas for religionists, being moderate necessitates an inclusive and contextual religious understanding that always display dialogic behavior in the face of contemporary social changes and development, including in the aspect of science. Nevertheless, outside of the aforementioned findings, this study still retains several shortcomings and weaknesses, especially in the aspect of field data presentation. The researcher acknowledges that the presentation of data in this study is not maximum yet, specifically in describing the dynamics of the strife between religion and science in Indonesia. Therefore, in an effort to complete this study, there is a need for a further study exploring the problem of religion and science contradiction in Indonesia in a more focused form.

REFERENCES

- Iman, Rahman Cahyadi. 'Total Ada 77 Orang Positif COVID-19 Dari Kegiatan Di Petamburan, Tebet Dan Mega Mendung'. https://www.beritasatu.com/, 20 November 2020. https://www.beritasatu.com/kesehatan/700783/totalada-77-orang-positif-covid19-dari-kegiatan-di-petamburan-tebet-danmega-mendung.
- Agencies, Staff and. 'South Korean City on High Alert As Coronavirus Cases Soar at "Cult" Church'. the Guardian, 20 February 2020. http://www.theguardian.com/world/2020/feb/20/south-korean-city-daegulockdown-coronavirus-outbreak-cases-soar-at-church-cult-cluster.
- Aljazeera.com. 'India Covid Cases Soar as Oxygen, Vaccine Shortages Persist'. aljazeera.com, 3 May 2021. https://www.aljazeera.com/news/2021/5/3/india-covid-cases-soar-asoxygen-vaccine-shortages-continue.
- Anand, Gopesh, Eric Larson, and Joseph Mahoney. 'Thomas Kuhn on Paradigms'. *Production and Operations Management* 29 (1 April 2020). https://doi.org/10.1111/poms.13188.
- Barlow, Monique Deal. 'Christian Nationalism Is a Barrier To Mass Vaccination Against COVID-19'. The Conversation, 1 April 2021. http://theconversation.com/christian-nationalism-is-a-barrier-to-massvaccination-against-COVID-19-158023.
- Barton, Greg, and Greg Fealy. "Introduction". In Nahdlatul Ulama, Traditional Islam and Modernity in Indonesia, Edited by Greg Barton and Greg Fealy. Clayton: Monash Asia Institute, Monash University, 1996.
- BBC News. 'Coronavirus: South Korea Church Leader Apologises for Virus Spread'. *BBC News*, 2 March 2020, sec. Asia. https://www.bbc.com/news/world-asia-51701039.
- Beer, Tommy. 'India's Daily Covid Cases Soar Past 400,000 As Crisis Deepens'. Forbes, 1 May 2021. https://www.forbes.com/sites/tommybeer/2021/05/01/indias-daily-covidcases-soar-past-400000-as-crisis-deepens/.

