Content Analysis of Al- Science Integration in Children's Animated Serial of Riko the Series on Hujan’s Episode

Abstract: The is a source of value in the development of religion, morals, and knowledge for early childhood, especially for Muslim children. The integration of science-based knowledge is often highlighted at every level of education, especially in PAUD. This study uses a qualitative descriptive with the type of document analysis or content analysis. The data analysis technique, consisting of content analysis, information grouping, data interpretation, and verification, refers to the Saussure model. Testing the validity of the data used the credibility test, namely by increasing the persistence of researchers in terms of reviewing the important points of the analyzed content. The result shows that the animated film Riko the series became a science learning solution which was integrated with Al-learning gives meaning to its learning so that it was not limited only to the memorization but could be directly contributed to children’s daily life.

Keywords: Al Science Integration, Animated Series, Riko the Series
INTRODUCTION

Early childhood is the successor to a nation and religion. In Islam, early childhood will be a connector for the message of Islam (‘Ulwan, 2012; Abdurrahman, 2010; Suwaid, 2010). The quality of Muslims in the future is determined by their closeness and understanding of the (Muhammad Askar, 2016; Suwaid, 2010). One proof that the glory of Islam is determined by the proximity of its successors to the has been illustrated in the long history of Islam. Children who live under the auspices of the from an early age grow into individuals with character and develop according to their potential. The potential of the early childhood can develop optimally if it gets the appropriate stimulation. The  is the main source of the values and way of life of a Muslim which has been scientifically proven to be related to every line of Muslim life (‘Ulwan, 2012; Asis, Azria, 2018; Hidayatulloh, 2017). This linkage is not limited to sharia concepts such as worship but is also comprehensively related to science, technology, and even the ideal way of life for children (Ismail, 2004; Kamarulzaman & Ahmad, 2014; Mustakim, 2019; Sidik, 2013). Children's understanding of the relationship between the Qur’an and their way of life can be obtained through education.

Education is one of the means of developing human potential as mandated by the 1945 Constitution, further in Article 31 (paragraph 1) stating that everyone has the same right to obtain education and in paragraph (3) stating that the administration of education is carried out by the government in the context of increasing faith and piety. This educational effort is carried out from an early age with the aim that the potential of children can develop optimally at their golden age so that from that point they already have a solid foundation. One of the foundations relates to the children's understanding of the . A good impression and understanding can be obtained by children if they get a good understanding of the and science through learning by the principles of early childhood learning.

The principles of early childhood learning include learning through concrete activities with the characteristics of playing while learning to develop all aspects of its development (Rahayu, 2015; Saepudin, 2011). Abstract concepts will be understood by early childhood if it is presented in a real form and related to the child's immediate environment. A linkage is a form of integration between the and other learning. The integration will make the information received by the child becomes meaningful. This meaningfulness will make the process of developing aspects of early childhood development fun. One of the lessons that can be directly integrated with the is science learning.

Learning science in early childhood is related to children's understanding of themselves and their surroundings. The as the source of Islamic religious concepts also provides various scientific concepts that children can prove in their lives (R. Astuti & Aziz, 2019; Y. Astuti, 2016; Muhammad Askar, 2016; Promadi, 2010; Suwaid, 2010). However, learning related to the Qur’an so far is dominated by rote so that early children are not able to apply the values contained in the Qur’an in their life. Furthermore, the learning is only as memorization to achieve academic targets without giving meaning to children. One of these problems can be overcome through the use of media that can meet the requirements for meaningful learning for early childhood, namely concrete, fun, and related to the child's immediate environment. One of the media that can be used is animated films.

Animated films are one of the media which use smaller portion compared to the use of other learning media (Asis, Azria, 2018; Fardani & Lismanda, 2019; Rahayu, 2015; Sidik, 2013). In learning, the majority of the media used are still in the form of Iqro's books and letter cards. Meanwhile, the use of multimedia-based media is still rarely used. In addition to this, the use of media that can provide clear concepts related to the
integration of al- learning is still very minimal. Therefore, animated films are one of the media that can be used in early childhood learning.

The animated film Riko the series is one of the animated films that presents the relationship between the Qur’an and the daily lives of children in a fun and concrete way of presentation. The presentation of learning in the form of films can reach all types of children's learning and is very interesting for them (Fardani & Lismanda, 2019; Rahayu, 2015; Sidik, 2013). Considering that during the pandemic the use of smartphones and online-based media became very dominant, animated films became a very effective choice of learning media to use. The purpose of this study is to describe the content of the integration of the science in the animated series Riko The Series which is devoted to episodes that have scientific content, especially about rain, chameleons, getting to know great scientists, and being brave with iron. The latest study in this research lies in the content of scientific analysis which is integrated with the Qur’an so that it becomes full of meaning and education.

