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Ethnomathematics of Darussajidin Mosque Indramayu in designing mathematics activities and philosophy of Islamic values

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Abstract

A mosque is a place of worship for Muslims worldwide. The shape of the mosque in each region is different. Along with the times, the mosque has also become one of the objects in cultural acculturation from one area to another, thus creating increasingly diverse shapes and designs in mosques. One of them is the Darussajidin Mosque in Bondan Barat Indramayu. This research aims to determine the ethnomathematics of the Darussajidin Indramayu mosque in designing mathematical activities and the ethnomathematics of the Darussajidin Indramayu mosque on the philosophical meaning of Islamic values. This research was conducted at the Darussajidin mosque, Indramayu, in Bondan Village, Sukagumiwang District, Indramayu Regency. The subjects in this study were DKM mosques, caretakers, community leaders, and cultural observers, while the object in this study was the Darussajidin Indramayu mosque. This research is qualitative research with an ethnographic approach. Observation, interviews, and documentation collected data. The instruments used are observation guidelines, interview guidelines, and documentation tools. The results showed that there was ethnomathematics of the Darussajidin Indramayu mosque in the mathematical activity of designing, and there was ethnomathematics of the Darussajidin Indramayu mosque in the philosophical meaning of Islamic values among them; on the roof, dome, walls, pillars, floors, and ornaments of the Darussajidin Indramayu mosque.

Keywords: Designing Mathematics Activities, Ethnomathematics, Philosophy of Islamic Values

Introduction

Mathematics is a subject where learning requires an understanding. However, according to students, mathematics is considered a boring subject, not easy to understand, and makes them not interested in learning it. It is necessary to innovate. Learning to learn mathematics can be more fun. Interesting learning resources can be obtained from various things that are concrete and involve students' daily experiences. The involvement of mathematics in the pursuit of knowledge is an important value contained in mathematics. Overview human development especially in the fields of science shows that mathematics is involved in many human endeavors to acquire knowledge (Kartasasmita, Bana, & Wahyudin, 2014). Meanwhile, math values are related with the nature of mathematics derived from how mathematicians are different cultures develop mathematics (Bishop, 1999). Both views This gives the conclusion that mathematics and culture are parts integrated.

The process of learning mathematics usually only tends to theoretical concepts and is not very contextual, so it can influence students' interest in learning mathematics. In addition, learning mathematics in schools is too formal and not associated with everyday life in the student environment. The teaching and learning process that uses a contextual approach is a learning concept that communicates material with students' real-world situations. Therefore, teaching mathematics must be related to the culture that surrounds students. Connecting mathematics with cultural aspects will make mathematics accurate and close to everyday life. Mathematics is generally learned through a formal process with rules tight and stiff. Transformation of thinking ability from concrete to abstract and from abstract to concrete becomes the main difficulty in learning mathematics so that it is necessary to strengthen the role of mathematics in everyday life. The importance of strengthening the role of mathematics shows that mathematics education is one of the foundations of science important in education (Umay, 2003). Studying math will be great depend on a person's cognitive structure so knowledge of mathematics someone will be different from each other.

The interrelationships between cultural anthropology, mathematics and utilization of mathematical modeling is referred to as ethnomathematics (Orey & Rosa, 2006). Important thinking about ethnomathematics is based on two things namely the conceptuality of mathematics and culture as a result of human thought as well as information processing in individual cognitive structures that are carried out in order meet their needs, especially in social interaction. Like Anderson (Fouze & Amit, 2018) which states that ethnomathematics developed by cultural groups and serve their natural interests derived from their social situation. Wijayanto (2017) states that ethnomathematics can be bridged with culture and education, especially mathematics. Ethnomathematics is a form of learning based on the culture in the context of mathematics. So, it is necessary to link mathematics with everyday life, which is based on local culture with mathematics in learning mathematics. Pramesti (2021) explained that ethnomathematics could help students in articulation, management, and understanding to practice mathematical and practical ideas for solving and solving problems.