- Belarminus, Robertus. 'Ini Alasan Misa Penahbisan Uskup Ruteng Tak Bisa Ditunda'. KOMPAS.com, 19 March 2020. https://regional.kompas.com/read/2020/03/19/12213691/ini-alasan-misapenahbisan-uskup-ruteng-tak-bisa-ditunda.
- Braverman, John. 'Science and Faith: A New Introduction by John F. Haught'. *Theology Today* 72 (1 July 2015): 236–37. https://doi.org/10.1177/0040573615578383a.
- Cech, Paul J. 'John F. Haught: Deeper Than Darwin: The Prospect for Religion in the Age of Evolution'. *Isis* 96, no. 3 (1 September 2005): 467–68. https://doi.org/10.1086/498810.
- Chanifudin, Chanifudin, and Tuti Nuriyati. 'Integrasi Sains dan Islam dalam Pembelajaran'. *ASATIZA: Jurnal Pendidikan* 1, no. 2 (12 May 2020): 212–29. https://doi.org/10.46963/asatiza.v1i2.77.
- CNN Indonesia. 'Ijtima Dunia Di Tengah Corona, 5 Ribu Orang Tiba Di Gowa'. CNN Indonesia, 18 March 2020. https://www.cnnindonesia.com/nasional/20200318213110-20-484752/ijtima-dunia-di-tengah-corona-5-ribu-orang-tiba-di-gowa.
- Cook, T. M. 'Personal Protective Equipment During the Coronavirus Disease (COVID) 2019 Pandemic–a Narrative Review'. Anaesthesia 75, no. 7 (July 2020): 920–27. https://doi.org/10.1111/anae.15071.
- Sky News. 'COVID-19: India Coronavirus Cases Soar Past 20 Million with Health System on Brink of Collapse'. Accessed 11 May 2021. https://news.sky.com/story/COVID-19-india-coronavirus-cases-soar-past-20-million-with-health-system-on-brink-of-collapse-12294499.
- Deltete, Robert J. 'John F. Haught: God and the New Atheism: A Critical Response to Dawkins, Harris, and Hitchens'. *Philosophy in Review* 30, no. 6 (October 2010): 404+.
- Dimbath, Oliver. 'George Ritzer, Introduction to Sociology'. *Soziologische Revue* 37 (8 July 2014). https://doi.org/10.1515/srsr-2014-0060.
- Drees, Willem. 'Fifty Years in Science and Religion: Ian G. Barbour and His Legacy'. Ars Disputandi: The Online Journal for Philosophy of Religion 6 (1 January 2006). https://doi.org/10.1080/15665399.2006.10819936.
- Faiqah, Nurul, and Toni Pransiska. 'Radikalisme Islam Vs Moderasi Islam: Upaya Membangun Wajah Islam Indonesia yang Damai'. *Al-Fikra : Jurnal Ilmiah Keislaman* 17, no. 1 (3 July 2018): 33. https://doi.org/10.24014/af.v17i1.5212.
- Fajarni, Suci. 'Integrasi Tipologi Paradigma Sosiologi George Ritzer Dan Margaret M. Poloma'. Jurnal Sosiologi Agama Indonesia (JSAI) 1 (31 July 2020): 132–47. https://doi.org/10.22373/jsai.v1i2.554.
- Ferré, Frederick. 'Ian G. Barbour: Technology, Environment and Human Values'. *Environmental Ethics* 5 (1 January 1983): 367–70. https://doi.org/10.5840/enviroethics19835419.
- Forster, Malcolm. *Précis of Thomas Kuhn's The Structure of Scientific Revolutions*, 2021. https://doi.org/10.13140/RG.2.2.14896.48646.
- Gahral Adian, Donny. *Percik Pemikiran Kontemporer*. Yokyakarta Bandung: Jalasutra, 2005.

Gusmian, Islah. 'Mengurai Benang Kusut Hubungan Sains dan Agama', n.d., 20.