METHOD
Based on this background, the researcher uses qualitative research methods with a semiotic analysis approach as an effort to develop an understanding of the object under study (Creswell, 2013; Sugiyono, 2018). The consideration for choosing this method was motivated by the need for a detailed description of the relationship between the Qur’an and science through the animated film Riko the series. The orientation of this research will describe what is contained in the animated series Riko The Series related to the integration of the science of the Qur’an in several episodes. The data source was obtained from the YouTube video footage of the animated series Riko The Series with episodes of Rain, Great Scientists, Like Chameleons, and Dare to Be with Iron.

The data collection technique is carried out in the form of documentation analysis by identifying the animated series Riko The Series, observing and understanding the scenario according to the steps that will be carried out in this research, namely the integration of the science of the Qur’an. The data analysis model used is the semiotic analysis method of the Saussure model (Moleong, 2016). This analysis model was chosen to know the meaning of the signs contained in the scenes and dialogues of the characters in the animated series Riko The Series which contains the values of integrating the science of the Qur’an. The stages of data analysis are carried out by reviewing content, grouping content according to research objectives, interpreting data, and verifying data so that all phenomena have academic social value and scientific value. Testing the validity of the data using a credibility test, namely by increasing the persistence of researchers in terms of reviewing the important points of the content being analyzed.

RESULTS AND DISCUSSION
The animated film Riko the series is a film that was first launched in 2019. This film was initiated by its executive producers, namely Yuda Wirafianti, Arie Untung, and Teuku Wisnu with the hope that children can be entertained, educated about religious knowledge, science, Sirah, and history that are considered to be relevant to the storyline. To make the animated film Riko the series a quality and useful film, Garis Ten as its production house collaborates with students from the Faculty of Science and Technology, Bogor Agricultural University and brings religious leaders in the production process. Strict care and control of the animated film content can ensure the quality of the content contained in the Riko The Series film. This effort is carried out to provide education related to religion, one of which is about the relationship between the Qur’an and science and its relationship to children's lives through interesting illustrations.

The animated film Riko the series is made with an attractive film presentation because it is three-dimensional and adapted to the typical characters of the children's
world, namely expressive, colorful, cheerful, unique, and filled with curiosity (Maiza & Nurhafizah, 2019; Suryana, 2007, 2018). One of the forms of children's curiosity and expressiveness is depicted in the character Riko, who every time she has a question, some of her hair will stand up like in the picture (Riko The Series, 2021).

Figure 1. Riko's Hair When You Have Questions (Riko The Series, n.d.-c, n.d.-a, 2021)

Figure 2. Sis Wulan is explaining Riko's question (Riko The Series, n.d.-c, 2021)

The explanations related to science in this film are explained with illustrations in the form of animations that are very simple and easy to understand. Interesting science narration and illustrations will give a sense of pleasure so that it will impress children. The concept of science will also be easily understood by children because it is explained in moving illustrations so that it is by the principle of children's learning, namely learning through concrete objects, here is an example of an illustration about the rain that is in the Riko the series film in the rainy episode, after Riko asked: "if it rains it can fall, then when will it rise?"

Figure 3. Illustration of the Process of Rain (Riko The Series, 2021)

Figure 4. Seen Black Clouds With Falling Raindrops (Riko The Series, 2021)

After the explanation with moving illustrations, the concept of rain is associated with the greatness of Allah and the verses of the concerning rain. In some episodes, the verses of the are read by children while in other episodes, the verses of the are read by characters in the film. Presentation of interesting illustrations and narratives while leaving a positive impression for children in understanding the relationship between the Qur’an and the concept of science.

The Riko series film provides an understanding of the interrelationship of the and science in an integrative and applicable way. This can be seen from every story presented in the Riko series film. Each verse of the discussed has a direct connection with the problem being discussed. Like when answering Riko's question about "if it rains, when will it go up?". Presents daily events that address questions that often arise from children. The problems discussed or questioned by Riko as the main character in
the animated film are problems that are usually questioned by children. The question is then discussed and associated with the greatness of Allah. The character of Muslim children is very clearly highlighted in this film such as praying when it rains, apologizing when wrong, saying thayyibah sentences such as subhaanallaah, Masha Allah, and so on.