Mosques are places of worship for Muslims all over the world. The shape of the mosque in each region is different. Along with the times, the mosque has also become one of the objects

in cultural acculturation from one area to another, thus creating increasingly diverse shapes and designs in mosques. This shows that a mosque will create different characteristics in each region. One of them is the Darussajidin Mosque, Bondan Barat, Indramayu. The architectural form of the mosque building has its characteristics, and there are no striking ornaments on the walls or supporting poles. Although it has been renovated several times, it still maintains its authenticity. This mosque building is unique because it is made of teak wood, whose authenticity is still maintained. The uniqueness of the mosque's architecture is that it is designed in such a way that it forms geometric shapes. The uniqueness of the architecture of the building contained in the mosque has the potential to be used for mathematics learning for students based on ethnomathematics.

There are ethnomathematical values in the Jami' Darul Mutaqqim Mosque. Ethnomathematics appears in the shape of the parts of the mosque building. The parts of the mosque are *first*, the azan tower; *second*, the mosque roof; *third*, the main prayer room (*liwan*); *fourth*, the mihrab; and *fifth*, the porch. As in the Jami' Darul Mutaqqim Mosque has elements of mathematics that can be used as a reference in the development of teaching materials in schools (Permatasari, 2022). The mathematical concepts that can be revealed from the building and ornaments at the Great Mosque of Cimahi are geometry concepts (plane geometry, space geometry, and transformation geometry) and algebra (frieze group). Through building and ornaments at the Great Mosque of Cimahi, it is expected that students will more easily learn mathematical concepts (Purniati, 2020). The old mosque of Tosora in Wajo can be an alternative to introduce mathematical activities based on local wisdom (Kastolani, 2021).

Based on the results of observations made by researchers as a preliminary study at the Darussajidin Mosque, mathematical concepts and ideas have grown, developed, and used by people in the past to make it easier to re-explore these ideas. There is one concept in the architecture of the Darussajidin Mosque, Bondan Village, and Indramayu Regency, namely congruence. The concept of congruence is contained in the architecture of the mosque building, one of which is the air ventilation of the mosque. The shape of an air vent consists of 2 parts that are side by side and have the same size and shape, namely the regular polygon of stars. In addition, in the architecture of the mosque building, there are also fundamental concepts in other geometric materials, including flat wake, flat side space build, curved side space build, and similarity. Some studies have tried to relate the exploration of local cultural heritage. Huda (2018) contributed to the discovery of geometry elements, such as square planes and solid figures. Another study, Utami (2018) disclosed the mathematical activity in the Lampung traditional house, which contains the mathematical concepts of one-dimensional geometry, two-dimensional geometry, three-dimensional geometry, geometrical transformation, odd numbers, even numbers, and rational numbers. A similar study by Putri (2017) revealed the existence of mathematics elements in the traditional tambourine art, such as geometrical concepts and numeration techniques that produce harmonious tone patterns.

The brief description of the Darusajidin Mosque above illustrates that mathematics has been applied to the Indramayu community in the architecture of the Darussajidin Mosque, which contains elements of mathematics. In order to identify the ethnomathematical values

employed in a more realistic mathematics learning process, it is necessary to investigate the shape and architecture of the Darussajidin Mosque. As a result, the Darussajidin Mosque can serve as a learning resource. D'Ambrosio (2004) divides the current ethnomathematics categories into counting, weighing, measuring, comparing, sorting, and categorizing when referring to resources for learning mathematics. This category can be used as a research tool to find learning materials for learning basic mathematics. Determining learning resources for ethnomathematics of the Darussajidin Mosque in accordance with the subjects, materials, and fundamental skills of students based on the independent learning curriculum is the aim of this research, which aims to explore the concepts contained in the building of the Darussajidin Mosque. This study aimed to determine the mathematical activity of designing and philosophy of Islamic values at the Darussajidin Mosque, Bondan Barat Village, Indramayu. Therefore, researchers are interested in conducting ethnomathematical research at the Darussajidin Mosque titled "Ethnomathematics of the Darussajidin Indramayu Mosque on Designing Mathematical Activities and Philosophy of Islamic Values."

