

TOURISM OF BAKA RATU AS BIBAKKAH IN QURAN 3.96 WITH HAHSLM 472319 AND CONSTANT 12

Roikhan Mochamad Aziz
UIN Jakarta, Indonesia

ABSTRACT

Purpose: the purpose of this study is to analyze tourism in the Ratu Baka area which is written as Bibakkah in the Quran 3.96. **Methodology:** This study uses descriptive analysis. The method used is the Hahslm 472319 with Holy Book. The object of this research is Ratu Baka, Quran 3.96 and 72 stupas. **Results:** The results are the Ratu Baka tourist complex and Borobudur is one area. By the word, Bibakkah means by bakkah in Quran 3.96 which refers to Ratu Baka. The builder of the 72 stupas is Ratu Baka reinforced by the word “placed” meaning it can be moved. The reflexivity of 3.96 is in the stupa in the form of 3 floors, 7+2 stupa which is 9, and factorization 16, 24, 32 in the form of 1+2+3, and 6+4+2 which is 6. **Discussion:** Tourism management in the Ratu Baka area is in the form of an empty building that has been relocated to Borobudur. Ratu Baka and Borobudur are under the same management company. The limit on the number of 72 stupas built holds phenomenal and absolute meanings. The largest historic temple building in the world, namely Borobudur has The 72 stupas refer to phenomenal occurrences with absolute and differential. Tourism management also needs to be done with a phenomenal modern physics pattern with quantum reality in its wave interference. The similarity is found in the meaning of 7 waves and 2 gaps in the interference physics process, then reflected in the code of the 72 stupas that were built. The research concludes that tourism management needs to develop the Ratu Baka area according to the Quran 3.96 in the form of the word Bibakkah with the constant Hahslm 472319 in the Covid economic era.

Keywords: Tourism, Ratu Baka, Quran

INTRODUCTION

Ratu Baka tourist area is an economic driving area with a historical building in the form of the Ratu Baka palace. This tourism differentiation is in the form of an empty palace that is left behind. There are remaining buildings, including a five-door gate and a three-door gate as well as several broad foundations with a wide yard plus a stupa. With one stupa left in the Baka palace area, more tourist visits. This increase in tours to the temple area in Central Java has contributed greatly to regional and even national economic growth(H. Murwanto et al., 2018).

The combination of adventurous tourists and tourists who want to research makes this area even more interesting to visit. Where there is a similarity in the pattern of one stupa that is left behind with a large number of stupas at the top of Borobudur. There is a quantum phenomenon that there has been a transfer of the stupa from the Ratu Baka palace to Borobudur Temple(Dumarcay, 1992).

With the similarity in one stupa left at Ratu Baka with many stupas at the top of Borobudur, it indicates that the Ratu Baka area and the Borobudur area have a connection in the past, this relationship is what makes Ratu Baka more phenomenal than the Borobudur building. The hypothesis of the origin of many stupas in Borobudur is significantly derived from the Ratu Baka palace(Nagaoka, 2016).

Without a doubt, Borobudur Temple is one of the most beautiful in the world. This temple holds the incomparable essence of Mahayana art of “ratna quality manikam”. Experts even believe that the highest point of Gupta Art is found, but in Central Java, at the historic building of the Borobudur Temple. Some believe that Borobudur Temple is the most magnificent Buddha creation in all of Asia (Munandar, 2016).

The magnificent Borobudur is the largest stupa monument in the world. The ancient site, widely regarded as one of the seven wonders of the temple world, overlooks lush green hills. The temple design in the stupa architecture holds the meaning of togetherness combined with local elements to make the Borobudur area unique in Indonesia. Measuring 123 meters by 123 meters, the monument of wonders is decorated with thousands of relief panels and hundreds of statues. The architecture and stone of this temple are not the same. And it was built without using any kind of cement. The structure is like a set of big lego blocks that are tied together without glue(Situngkir, 2012).