Riko is an example of the attitude of Muslim children in everyday life. Riko's expressive and curious character is clearly illustrated through the questions that arise from her. In one of the episodes in the Riko series film entitled "like a chameleon, it is told that Riko imagines being a ninja so that he can disguise himself and cannot be seen by his brother (Riko The Series, n.d.-a, n.d.-c). Kio's character then explains to Riko that it turns out that there are creatures of God that God created far more powerful than ninjas because they can disguise themselves so as not to be caught by their enemies, namely chameleons. Kio's explanation then amazed Riko who then said Masha Allah as an expression of her amazement. At the end of the film, it is explained that in the universe there are many signs of Allah's greatness on earth, along with an invitation to read the find other signs of Allah's greatness, here is one of the letters in the that is read in that episode:

Figure 5. Sis Wulan reads the verses of the Qur’an related to the rain process (Riko The Series, 2021)

Other things are also seen in several episodes that have been aired. The episode of Knowing Great Scientists has an interesting value with the introduction of influential Islamic figures in the world wrapped in interesting and easy-to-understand children's songs (Riko The Series, n.d.-a, n.d.-b, n.d.-c). Studies related to the introduction of Muslim figures are the value of Islamic integration in the children's film series which can be mandatory recommendations for discussion and adding insight. So that Islamic values will always be realized in the family realm as the first education for children.

Based on this explanation, it can be concluded that the animated film Riko the series is an animated film that aims to provide educational entertainment to provide religious knowledge in a fun way. Quality assurance and content can be seen from the collaboration of Garis X with the Faculty of Science and Technology, Bogor Agricultural University as well as the involvement of religious leaders in the production process. The display and presentation are attractive and fun and adapted to the typical character of the children's world. The concept of science is concretely illustrated through moving animation starting from typical activities that children usually do such as playing, imagining, and trying new things which then raises questions from Riko's character. This question then becomes the story that will be answered and linked to the verses of the.

Based on several research results indicate that the use of media is very influential on the mastery of learning concepts. Learning media should be able to touch all types of learning and meet the requirements of good media for early childhood, namely following the objectives, practical, easy to see, interesting, and concrete (Mustakim, 2019; Promadi, 2010; Saepudin, 2011). During the pandemic, learning is done online, so the use of media will ultimately adapt to the needs of online learning that involves the use of technology.

Animated films are multimedia-based media that can be used to discuss the concept of learning effectively and for fun during a pandemic. This is because animated films are widely available and can be watched for free
through social media. Animated films are films made through image processing. The early history of animated films was made through images made by hand which was then played repeatedly so that they seemed to move. Even today, animated films are becoming more interesting because they are made in three dimensions so that they look more real. The use of animated films in learning has several advantages, including helping understand abstract concepts to become concrete, helping to overcome controls related to the limitations of space and time, and helping to give a deeper impression of events that are difficult to observe due to the limitations of the human senses.

Science learning for early childhood is learning that aims to build children's understanding of themselves and their environment (S Safrizal, 2019; Safrizal Safrizal et al., 2020). However, one way to construct understanding in early childhood is to integrate one concept with other learning so that the construct of children's knowledge becomes intact. One of the integrations of science learning related to children's lives, especially for those who are Muslim is their understanding of the Qur'an (Agusti et al., 2018; R. Astuti & Aziz, 2019; Rahayu, 2015; Sidik, 2013; Tri Puji Astuti, 2007).

The and science are two things that cannot be transferred in the lives of Muslim children ('Ulwan, 2012; Abdurrahman, 2010). The is a source of value and the main source of knowledge, including knowledge of scientific concepts. Many of the arguments of the have been scientifically proven to be true. So that taking the arguments of the as a source of science learning can be used as a reliable reference (Hidayatulloh, 2017; Ismail, 2004; Mustakim, 2019). The phenomenon of the separation of the learning of the Qur'an and science and the phenomenon of learning the Qur'an which is limited to the realm of memorization can be overcome, one of them through the animated film Riko The Series.

The integration of the science of the Qur'an in several animated series Riko The Series is shown in an applicative and concrete way. This makes the academic content in this animated series not only contain entertainment but has academic and Islamic-based value that can be used for learning or discussion with children when online learning is carried out. Fun learning will leave a positive impression, according to neuroscience theory, information received in a fun way will be stored longer in the child's brain. An understanding related to the Qur'an that is integrated with science will be needed by children throughout their lives, because belief in the truth of the Qur'an will shape Muslim characters which in turn make children become good individuals for their society (Asis, Azria, 2018; Hidayatulloh, 2017; Mirawati & Nugraha, 2017; Saepudin, 2011) (Asis, Azria, 2018; Hidayatulloh, 2017; Mirawati & Nugraha, 2017; Saepudin, 2011).