Methods

The subjects in this study were DKM, caretakers, community leaders, and cultural observers. The object of this research is the Darussajidin mosque, Indramayu. This study uses a qualitative method with an ethnographic approach. This research was conducted at the Darussajidin mosque, Indramayu, in Bondan Village, Sukagumiwang District, Indramayu Regency. The method used in this research is qualitative with an ethnographic approach. Qualitative research is research that aims to find out empirically or see the world as it is, not the world that should be carried out in natural and innovative conditions, to ensure the truth of data, to develop theories, to understand social interactions, to find hidden meanings, and to research the history of development.

According to Creswell, ethnography is a method that wants to describe and interpret the 'world' of a group of people who have the same lifestyle (Raco, 2018). The ethnographic approach analyzes, explains, and describes mathematical concepts in the Darussajidin Mosque building, West Bondan Village. The procedures in this study include; *first*, preliminary design, in the preliminary stage, what is done is to determine the conflict that will be the research object. The object of this research is the Darussajidin Mosque, Bondan Barat Village, Indramayu; *second*, instrument making, at this stage, research instruments consisted of observation instruments and interview instruments; *third*, instrument validation, at this stage, the validity is carried out on the interview guide instruments, observation guidelines, and expert validation sheets by giving validation sheets to the validator, namely the supervisor; *fourth*, data collection, in this study, data collection was used to determine the ethnomathematical elements of the Darussajidin Mosque using observation, interviews, and documentation techniques; *fifth*, data analysis, at this stage, what is done is to process the data obtained through observation, interviews, and documentation by describing it into easy-to-understand data; *sixth*, conclusion, at this stage, conclusions are drawn from the data analysis referring to the research questions.

The collected data in this study by observation, interviews, and documentation. The data analysis procedure in this study begins with collecting data such as field notes, interview transcripts, and documentation grouped by coding. After that, other activities in data analysis using the Miles and Human model are data reduction (Milles & Huberman, 1992). Presentation of data (data display) and verification of conclusions (conclusion drawing/verification). At this coding stage, they were using the ATLAS.ti software.

Results and Discussion

There is the ethnomathematics of the Darussajidin Indramayu mosque on the mathematical activity of designing and the ethnomathematics of the Darussajidin Indramayu mosque on the philosophical meaning of Islamic values. Ethnomathematics is an attempt to discuss and assess several cultural aspects related to mathematics. The ethnomathematics found in the Darussajidin mosque, Indramayu, is a mathematical activity of designing. Mathematical designing activity is an effort to develop students' reasoning power through culture-based mathematics learning or ethnomathematics. At the Darussajidin mosque, Indramayu, there is a philosophical meaning of Islamic values related to people's lives, both relationships with humans and with the creator. As an old site or building, the mosque material is not made of modern materials, and each structure has its philosophical meaning or value.

Based on independent learning curriculum that sought to build students' character and attitudes of adoration for God Almighty, the mosque was selected as a cultural artifact. It is believed that by learning about the history of the houses of worship in each student's community, they will be able to strengthen the principles that guide their religious life. The mosque is not only a place of worship for Muslims but also a hub for Islamic arts and culture that is infused with each nation's unique national characteristics. As a result, the structure is made up of a collection of monumental structures, Islamic architecture, and local characteristics from the region where the mosque was built (Marli, 2017). The cultural context can help students connect their learning to their daily life and make it easier for them to recall what they have learned (Reiser & Gagne, 1982).

History of Darussajidin Mosque

No one knows when the Darussajidin mosque was built, but when renovating and dismantling the dome around the 80’s or 90’s, there was the inscription 1414 on the mosque's dome. Because people used to make a building when they usually wrote the year of manufacture, from there, the perception was equated that the year the Darussajidin mosque was founded was 1414. At first, the Darussajidin mosque was known as the magi broom wind sadly mosque. Many versions state that the founder of the Darussajidin mosque in Indramayu is Syekh Bayanila, which means the banks of Cimanuk because it is close to the Cimanuk river. The founder of the Darussajidin mosque, Indramayu, is also known as Sheikh Ali Mudin and Sheikh Datul Kahfi. The history of the Darussajidin mosque also has many versions, with similar stories but different names of characters.