Borobudur's historic buildings are decorated with stone carvings in bas reliefs representing images from life. The largest and most complete relief in the world, to explore this site on foot.The stone carvings attached to the temple display legends and history that have deep philosophical meaning. Borobudur stands tall against the spectacular backdrop of the Menoreh mountain range that surrounds it. There are no archaeological remains in the country around the archipelago before the end of the 7th century(Sundberg, 2006).

The monument is a cosmological model of the universe that is systematic around the axis of association. This temple has a middle and upper base. On the three terraces, 72 stupas are containing a statue (Suwardhi et al., 2015).

Some archaeologists suspect the establishment of the Borobudur temple in the 7th century AD. Other researchers calculate that the Borobudur temple was built in the 10th century BC. This is reinforced by the absence of historical inscriptions related to the construction of the largest temple in the world mentioned in the 5th century to the 10th century AD.

After being lost for hundreds of years due to being covered by heavy floods, natural disasters, dust from the ground, and the ashes of Merapi, the ruins of the Borobudur temple were rediscovered in the 19th century by the Dutch colonialists in Indonesia.

Borobudur temple architecture is full of physics and mathematics concepts. Even though it is known that at that time no technology developed as it is today. The concept of mathematics has unwittingly been applied and became an activity in the life of ancient people. Physics also has a modern architecture in its quantum physics. The contribution of this quantum theory reaches 80% of the application of current technology.

Quantum theory is widely used but the theory itself is still following to be standardized. Quantum technology standards already exist, but quantum theory standards do not yet exist. Analogy on a smartphone. Smartphones are now connected between users using quantum technology. Magnetic resonance imaging or MRI in medicine is the most advanced technology for 100 years also with the use of quantum theory. Islam recognizes a mixture of theoretical and empirical approaches to understanding the behavior of individual economic agents while the latter uses an analytical approach to change individual normative rules (Frauchiger & Renner, 2018).

Ikhwan-us-Safa, Ibn Khaldun articulated the importance of the integration of Islamic civilization and science stating the tenth-century intellectual society was a pioneer in underlining the spiritual dimension of work apart from fulfilling religious obligations (Razak et al., 2020).

Given the significant public health risk that Covid-19 poses to the world, the World Health Organization (WHO) has declared a public health emergency of international concern to coordinate the international response to the disease. The impact of this pandemic has resulted in the global economy experiencing a prolonged crisis in all sectors (McKibbin & Fernando, 2021).

The Covid pandemic has proven to put pressure on economic and social conditions in Indonesia since the end of 2019. It is estimated that economic growth will decline to 5.2 percent this year. This could be the deepest recession since World War Two, with per capita output declining since the end of World War II in the 18th century. Adding to the previous situation in Indonesia, economic growth has weakened due to trade tensions between the United States and China that preceded the Covid contagion. This economic impact has far-reaching implications throughout Indonesia. Each region's economy is under threat, plus the region's condition is worse than before.

The main research problem of this study is the owner of the 72 stupas that is located on the top of Borobudur. Those 72 stupas previously had been build by Ratu Baka that located in the area of Ratu Baka Palace. This study aims to analyze the relation between 72 Stupa from Ratu Baka with the name Bibakkah that mention in the Quran. The importance of this study is to prove the connection between Bibakkah as the owner of the 72 Stupas with the history of the Ratu Baka Palace that has space.

THEORETICAL BASIS

Ratu Baka area has a high civilization as evidenced in the vast area of the palace. The division of the palace cluster includes a complex with the separation of the pool and also the worship room facing the setting sun. Scientists found evidence that the Land of Saba or the Ratu Baka area once existed. The evidence for that is the Ma'rib dam or the Arim dam. This dam is described by Arab historians for several centuries. Al-Hamdani in his book entitled: Wasfu Jaziratil Arab. Hamdani explained that the Ma'rib dam is one of the proofs that the land of Saba" referred to by the Quran is in South Yemen (Sundberg, 2013).