Riko The Series film content related to the integration of the Qur'an and science that is presented concretely will help children understand abstract science concepts that are not accessible to children's senses (Asis, Azria, 2018; Rahayu, 2015; Saepudin, 2011; Sidik, 2013; Tri Puji Astuti, 2007). Children will more easily understand the evaporation of water by sunlight or understand how chameleons save themselves if assisted by media that can be seen and heard by children. The use of animation media such as Riko the series can touch the audio and visual senses of children. The involvement of the senses will greatly affect the child's understanding construct. as the results of the study show that the more the child's senses are involved, the better the absorption of information and the formation of children's knowledge.

Based on the discussion, it can be concluded that the animated film Riko The Series helps explain the relationship between the Qur'an and science so that learning the Qur'an and learning science are no longer separate and learning the Qur'an is no longer limited to memorization without being connected with the daily life of early childhood. Thus, it is hoped that the learning
function of the as a means of building confidence that the is a guide and the main source of knowledge for children will be meaningful for children because it is directly related to their lives.

CONCLUSION

The results and discussion of the research show that animated films can be an effective means of explaining the and science as well as being the answer to conventional learning that focuses on memorizing and learning science that is not integrated with religious concepts, especially al-. The is the main source of knowledge and life guidelines for Muslim children. The animated film Riko The Series does not only limit the relationship between the Qur’an and science, but more broadly, this film discusses the real character of Muslim children in their daily lives. There are still many aspects that can be touched by this animated film, the researcher recommends conducting further research on other aspects touched by the Riko the series, such as, the relationship between the Qur’an and technology or a real picture of Muslim children's characters because there are still few shows that can be watched by children. describe the figure of a Muslim child well. Furthermore, suggestions were submitted to the entire production team of the animated film Riko The Series regarding the use of language that must be adjusted again for children from an early age to elementary school. So that this film provides a good nuance and understanding in educating children.

REFERENCES

‘Ulwan, A. N. (2012). Pendidikan Anak dalam Islam (A. Wicaksono (ed.)). Insan Kamil.
Abdurrahman, J. (2010). Islamic Parenting: Pendidikan Anak Metode Nabi (A. Wicaksono (ed.); 15th ed.). Aqwam-Jembatan Ilmu.
Agusti, F. A., Anwar, F., Alvi, A. F., Negeri, U., Dasar, S., Islam, S. D., & Ummah, K. (2018). Penanaman nilai-nilai karakter terhadap peserta didik Melalui permainan congkak sebagai media pembelajaran. Jurnal Pendidikan Karakter, 8(1), 95–104. https://doi.org/10.21831/jpk.v8i1.21678
Asis, Azria, R. (2018). Pengenalan Konten Life Science Pada Anak Usia Dini Melalui Kegiatan Fun Cooking Kapurung. Jurnal Tunas Cendekia, 0849, 22–30.
Astuti, R., & Aziz, T. (2019). Integrasi Pengembangan Kreativitas Anak Usia Dini di TK Kanisius Sorowajan Yogyakarta. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 3(2), 294. https://doi.org/10.31004/obsesi.v3i2.99
Astuti, Y. (2016). Perilaku Tantrum Anak Usia 5-6 Tahun. Journal of Chemical Information and Modeling.
Creswell, J. W. (2013). Qualitative Inquiry and Research Design (3rd ed.). Sage Publication, Inc.
Fardani, D. N., & Lismanda, Y. F. (2019). Nilai-Nilai Pendidikan Karakter Untuk Anak Usia Dini Dalam Film “Nussa.” Thufuli: Jurnal Ilmiah Pendidikan Islam Anak Usia Dini, 1(2), 34. https://doi.org/10.33474/thufuli.v1i2.4921
Hidayatulloh, M. A. (2017). Nilai-Nilai Pendidikan Karakter untuk Anak Usia Dini dalam Film “Adit & Sopo Jarwo.” ThufulLA: Jurnal Inovasi Pendidikan Guru Raudhatul Athfal, 5(1), 42. https://doi.org/10.21043/thufula.v5i1.2345
Ismail, S. (2004). Being Muslim: Islam, Islamism, and identity politics. Government and Opposition, 39(4), 614–631. https://doi.org/10.1111/j.1477-7053.2004.00138.x
Kamarulzaman, W., & Ahmad, I. S. (2014). Contributing Factors To Children’S Critical Thinking Ability: the Perception of Pre-Service Teachers From a Private University in Malaysia. 2, 69–76. file:///C:/Users/myAcer/Downloads/f5c ac2068965fca379780e7cbb5a231.pdf
Maiza, Z., & Nurhafizah, N. (2019).
Pengembangan Keprofesian Berkelanjutan dalam Meningkatkan Profesionalisme Guru Pendidikan Anak Usia Dini. *Jurnal Obsesi* : *Jurnal Pendidikan Anak Usia Dini*, 3(2), 356. https://doi.org/10.31004/obsesi.v3i2.196