Sheikh Ali Mudin is still a student of Sunan Kalijaga. At that time, he wanted to spread Islam in the Bondan area. However, he was prevented by someone influential in the area, namely Ki Geden Bondan and Ki Geden Bondan, who did not like Sheikh Ali Mudin from spreading Islamic teachings in the area. Ki Geden Bondan has a younger brother named Kencana Wungu, Kencana Wungu wants to convert to Islam. When Kencana Wungu converted to Islam, Ki Geden Bondan heard him. There was a disagreement between Ki Geden Bondan and Sheikh Ali Mudin, and an agreement was made. If Sheikh Ali Mudin wins, then Ki Geden Bondan must follow the teachings of Sheikh Ali Mudin and vice versa. Ki Gede Bondan lost the competition, and at that time, Kencana Wungu came to intervene between Ki Geden Bondan and Sheikh Ali Mudin. After that, Sheikh Ali Mudin wanted to marry Kencana Wungu. Because he saw that Sheikh Ali Mudin had supernatural powers, it was accepted on the condition that a mosque was built in one night in the form of a stage and made of wood. The stage is shaped because it is close to the Cimanuk river. If there is a flood, it will not be damaged. Furthermore, the Darussajidin mosque was created as indicated in the form of a stage, roofed pedestal, and wooden walls.

Darussajidin Mosque Roof

At the Darussajidin Indramayu mosque, the roof is not only one part but there are two parts. The roof of the Darussajidin Indramayu mosque uses wood shingles arranged in the shape of a pyramid, as can be seen in Figure 1. The top of the roof is conical in shape. The roof of the Darussajidin mosque is also said to be in the form of an isosceles triangle with four corners made into one part, and the bottom is not rectangular but square because it has the same size. The initial architectural form of Darussajidin Indramayu Mosque is traditional Javanese architecture by using a *brunjungan* roof like the three-story *meru* on the main building.

Figure 1. The Roof of the Darussajidin Mosque

The philosophy of Islamic values on the 9 x 9 meters roof is associated with the 99 Asmaul Husna, and the roof of the Darussajidin Mosque is not only one layer. So, the roof is significant, then there is a distance like the wind, and another small roof is at the top. The philosophy of Islamic values on the roof is to achieve something or perfection. There must be

stages. On the roof of the Darussajidin mosque, Indramayu, Islamic philosophy has meaning, namely Inna prayers *wanusuki wamahyaya wamamati lillahi robbie alamin*. When drawn, the roof of the Darussajidin mosque is almost the same as a cone. The symbol and philosophy are that we live in two realms, in two parts, male and female, happy and sad, laughing and crying, black and white, day and night, all side by side, starting from the bottom. The bottom is the result of the earth and will return to the earth. Tumpeng consists of two sentences, *tum* and *peng*, meaning this tumpeng is *tuntunge* thief prince, meaning that in the end, everything, whether its deeds, deeds, etc., remains at the end left to God.

In the other study, carvings (ornaments) on the walls, pavilion buildings, mosque roofs, and drums were identified as being part of the Kota Gede Mataram Mosque. These carvings are strongly tied to geometric ideas, such as constructing flat and building space (Bakhrodin, 2019). The other study goes on to say that circles, rhombuses, squares, triangles, squares, rectangles, and reflections are among the mathematical symbols that may be found in the Masjid Soko Tunggal (Putra et al, 2020). It demonstrates how, if mathematical concepts are presented properly, learning mathematics is not difficult because it is directly related to students' or society's everyday lives. Based on the ethnomathematical identification of the roof of the Darussajidin Mosque, questions and explanations are offered.