In Indonesia, there are Baka Borobudur are was built from nearly millions of volcanic boulders mined from the remnants of a volcanic eruption not far from the site. This temple has been the subject of various theories trying to explain its purpose and even its spiritual connection (Jordaan & Colless, 2004).

Borobudur Temple was built from nearly millions of chunks of volcanic rock mined from the remnants of a volcanic eruption not far from the site. This temple has been the subject of various theories trying to explain its purpose and even its spiritual connection. The exact purpose of this temple is not clear, because this is not a monastery and not a seka stupa and also not clear with the means of introducing Buddhism. But it is quite safe to say that this temple is generally included in the Mahayana school. However, it shows the characteristics of the influence of the tantric flow (Kurniawan & Hidayati, 2020).

Borobudur is a site that is included in the world heritage category which is a special temple. Borobudur Temple consists of 9 levels which represent the concept of life in the Borobudur temple. There are 2 types of reliefs in the Borobudur temple: the first is decorative relief, the second is story relief or narrative relief. The relief stories at Borobudur temple are very unique because there are several story themes, the total number of story reliefs or panels. The total is a total of 1460 panels. The relief of the Borobudur temple story from the bottom is found in the Karmawibhanga relief. Then on the body, if the leg can be called the Kamandhatu part. Meanwhile, in the middle part of this temple, there are reliefs of Jakataawadana, Jatakamala, Lalitavistara, Gandawyuha, as the end of the story of Gandawyuha. Then at the top of the arupadhātu there is no relief at all at the foot of the Borobudur temple. The Karmawibhanga relief will tell about the law of cause and effect or Karma (Hasanah et al., 2020).

In the Kamandhatu section, the most important reliefs are found that convey about life. The Lalitavistara relief is found on the main wall of the Borobudur temple on the eastern stairway. On the walls of the temple, the Lalitavistara reliefs are on the top row, the Lalitavistara reliefs are carved in several 120 panels which are read Pradaksina. The reading of the relief starts from the east side then there is Pradaksina or to the right of the temple or rotating in the temple aisle in a clockwise direction. End up on the east stairs on the right side. This Lalitavistara relief is a relief taken from Lalitavistara silk. This means that sutras or books are used as the basis for carving reliefs (Metusala et al., 2020).

Historic Buildings

Historic buildings are matters related to the art of building. Borobudur Temple is one of the classic Indonesian historical buildings with the concept of the 7th century AD period. The hallmark of Indonesian classical architecture is seen in the temple buildings and tower structures. Borobudur Temple was built in the Setumbu valley in the shape of a pyramid with a stupa at the top. The historic building of Borobudur Temple consists of 2 large platforms, namely the 12 partition boxes and the circle, which is decorated with 2,672 relief panels and 504 Buddha statues (Helmy Murwanto & Purwoarminta, 2019).

Figure 1

Borobudur Upper Middle Base



The structure of the Borobudur Temple consists of three parts, namely: base, middle, and top. The basic architecture is the basic identifier structure or as a dependent variant. With a rectangular grid pattern with 12 partitions which has similarities to the turtle's skute pattern. Another opinion states that Borobudur is the most beautiful Buddha of creation in all of Asia. Seventy-two perforated stupas and 1 perforated stupa decorating the upper terrace on the top of the building show that there is numerology of 72 and constant of the universe (Munandar, 2016).

Integration of Science and Religion

Science is a branch of natural science that studies natural phenomena and characteristics of physical objects. Understanding Physics is one of the efforts that must be carried out to instill confidence in the power and majesty of God. In principle, everything that does not conflict with maqashid al-syariah al-islamiyah becomes something that is allowed in Islamic teachings. This is where the flexibility of Islam in responding to developments and changes in society lies. Islam makes it possible to absorb positivist knowledge and knowledge after going through the process of 'Islamization' and 'filterization' so that in the end it is by Islamic values. Islamic Physics is built based on Islam, therefore it is an inseparable part of Islam. As a derivation of Islam, Islamic Physics will follow Islam in various aspects (Fikri et al., 2019).