- Hadikusuma, Wira. 'Mendialogkan Sains dan agama dalam Upaya Resolusi Konflik'. Syi'ar 17, no. 1 (2017): 12.
- Hannan, Abd. 'Moderatisme dan Problem Konservatisme Beragama di Tengah Pandemi Global COVID-19'. *Jurnal KURIOSITAS; Media Komunikasi Sosial dan Keagamaan* 13, no. 2 (Desember 2020): 31.
- Hannan, Abd, and Wafi Muhaimin. 'Teologi Kemaslahatan Social-Phsycal Distancing dalam Penanggulangan COVID-19'. *KURIOSITAS; Media Komunikasi Sosial dan Keagamaan* 13, no. 1 (June 2020): 78–102.
- Hannan, Abd, and Heny Triyaningsih. 'Mitigasi COVID-19 melalui Kearifan Lokal Pesantren di Madura' 6 (2020): 30.
- Haught, John F. *Is Nature Enough?: Meaning and Truth in the Age of Science*. Cambridge: Cambridge University Press, 2006.
- Hidayat, Samsul. 'Sacred Science vs. Secular Science: Carut Marut Hubungan Agama dan Sains'. *KALAM* 8, no. 1 (1 July 2014): 87. https://doi.org/10.24042/klm.v8i1.169.
- Hidayatullah, Syarif. 'Relasi Agama dan Sains dalam Pandangan Mehdi Golshani'. *Jurnal Filsafat* 27, no. 1 (31 March 2017): 65. https://doi.org/10.22146/jf.21972.
- Hilmy, Masdar. 'Sikap Ilmiah Menghadapi Pandemi COVID-19'. Kolom UINSA (blog), 4 April 2020. https://w3.uinsby.ac.id/sikap-ilmiah-menghadapipandemi-COVID-19/.
- Hilmy, Masdar, and Khoirun Niam. 'Winning the Battle of Authorities: The Muslim Disputes Over the COVID-19 Pandemic Plague in Contemporary Indonesia'. *QIJIS (Qudus International Journal of Islamic Studies)* 8, no. 2 (31 December 2020): 293. https://doi.org/10.21043/qijis.v8i2.7670.
- Husni, Husni, Hasan Bisri, Tanto Aljauharie Tantowie, and Soni Samsu Rizal. 'Religious Community Responses to COVID- 19: Case Study on Muslim Small Community'. *International Journal of Psychosocial Rehabilitation* 24, no. 08 (2020): 8.
- Iswara, Aditya Jaya. 'Virus Corona Menyebar dari Tabligh Akbar, Malaysia Umumkan 190 Kasus Baru'. KOMPAS.com, 15 March 2020. https://www.kompas.com/global/read/2020/03/15/180803970/viruscorona-menyebar-dari-tabligh-akbar-malaysia-umumkan-190-kasus-baru.
- Joo Kim, Min. 'South Korea Closes Shincheonji Church in Daegu Coronavirus Outbreak - the Washington Post'. https://www.washingtonpost.com/, 23 February 2020. https://www.washingtonpost.com/world/asia_pacific/south-korea-orderstemporary-shutdown-of-messianic-church-linked-to-more-than-half-the-

countrys-coronavirus-cases/2020/02/23/728278f0-5650-11ea-8efd-0f904bdd8057_story.html.

- Junaedi, Mahfudz. 'Mengkritisi Tipologi Hubungan Sains Dan Agama Ian G. Barbour'. *Manarul Qur'an: Jurnal Ilmiah Studi Islam* 18 (1 December 2018): 36–63. https://doi.org/10.32699/mq.v18i2.939.
- Kim, Sungchan, Yong Dam Jeong, Jong Hyuk Byun, Giphil Cho, Anna Park, Jae Hun Jung, Yunil Roh, Sooyoun Choi, Ibrahim Malik Muhammad, and Il Hyo Jung. 'Evaluation Of COVID-19 Epidemic Outbreak Caused by Temporal Contact-Increase in South Korea'. *International Journal of Infectious Diseases* 96 (1 July 2020): 454–57. https://doi.org/10.1016/j.ijid.2020.05.036.
- Lazarus, Neville. 'Coronavirus: Millions in India Facing Hunger During COVID-19 Lockdown Measures'. Sky News, 26 April 2020. https://news.sky.com/story/coronavirus-millions-of-indians-facing-hungerduring-COVID-19-lockdown-measures-11978857.
- Li, Jie, James B. Fink, and Stephan Ehrmann. 'High-Flow Nasal Cannula for COVID-19 Patients: Low Risk of Bio-Aerosol Dispersion'. *European Respiratory Journal* 55, no. 5 (May 2020): 2000892. https://doi.org/10.1183/13993003.00892-2020.
- Maksudin, Maksudin. 'Transformasi Pendidikan Agama dan Sains Dikotomik ke Pendidikan Nondikotomik'. *Jurnal Pendidikan Islam* 4, no. 2 (1 December 2015): 277. https://doi.org/10.14421/jpi.2015.42.277-298.
- Marshall, Katherine. 'Beating Coronavirus Requires Faith Leaders to Bridge Gap between Religion and Science'. The Conversation, 22 April 2020. http://theconversation.com/beating-coronavirus-requires-faith-leaders-tobridge-gap-between-religion-and-science-135388.
- McLaren, Peter. 'Religious Nationalism and the Coronavirus Pandemic: Soul-Sucking Evangelicals and Branch Covidians Make America Sick Again'. *Postdigital Science and Education*, 19 May 2020, 1–22. https://doi.org/10.1007/s42438-020-00122-7.
- Monserrat, J. 'Science, Process Philosophy and God in the Thought of Ian G. Barbour'. *Pensamiento* 60 (1 January 2004): 33–66.
- Mseer, Ismail. 'Escaping Patterns; Reading in Thomas Kuhn Paradigm'. *Review* of Arts and Humanities 3 (1 January 2014). https://doi.org/10.15640/rah.v3n3-4a5.
- Mu'ti, Abdul. 'Religious Communities Join Fight against COVID-19 Opinion -The Jakarta Post'. The Jakarta Post, 12 June 2020. https://www.thejakartapost.com/academia/2020/06/12/religiouscommunities-join-fight-against-COVID-19.html.
- Navarro, Vicente. 'Is There a Third Way? A Response to Giddens's the Third Way'. International Journal of Health Services : Planning, Administration, Evaluation 29 (1 October 1999): 667-77. https://doi.org/10.2190/MCJ8-Y73B-F0PP-KQBM.
- ⁽Paradigma Integrasi-Interkoneksi Islamisasi Ilmu Dalam Pandangan Amin Abdullah'. *Aksiologi : Jurnal Pendidikan Dan Ilmu Sosial* 1 (15 April 2021): 56–61. https://doi.org/10.47134/aksiologi.v1i2.11.