Dome of Darussajidin Mosque

The mosque's dome is not made of ceramic like today's mosques, but is made of clay in a classic shape that is more than six hundred years old and has an irregular shape, as can be seen in Figure 2. The lower part is square or rectangular, the upper part is cylindrical, then the upper part is irregular in shape because it has a pattern, and the upper part is in the form of a half ball. The dome of the Darussajidin mosque consists of three parts, so the philosophy is associated with Islam because Allah likes odd things. Therefore, there are several parts of the building in the mosque which have an odd number, including the dome the mosque. The dome of the Darussajidin mosque is made of clay shaped and then dried in the sun to dry and then burned. The dome of the Darussajidin mosque is likened to a king wearing a crown.

Figure 2. Dome of Darussajidin Mosque

The dome of the Darussajidin mosque is the same as the dome of the great mosques in Demak and Banten. If now, there is a moon on the mosque's dome, it is an Arab influence. The

mosque's dome is likened to the end of a cone with nothing, meaning that Allah SWT will not ask for much time from humans, only a little time. Like a triangle, the higher you go, the smaller it gets. God will not ask for much time. It will not ask for many things. The important thing is sincerity. The dome is the brain. The higher our brain, the more appreciated, and the higher our brain, the more dignified people will become.

Darussajidin Mosque Walls

The walls of the Darussajidin mosque are made of teak wood composed of boards forming a rectangle because there are elongated sections, it can be seen in Figure 3. There are two rooms in the Darussajidin mosque, Indramayu. The main room, which is usually used for prayer, is made of wood with a size of 9 x 9 meters, and a terrace is made of bricks which are usually used for deliberation. The shape of the mihrab wall of the Darussajidin Indramayu mosque is rectangular because there is an elongated one. The shape of the mihrab at the Darussajidin mosque is not like the mosque now, which is rectangular with a half circle on it.

Figure 3. Darussajidin Mosque Wall and Air Vents

The air vents in Darussajidin mosque as can be seen in Figure 3, are star-shaped and identical to the logo or symbol of Islam. Islam is synonymous with the star and crescent. There is a star shape on the mosque's walls, and the star is something small but luminous. This means that no matter how small the knowledge we have, please give light, give knowledge so that nothing is dark. The more stars, the better, so it will be crowded the more worshipers. The pentagon star says it is related to the pillars of Islam, and some say it is the fifth father of cancer. Some say life has to do five times.

The pillars of the Darussajidin Mosque

The pillars of the Darussajidin mosque in Indramayu are four. The pillars of the Darussajidin mosque are made of teak wood, but unlike other mosque pillars, they are cylindrical. The shape of the pillar in the Darussajidin mosque is in the form of a beam with a width of 20 cm and a height of 4 meters. At the Darussajidin Indramayu mosque, there are 16 other supporting poles under the mosque with a height of 40 cm. The pillars in the Darussajidin Indramayu mosque are in several parts, such as in the place of teaching or praying that can be seen in Figure 4 and in under of the mosque that can be seen in Figure 5.

Figure 4. Teacher's Pillar

Figure 5. The Pillars Under the Mosque

The philosophy of the pillars of the Darussajidin mosque symbolizes the essence, *tarekat, syariat*, and *ma'rifat*. Soko guru, some say *sedulur papat*, some say that life must carry out four *syariat*, creed, prayer, fasting, zakat. These four pillars serve as a buffer between the ulema or the leader, umara, and ulema. There are leaders, religious experts, law enforcers, and the people who are the fathers of the pillars of the teacher. If the others are parts, the prayer must be five times from dawn to midday, *asr*, maghrib, that practice must be carried out. Some say that the secular papacy is the lord of Allah, angels, prophets, *wali Allah*.

Darussajidin Mosque Floor

The floor of the Darussajidin mosque is in the form of a board using teak wood, in the form of a square, not a parallelogram, because it has the same length, the same thickness, and the exact width of the board with a size of 9 x 9 meters. The floor of Darussajidin mosque can be seen in Figure 6. Generally, ancient mosques when religious symbols were made on stage to signify the ancientness of the mosque. The floor of the Darussajidin mosque was made on a stage to avoid flooding and calamities. The mosque is made on a stage because the place of worship is a holy place. It is not allowed to make toys or make dirty things. So, to keep it should not be dirty.