The human attitude towards the development of quantum physics is holistic in interpreting the current reality such as a pandemic. That the reality of the quantum world is different from the reality of the microscopic world. The analogy of a bullet shot will form a parabola with gravity that can be calculated and predicted the direction and purpose of the object. But in the quantum world, the direction of the fired bullet will experience a non-probability of direction and destination deterministic(Zulkifli et al., 2021).

Electron material that is shot through 2 slits is hypothesized to collect at a point. But the experimental results show that the electrons on the wall after the gap turns out that electrons spread in various directions and places and do not collect in one area or almost all over the place. This results in a different hypothesis that the electron, apart from having material properties, also has wave properties(Rahayu, 2016).

METHODOLOGY

Scope of Research

The scope of this research is to analyze the influence and application of Islamic Physics and Hahslm Theory accompanied by an analysis of economic developments and Covid-19 in Indonesia and how the government's efforts in handling the Covid-19 outbreak and stabilizing the existing economy are based on Economics. Islamic Physics and Hahslm. This research is qualitative, epistemological, and quantitative, i.e. both derived from journal or book data, numerical data, articles and also rereading economic science with the eyes of Islamic epistemology. This study is desk research with descriptive analysis. Literature comes from the journal, book, holy book, and internet media.

Methods of Research Epistemology Analysis

Understanding until the "science" of objects with physical reality is limited by human physical instruments. What humans can absorb in economic events in the first reality, consists of facts; behavior, actions, formulations, building approaches, simplifying facts into data, classifying data, measuring data, and so on. But it will not go beyond the characteristics of the reality of human physics itself (Iakovides et al., 2004).

Understanding Physics is one of the efforts to carry out Allah's commands that are prescribed in the Quran. By studying natural phenomena and physics, generations of Muslims have avoided the habit of blind taklid (the following something without knowing the reason). Humans will realize the truth of their teachings, which they have proven themselves from their understanding of the universe (Zyla et al., 2020).

With this virus that has infected many countries, it has made it some countries difficult in handling Covid-19 and also difficulties in the economy. The Indonesian government is trying to deal with Covid-19 in numerical data, which is related to the behavior of the Islamic Physical Economy and Hahslm Theory in social life(Aziz, 2020b).

RESULT AND ANALYSIS

Candi Ratu Baka or Candi Baka (Javanese: Candi Ratu Baka) is an archaeological site that is a complex of remnants of buildings located approximately 3 km south of the Prambanan Temple complex, 18 km east of Yogyakarta City or 50 km southwest of Kota Surakarta, Central Java, Indonesia. Ratu Baka site is located on a hill at an altitude of 196 meters above sea level. The total area of the complex is about 25 ha. This site displays attributes as a place of activity or a residential site, but its exact function is not known. Ratu Baka is estimated to have been used by people in the 8th century during the Sailendra dynasty (Rakai Panangkaran) of the Medang Kingdom (Hindu Mataram). Judging from the laying pattern of the remains of the building, it is strongly suspected that this site is a former palace (king's palace). This opinion is based on the fact that this complex is not a temple or building with a religious nature, but a fortified palace with evidence of remnants of fort walls and dry moats as defensive structures. Remains of residential settlements were also found around the location of this site. Ratu Baka was first reported by Van Boeckholtz in 1790, who stated that there were archaeological ruins on Ratu Baka hill. This hill itself is a branch of the Sewu Mountains system, which stretches from the south of Yogyakarta to the Tulungagung area. by FDK Bosch, reported in Keraton van Ratoe Baka.