Mirawati, M., & Nugraha, R. (2017). Meningkatkan Keterampilan Proses Sains Anak Usia Dini Melalui Aktivitas Berkebun. *Early Childhood : Jurnal Pendidikan*, 1(1), 13–27. https://doi.org/10.35568/earlychildhood.v1i1.50

Moleong, L. J. (2016). *Metodologi Penelitian*. PT. Remaja Rosdakarya.

Muhammad Askar, A. W. (2016). Al-Quran Dan Pemanfaatan Permainan Edukatif Pada Anak Usia Dini. *Al-Afkar : Jurnal Keislaman & Peradaban*, 3(1), 99–124. https://doi.org/10.28944/afkar.v3i1.97

Mustakim, B. (2019). Kontestasi Identitas dan Kesalehan Anak Usia Dini Islam dalam Animasi Nussa. *Al-Athfal : Jurnal Pendidikan Anak*, 5(2), 135–150. https://doi.org/10.14421/al-athfal.2019.52-02

Promadi. (2010). Integrasi ICT Dalam Pendidikan Islam: Suatu Alternatif Pendekatan Pembelajaran Masa Depan. *Jurnal Ilmu-Ilmu Keislaman*, XXXIV(2), 264–284.

Rahayu, M. dan A. W. (2015). INTEGRASI ANTARA AGAMA DAN SAINS DALAM PEMBELAJARAN PAUD. *Marwah*, XIV(1), 94–110.

Riko The Series. (n.d.-a). *Berani Sama Besi?! - Riko The Series - Episode 01*. www.youtube.com. https://www.youtube.com/watch?v=0nGb4E4uCOc

Riko The Series. (n.d.-b). *ILMUWAN HEBAT - Riko The Series Season 02 - Episode 13*. www.youtube.com. https://www.youtube.com/watch?v=BFHnjwILQlg&tt=397s

Riko The Series. (n.d.-c). *Seperti Bunglon - Riko The Series - Episode 15*. www.youtube.com. https://www.youtube.com/watch?v=UUOjjXK7lBk

Riko The Series. (2021). *HUJAN - Riko The Series Season 02 - Episode 10*. www.youtube.com. https://www.youtube.com/watch?v=AHtqeb17Ge&t=141s

Saepudin, A. (2011). Pembelajaran Sains Pada Program Pendidikan Anak Usia Dini. *Jurnal Teknologi*, XV(2), 213–226.

Safrizal, S. (2019). Adiwiyata; Model of Building Science Literacy of Basic School Students in 21St Century. *PROCEEDING IAIN Batusangkar*, Query date: 2020-08-14 14:24:03, 277–282. http://ecampus.iainbatusangkar.ac.id/ojs/index.php/proceedings/article/view/1319

Safrizal, Safrizal, Zaroha, L., & Yulia, R. (2020). Kemampuan Literasi Sains Siswa Sekolah Dasar di Sekolah Adiwiyata (Studi Deskr iptif di SD Adiwiyata X Kota Padang). *Journal of Natural Science and Integration*, 3(2), 215.https://doi.org/10.24014/jnsi.v3i2.9987

Sidik, U. (2013). Ideologi Cerita Sang Kancil Dan Implikasinya Dalam Pendidikan Anak Usia Dini. *Widyapanfa*, 41(2), 144–152.

Sugiyono. (2018). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta.

Suryana, D. (2007). Dasar-Dasar Pendidikan TK. *Hakikat Anak Usia Dini*, 1, 1–65.

Suryana, D. (2018). *Stimulasi dan Aspek Perkembangan Anak*. Prenada Media Grup.

Suwaid, M. N. A. H. (2010). *Prophetic Parenting; Cara Nabi SAW Mendidik Anak* (F. A. A. Qurusy (ed.)). Pro-U Media.
Tri Puji Astuti. (2007). *Gambaran perkembangan literasi emergen anak taman kanak-kanak dengan alat ukur adaptasi Get ready To Read*. 13.