Figure 6. Darussajidin Mosque Floor

Darussajidin Mosque Ornament

At the Darussajidin mosque, Indramayu, there are no striking ornaments. There are ornaments on the Darussajidin mosque in the form of carvings on the original door. Darussajidin Mosque uses a door that has two doors that meet in the middle. The mosque door is made of rectangular wood with a size of 130 cm and a width of 89 cm.

Figure 7. Darussajidin Mosque Window

The door at the Darussajidin mosque is made relatively short by using wooden hinges, as can be seen in Figure 7. The door at the Darussajidin mosque is made relatively short, so the philosophy is that when people enter the mosque, they bow down or be more respectful. The Islamic values in the door ask for forgiveness, so we must ask for forgiveness and repent. When entering the mosque, it is intended to repent, and wherever you go, you must respect.

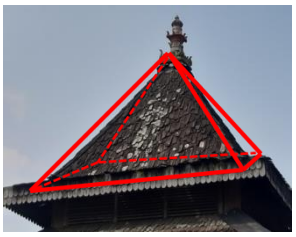
Figure 8. Darussajidin Mosque Air Ventilation

The window in the Darussajidin mosque as is square and there is a semi-circle above it. There is no glass in the Darussajidin mosque because there was no glass in ancient times, and windows in the Darussajidin mosque should not be glass because it is an ancient mosque. The air vents in the Darussajidin Indramayu mosque are in the form of stars, star shapes, pentagons, or triangles as many as 10 shapes. Moreover, there are air vents in the Darussajidin Indramayu mosque in the form of a kayak. The air vents as in Figure 8 are in the form of star-shaped Darussajidin mosque are identical to the logo or symbol of Islam. Islam is synonymous with the star and crescent. The form of five-star air ventilation on the mosque's walls has a philosophy that is related to the five pillars of Islam. At the Darussajin Mosque also have *kentongan*, that is the same as in general mosques, tubular or cylindrical. *Kentongan* at the Darussajidin mosque uses jackfruit wood because it is considered louder. The shape of *kentongan* can be seen in Figure 9.

Figure 9. *Kentongan* Darussajidin Mosque

The results of observations during the research to answer research questions about ethnomathematics that found in the Darussajidin Indramayu mosque, summarized in Table 1.

Table 1. Ethnomathematics of the Darussajidin Indramayu Mosque in Designing Mathematical Activities and Philosophy of Islamic Values

Documentation	Mathematics Concept	Philosophy of Islamic Values
	The upper roof of the Darussajidin mosque is a rectangular pyramid and isosceles triangle (front and side view). The link between the upper and lower roofs is a cube.	The meaning of the philosophy of Islamic values is *inna prayeri wanusuki wamahyaya wamamati lillahi robbil alamin.* The roof of the Darussajidin mosque, if drawn, is almost the same as the tumpeng. Tuntunge consists of two words *tum* and *peng*, meaning that this tumpeng is *tuntunge* thief prince, meaning that in the end everything, be it deeds, charity and so on, is ultimately left to God.
	The lower roof is prism-shaped and trapezoidal (front view).	
	The roof above the mihrab is in the form of a triangular prism.	
	The roof above the mihrab side view is triangular in shape.	
	The shingles on the top roof tiles are rectangular and triangular in shape, while the shingles on the side tiles are rectangular and semicircular in shape. The shape of the shingle at the top of the mihrab consists of several rectangular and semicircular shapes, some are rectangular and quarter circle which are then arranged into a rectangular shape.	
		
		

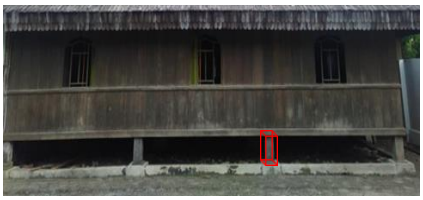
The shape of the dome at the Darussajidin mosque, the lower part is cube-shaped and the middle part is cylindrical with patterns and the upper part is half-spherical.