Figure 2 Baka Queen Palace



The layout of the Ratu Baka Palace Complex consists of the main gate building, the ruins of a stupa that was left behind, a pond fence, a cave, and a hill. From the palace gate to the center of the front, namely the main part, there are two high gates, a gate consisting of two layers. The first gate has 3 doors while the second gate has 5 doors. After passing through the main gate, then there is a wide expanse of grass, namely the square. About 45 meters from the second gate, on the left side of the square there is a temple building made of white stone, so it is called Candi Batu Putih. Not far from there, you will also find the Burning Temple. The temple is square (26 meters x 26 meters) and has 2 terraces. As the name implies this temple is used for the cremation ceremony. In addition to the two temples, a pedestal stone and a pond will be found later if you walk approximately 10 meters from the Burning Temple. To the southeast of the Burning Temple, there is a mystery well. It is said that the well is named Amerta Mantana which means holy water given a mantra. The water is still often used. Local people say that well water can bring good luck. To the west, along with Dawung Village on the hillside, there are the former palace complexes, namely Paseban and Batur Pendopo. The front yard is located on the west side, consisting of three terraces. Each terrace is separated by an andesite stone fence as high as 3.50 meters, and the cliffs of the terrace are reinforced with an andesite stone arrangement. The southern boundary of the yard is also a fence of andesite stone, but the northern boundary is a hill wall that is carved directly. To the east of the palace, there are two caves, a large pool measuring 20 meters x 50 meters, and a Buddhist stupa that looks serene. The two caves were formed from a sedimentary rock called the Pumis Breccia. The upper cave is called Lanang Cave while the lower one is called Wadon Cave. Just in front of Lanang Cave, there is a pond and three stupas. Based on a study, it is known that the stupa is Aksobyta, one of the Buddhist Pantheons.

Figure 3
Stupa Left In Baka



There is a stupa that is identical to the 72 stupas above Borobudur. Several studies have shown that the stupa at Baka Queen palace has stronger sculptural details than the flower stupa at Borobudur, which is blurry. The meaning of this 1 left stupa states that the 72 stupas in Borobudur are a transfer from the 72 stupas that were originally located in the Baka Queen palace. The analysis of the ownership of the 72 stupas is obtained from the words written in the QS. Ali Imran [3]:19 states the word Bibakkah which directly refers to the name of the person in the Baka Queen area.

The same between Baka and Borobudur is the stupa. On the main top floor of Borobudur, there are 72 stupas, so the accumulation is $72+432=504$ statues, plus the main stupa to $504+1=505$ statues. Especially for the statue on the top floor is called a stupa. To distinguish it from the statue outside the main floor, where the stupa consists of $72 + 1 = 73$ stupas with details of $16 + 24 + 32 = 72$ stupas on each floor of the 3 main floors (Aziz, 2020a).

Figure 4
Symmetrical Patterns of Historic Buildings



Research on the Borobudur Temple that has been carried out today focuses more on mathematical concepts as a result of designing buildings, measuring, making patterns, and how to relate the concepts of mathematical physics in learning mathematics (Danoebroto, 2017).

The concept of mathematical physics at Borobudur Temple is shown by the shape of the building structure resembling the concept of flat and spatial shapes in mathematics. The essence of Borobudur Temple is a stupa. When viewed from above, it is in the form of a large mandala pattern, which is an arrangement of patterns consisting of squares and concentric circles that symbolize the universe. The design concept of the Borobudur Temple can be related to Euclidean Geometry. The structure of the Borobudur Temple building consists of two main shapes, namely a circle and a square.

Research on Borobudur Temple states that there is a relationship between teachings, philosophy, and physical concepts that make the Borobudur Temple building a phenomenal megastructure. The Borobudur Temple building is the realization of a structured, unique, and beautiful physics concept.

In every part of the temple structure, there are moral and philosophical messages that describe the teachings, culture, and realities of life during its construction. The concept of Hahslm, teachings, and philosophies is a unity that cannot be separated from Borobudur Temple. This relationship inspires the understanding of kanyum interference as the orchestra of life, where all concepts are united in ethnomathematics.

Interference that occurs in the electron beam can be done in 2 or more slits so that it can be said that interference can occur with the least slit is 2 slits. Interference can also be done with 3 slits or 4 slits.