- Perciaccante, A, A Coralli, and P Charlier. 'Which Saint to Pray for Fighting against a Covid Infection? A Short Survey'. *Ethics, Medicine, and Public Health* 18 (September 2021): 100674–100674. https://doi.org/10.1016/j.jemep.2021.100674.
- Perdanakusuma. 'Menyikapi Kontroversi Informasi Ilmiah COVID-19.' *Suara Merdeka News* (blog), 31 March 2020. https://suaramerdeka.news/menyikapi-kontroversi-informasi-ilmiah-COVID-19/.
- Permadi, Agie. 'Kasus Kerumunan Di Megamendung, Polisi Panggil Ahli Untuk Dimintai Pendapat'. https://bandung.kompas.com/, 15 December 2020. https://bandung.kompas.com/read/2020/12/15/12454071/kasuskerumunan-di-megamendung-polisi-panggil-ahli-untuk-dimintai-pendapat.
- Prempeh, Charles. 'Religion and the State in an Episodic Moment of COVID-19 in Ghana'. Social Sciences & Humanities Open 4, no. 1 (1 January 2021): 100141. https://doi.org/10.1016/j.ssaho.2021.100141.
- Rachmawati. 'Menyoal Klaster Ijtima Ulama Gowa, Dari Peserta, COVID-19 Menyebar Di Jawa Tengah Hingga Kalimantan', 25 April 2020. https://regional.kompas.com/read/2020/04/25/09390001/menyoal-klasterijtima-ulama-gowa-dari-peserta-COVID-19-menyebar-di-jawa?page=all.
- Rahmawati, Fithriyah. 'Moderatisme dan Problem Konservatisme Beragama di Tengah Pandemi Global COVID-19'. *KURIOSITAS; Media Komunikasi Sosial dan Keagamaan* 13, no. 2 (Desember 2020): 31.
- Rellihan, Matthew. 'John F. Haught: Making Sense of Evolution: Darwin, God, and the Drama of Life'. *Philosophy in Review* 31, no. 1 (February 2011): 42+.
- Rosyid, Abdul. 'Pergeseran Paradigma Agama dan Sains di Tengah Pandemi Covid Dalam Kaca Mata Thomas Kuhn' 4 (2020): 21.
- Russell, Robert. 'Launching the Ian G. Barbour Lectureship in Religion and Modernity'. *Theology and Science* 6 (1 May 2008): 123–25. https://doi.org/10.1080/14746700801976809.
- Santoso, Listyono. Epistimolofi Kiri. Yogyakarta: ar-Ruzz Media, 2012.
- Shults, F. LeRon. 'When Science Meets Religion: Enemies, Strangers or Partners? By Ian G. Barbour San Francisco, HarperSanFrancisco, 2000. 205 Pp. \$16.00'. *Theology Today* 58 (1 October 2001): 434–35. https://doi.org/10.1177/004057360105800318.
- Siregar, Parluhutan. 'Integrasi Ilmu-Ilmu Keislaman Dalam Perspektif M. Amin Abdullah'. *MIQOT: Jurnal Ilmu-Ilmu Keislaman* 38, no. 2 (9 December 2014). https://doi.org/10.30821/miqot.v38i2.66.