The dome of a mosque is likened to the tip of a tumpeng where there is nothing, meaning that Allah SWT will not ask for much time from humans, only asking for a little time. Just like a triangle, the higher you go the smaller God won't ask for a lot of time, won't ask for a lot of things, the important thing is to be sincere. The dome is the brain, the higher our brain, the more it will be valued, the higher our brain, the more dignified people will be.

The walls of the mosque are in the form of blocks arranged using rectangular wood. Rectangular wall (front view).

The walls of the mihrab are rectangular in shape (front view and side view).

The star-shaped air vents in the Darussajidin mosque are synonymous with Islamic logos or symbols. Islam is synonymous with stars and crescents. On the wall of the mosque there is a star shape, the star is something small but luminous. This means that no matter how small the knowledge we have, please provide light, provide knowledge so that there is no darkness. The more stars the better, that's why the more worshipers will be crowded. Some say that the five-pointed star is related to the pillars of Islam, some say that the five *pancers* are *sedulur papat*, some say that life must be done 5 times.



The main pillar, called the pillar of the teacher at the Darussajidin mosque, is in the form of a beam. There are 4 pillars of pillars at the Darussajidin mosque with a width of 20 cm and a height of 4 meters.

The pillars under the mosque are in the form of blocks measuring 40 cm, totaling 16.

The philosophy of the pillars of the Darussajidin mosque symbolizes nature, tarekat, syariat and ma'rifat. Soko guru some say *sedulur papat*, some say life must carry out 4 *syariat*, creed, prayer, fasting, zakat. These 4 pillars are the support between the ulema or leaders, umara, ulema. If the others are parts, the prayer must be five times starting from evening dawn to noon, *asr*, sunset, these practices must be carried out. Some say *sedulur papat* is God's god, angel, prophet, *waliyullah.*

The floor of the Darussajidin mosque is composed of rectangular wood that forms a square.

The floor of the Darussajidin mosque is made of stilts to avoid flooding and disaster. The mosque is made a stage because the place of worship is a holy place, toys or dirty things are not allowed to be made. So, to keep it not dirty.

The *Kentongan* in the Darussajidin mosque is in the form of a tube made of jackfruit wood.

The windows in the Darussajidin mosque are square and semi-circular and there are also 10 five-pointed star-shaped air vents.

The door to the Darussajidin mosque is rectangular. On the box-shaped door leaf there is a translation form in the geometric transformation. The size of the door is 108 cm wide and 180 cm high.

The door to the Darussajidin mosque is made rather short, so the philosophy is so that when people enter the mosque they bow down or be more respectful. The Islamic values contained in the door are asking for forgiveness, so one must ask for forgiveness and repent. When entering the mosque, it is intended to repent and wherever you walk you have to respect it.

The carving on the door of the Darussajidin mosque contains a form of Geometry Transformation, namely reflection.

The carvings on the pulpit at the Darussajidin Indramayu mosque are in the form of a Geometry Transformation, namely dilatation.

Conclusion

There is ethnomathematics in mathematical designing activities at the Darussajidin Indramayu mosque, including the roof of the mosque is not only one part but there are two parts. The roof of the Darussajidin Indramayu mosque uses wood shingles arranged in the shape of a pyramid. The top of the roof is conical in shape. The mosques dome is classically shaped, more than six hundred years old, and has an irregular shape. The lower part is square or rectangular, the upper part is cylindrical, then the upper part is irregular in shape because it has a pattern, and the upper part is in the form of a half ball. The walls of the Darussajidin mosque are made of teak wood composed of boards forming a rectangle because there are elongated sections.

There are two rooms in the Darussajidin Indramayu mosque. The pillars of the mosque are in the form of beams, totaling 4, the floor of the mosque is square, the door of the mosque is rectangular, the windows of the mosque are square with a semi-circle, and ventilation is in the shape of a star, the *kentongan* is in the form of a tube or cylinder. There is ethnomathematics of the Darussajidin Indramayu mosque on the meaning of the philosophy of values, namely on the mosques roof. The philosophy of Islamic values on the roof is that to achieve something or achieve perfection, and there must be stages. When drawn, the roof of the Darussajidin mosque is almost the same as a cone.

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Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been covered completely by the authors.

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