With the enlargement of the water waves, there is contact and overlap. The lines that overlay one another wave of two-point sources of water that meet together in the middle and slightly upward, apparently forming a square pattern 6.

Table 1			
Interference Line Wave 3			
7th square hexagon (Clockwise)	Line Wave	Line Position	Origin of the Wave
Box 2	1	Right Top	A
Box 5	2	Left Down	A
Box 4	1'	Left Top	B
Box 1	2'	Right Down	B
Box 3	1 + 1'	Top	A+B
Box 6	2 + 2'	Down	A+B

In figure 4 it can be seen that wave interference occurs from tapping water with a lever automatically and regularly. The results obtained are more consistent with smaller and more numerous appearances. The results obtained are that the interference on the water forms a wave with a circular pattern of 7, where the middle circle (no 7) becomes the center of the circle, flanked by 6 circles perfectly. This 7 circle pattern can also be done without interference in the water, but it is enough to put 7 coins of the same size which are collected to form a circle. Then there will be 1 coin in the middle, and 6 coins are around the 1 circle in the middle.

Figure 5

Hahslm Wave Interference Quantum

From the interference pattern above, it can be taken the existing constant, namely 7 as a result of interference that forms a 6 with 1 6 square boxes in the middle plus 6 6 square boxes surrounding it according to diagram 2, so a total of 7 squares or 7 hexagons or 7 circles. And it can also be referred to as 7 circles by referring to diagram 3 which forms the 7 circles.

The next constant is 2, concerning the least interference possible in the 2 slots. In the experiment above, interference is carried out by knocking 2 water points, resulting in the presence of 2 (two) constants from the source of the tap water which forms waves and circular patterns circle.

The meaning of interference has a similar value with Borobudur on the 7, 8, 9 floors or referred to as the top floor as the Arupadhatu level which contains 72 stupas. At each base of the stupa, there is a hexagon motif resembling a beehive, where the word bee is inscribed in the Quran Surah An-Nahl [16]. Also on QS. Muhammad [47]: 15 states the parable of the garden of paradise. The honeycomb has a similarity to the wave superposition pattern during the wave interference process.

The motif etched on the base of the Borobudur stupa is a reflection of the interference pattern. This is confirmed by the number of stupas coded 72. This codification of 72 means that there are 7 hexagons as a result of the superposition of 2-slit interference that emerged in quantum physics experiments. These hexagons will add up to 7 to form a symmetrical set of more than one hexagon.

The meaning of 72 quantum physics in wave interference is also found in 72 Borobudur stupas and is also found in the enigma of the Qur'an with code 472319. The presence of the random 72 constant proves that the creation of the universe enforces the constant 72 in every sub-system that emerges.

The building that emerged as the beginning of civilization in the medieval era between the prophet Adam and the prophet Muhammad was in the form of 72 stupas. The 72 small temples and 1 large stupa were built by Ratu Baka which is written in the Quran Surah Ali Imran [3]: 96 as the word Bibakkah. Bi means by and bakkah is the name of a person, namely bakka with the suffix h indicating the female gender is Ratu Baka. There is a word placed that is interpreted in the form of something that is the result of a move or is floating without having a foundation embedded at its base. Bakkah built 72 small stupas and 1 large stupa. The letter number and verse number have similarities with the existing stupa structure. Three floors are similar with letter number 3, seventy-two stupas are similar to verse number 9. And the number of stupas on each floor, namely 16, 24, 32 has similarity with factorization 6, namely $1+2+3=6$ and $6+4+2=12$, where 6 and 12 are multiples of 6. This study concludes that Ratu Baka and Bakkah are the same individuals who are reinforced by the Baka stupa numbering 72 which was codified in 396 (Aziz, 2020c).

The presence of the number 72 is accompanied by the appearance of the number 19 in Covid 19 which is a continuation of the number from the Hahslm formula is 472319 where the fifth and sixth digits are nineteen. It is no coincidence that the world is reminded to see evidence of the creation of the universe which has constants 72 and 19 in this Covid-19 era which has an impact on the global economic crisis (Aziz, 2020b).