- Siswanto, Siswanto. 'Perspektif Amin Abdullah Tentang Integrasi-Interkoneksi Dalam Kajian Islam'. *Teosofi: Jurnal Tasawuf Dan Pemikiran Islam* 3 (6 October 2015): 376. https://doi.org/10.15642/teosofi.2013.3.2.376-409.
- Syarif, Zainuddin, and Abd Hannan. 'Islamic Populism Politics and Its Threat to Indonesian Democracy'. *Al-Tahrir: Jurnal Pemikiran Islam* 20, no. 2 (2020): 251–77.
- Syatar, Abdul, and Muhammad Majdy Amiruddin. 'Darurat Moderasi Beragama di Tengah Pandemi Corona Virus Desease 2019 (COVID-19) Abdul Syatar1, Muhammad Majdy Amiruddin2, Arif Rahman2'. *KURIOSITAS; Media Komunikasi Sosial dan Keagamaan* 13, no. 2 (2019): 13.
- Toresano, Wa Ode Zainab Zilullah. 'Integrasi Sains dan Agama: Meruntuhkan Arogansi di Masa Pandemi COVID-19'. *MAARIF* 15, no. 1 (30 June 2020): 231–45. https://doi.org/10.47651/mrf.v15i1.87.
- Triyogo, Arkhelaus Wisnu. 'Kasus Kerumunan Petamburan, Polda Metro Jaya Resmi Menahan Rizieq Shihab'. Tempo, 13 December 2020. https://metro.tempo.co/read/1413942/kasus-kerumunan-petamburanpolda-metro-jaya-resmi-menahan-rizieq-shihab.
- Welle, Deutsche. 'Tolak Karantina, Pemerintah Pakistan Gugup Hadapi Ulama'. detikNews, 1 April 2020. https://news.detik.com/dw/d-4961226/tolak-karantina-pemerintah-pakistan-gugup-hadapi-ulama.
- Yarnold, G. 'Book Review: Issues in Science and Religion Ian G. Barbour'. Journal of Religion 48 (1 April 1968). https://doi.org/10.1086/486124.
- Yulanda, Atika. 'Epistemologi Keilmuan Integratif-Interkonektif M. Amin Abdullah Dan Implementasinya Dalam Keilmuan Islam'. *TAJDID: Jurnal Ilmu Ushuluddin* 18 (30 June 2020): 79–104. https://doi.org/10.30631/tjd.v18i1.87.
- Yunus, Muhammad. 'Integrasi Agama dan Sains: Merespon Kelesuan Tradisi Ilmiah di PTAI'. *INSANIA : Jurnal Pemikiran Alternatif Kependidikan* 19, no. 2 (1 January 1970): 284–313. https://doi.org/10.24090/insania.v19i2.717.
- Zulkifli, Zulkifli, Cucu Nurhayati, Bambang Ruswandi, and Fadhilah Suralaga. 'Plural Conceptions of Integration of Science and Religion'. TARBIYA Journal of Education in Muslim Society 7 (28 December 2020): 142–57.