CONCLUSION

The beginning of 72 stupas had been built by Ratu Baka as Quran 3.96 mentions the name of Bibakkah that directly pointed to the Baka Rata. The encryption of $3+9 \times 6$ also refers to 72 stupas with a constant 12 as balancing numbers. The dynivity of 72 stupas is the reflexivity of quantum physics in the form of wave interference. This corresponds to 7 circular or hexagonal superpositions that occur after passing through 2 slits. The 72 constant is recorded in 72 Borobudur stupas.

Before 72 stupas were placed on the top-level of Borobudur as the peak of the monument, it had belonged to Rat Baka. This existence of 72 quantum realities in the world of particles in the form of wave interference is the limit of modern physics. The constant 72 is also stored in the Quran with the formula 472319. The meaning of this 72 is that the straight path in the world is to worship the creator where constant 12 appeared before the universe.

Worship interference in prayer is still carried out despite the Covid pandemic which has an impact on the global economic crisis.

REFERENCES

- Aziz, R. M. (2020a). Integration of Islamic Mathematics in Quranic Equation and the Universe Creation. *Prosiding Seminar Nasional Integrasi Matematika Dan Nilai Islami*, 3(1).
- Aziz, R. M. (2020b). Relation of physics and economics affected Covid-19 in Islam on Hahslm. *Prosiding Seminar Nasional Pendidikan Fisika Banjarmasin*, 21–26.
- Aziz, R. M. (2020c). *Universe Created by Allah Equation of Hahslm 472319 as Big Bang Concept and Eid Pray Symbols*. 408(Iconist 2019), 1–4. <https://doi.org/10.2991/assehr.k.200220.001>
- Danoebroto, S. W. (2017). Students' Perception on Borobudur Temple as Mathematic Learning Resource. *Southeast Asian Mathematics Education Journal*, 7(1). <https://doi.org/10.46517/seamej.v7i1.47>
- Dumarcay, J. (1992). Borobudur: Golden Tales of the Buddhas. Text by John Miksic. Photographs by Marcello Tranchini. Berkeley and Singapore: Periplus Editions, 1990. Diagrams, Photographs, Notes, Bibliography, Index. *Journal of Southeast Asian Studies*, 23(1). <https://doi.org/10.1017/s0022463400011565>
- Fikri, A. A., Miasari, D., & Dewi, I. T. (2019). Misconception In Scientific Literature On Journal Online That Discuss Integration Of Science And Religion In Era 4.0. *Journal Of Biology Education*, 2(2). <https://doi.org/10.21043/jbe.v2i2.6323>
- Frauchiger, D., & Renner, R. (2018). Quantum theory cannot consistently describe the use of itself. *Nature Communications*, 9(1). <https://doi.org/10.1038/s41467-018-05739-8>
- Hasanah, N. A. I., Maryetnowati, D., Edelweis, F. N., Indriyani, F., & Nugrahayu, Q. (2020). The climate comfort assessment for tourism purposes in Borobudur Temple Indonesia. *Heliyon*, 6(12). <https://doi.org/10.1016/j.heliyon.2020.e05828>
- Iakovides, S. A., Iliadou, V. T. H., Bizeli, V. T. H., Kaprinis, S. G., Fountoulakis, K. N., & Kaprinis, G. S. (2004). Psychophysiology and psychoacoustics of music: Perception of complex sound in normal subjects and psychiatric patients. In *Annals of General Hospital Psychiatry* (Vol. 3). <https://doi.org/10.1186/1475-2832-3-6>
- Jordaan, R., & Colless, B. (2004). The Ratu Boko Mantra And The Sailendras. *Berkala Arkeologi*, 24(1). <https://doi.org/10.30883/jba.v24i1.894>
- Kurniawan, W., & Hidayati, T. (2020). Ethnomathematics in Borobudur Temple and Its Relevance in Mathematics Education. *Jurnal Pendidikan Progresif*, 10(1). <https://doi.org/10.23960/jpp.v10.i1.202011>
- McKibbin, W., & Fernando, R. (2021). The Global Macroeconomic Impacts of COVID-19: Seven Scenarios. *Asian Economic Papers*. https://doi.org/10.1162/asep_a_00796
- Metusala, D., Fauziah, Lestari, D. A., Damaiyani, J., Mas'udah, S., & Setyawan, H. (2020). The identification of plant reliefs in the lalitavistara story of Borobudur temple, central Java, Indonesia. *Biodiversitas*, 21(5). <https://doi.org/10.13057/biodiv/d210549>
- Munandar, A. A. (2016). Kisah-kisah dan Kepercayaan Rakyat di Seputar Kepurbakalaan. *Paradigma, Jurnal Kajian Budaya*, 2(1). <https://doi.org/10.17510/paradigma.v2i1.15>
- Murwanto, H., Sutarto, Purwoarminta, A., & Sulaksono, A. (2018). Geohazard assessment in Borobudur Temple area, Central Java, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 212(1). <https://doi.org/10.1088/1755-1315/212/1/012005>
- Murwanto, Helmy, & Purwoarminta, A. (2019). The ancient Borobudur lake, history, and its evidences to develop geo-archeotourism in Indonesia. *Indonesian Journal on Geoscience*, 6(1). <https://doi.org/10.17014/ijog.6.1.103-113>
- Nagaoka, M. (2016). Cultural Landscape Management at Borobudur, Indonesia. In *Cultural Landscape Management at Borobudur, Indonesia*.
- Rahayu, M. (2016). Integration Between Religion And Science In Early Childhood Education Learning. *Ta'dib*, 20(2). <https://doi.org/10.19109/td.v20i2.223>
- Razak, A. Q. A., Suyurno, S. S., & Nordin, R. (2020). The 'umrānic thoughts of ibn khaldūn and its contributions to the studies of islamic sociology and civilization. *Afkar*, 2020(Special Issue 1). <https://doi.org/10.22452/afkar.sp2020no1.5>
- Situngkir, H. (2012). Borobudur Was Built Algorithmically. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1672522>
- Sundberg, J. R. (2006). Considerations on the dating of the Barabudur stūpa. *Bijdragen Tot de Taal-, Land- En Volkenkunde*, 162(1). <https://doi.org/10.1163/22134379-90003675>
- Sundberg, J. R. (2013). A Buddhist mantra recovered from the Ratu Baka plateau; A preliminary study of its

- implications for Sailendra-era Java. *Bijdragen Tot de Taal-, Land- En Volkenkunde / Journal of the Humanities and Social Sciences of Southeast Asia*, 159(1). <https://doi.org/10.1163/22134379-90003755>
- Suwardhi, D., Menna, F., Remondino, F., Hanke, K., & Akmalia, R. (2015). DIGITAL 3D Borobodur: Integration of 3d surveying and modeling techniques. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 40(5W7). <https://doi.org/10.5194/isprsarchives-XL-5-W7-417-2015>
- Zulkifli, Z., Nurhayati, C., Ruswandi, B., & Suralaga, F. (2021). Plural Conceptions of Integration of Science and Religion. *TARBIYA: Journal of Education in Muslim Society*, 7(2). <https://doi.org/10.15408/tjems.v7i2.18991>
- Zyla, P. A., Barnett, R. M., Beringer, J., Dahl, O., Dwyer, D. A., Groom, D. E., Lin, C. J., Lugovsky, K. S., Pianori, E., Robinson, D. J., Wohl, C. G., Yao, W. M., Agashe, K., Aielli, G., Allanach, B. C., Amsler, C., Antonelli, M., Aschenauer, E. C., Asner, D. M., ... Zheng, W. (2020). Review of particle physics. In *Progress of Theoretical and Experimental Physics* (Vol. 2020, Issue 8). <https://doi.org/10.1093/ptep/ptaa104>