DOI: 10.26565/2226-0994-2021-64-9

УДК 791.22:004.946

Halyna Mylenka, Anhelina Anhelova

AUGMENTED REALITY IN CONTEMPORARY RELIGIOUS PRACTICE

The usage of the augmented reality is increasing in various religious fields. Virtual visualizations replace the theatrical elements with which church institutions used to operate in the past. The latest media technologies cause a specifically perception of religious ideas and symbols by believers. Consequently, augmented reality is a way of spectacularly visualizing religious topics, and new technologies have an effective impact on the consciousness of contemporary religious adherents. Thus the purpose to determine the main directions, functions, risks and perspectives of applying augmented reality in the religious education and practice of believers is very actual. Augmented reality is a convenient interactive method of forming parishioner's knowledge, creeds and, ultimately, a steadfast belief in the importance of regular religious practice. The main target audiences for implementing such new technologies consists from children, youth, pilgrims and people with disabilities. Despite serious objections from opponents, the application of augmented reality in religious education and daily practice has a great potential. So the use AR-technology in different directions (learning game, interactive quizzes, animated guides, biblical and hagiographic stories visualization, praying prompts et cet.) is an interesting phenomenon of the religious practice. This methodology could be improved only in case of in close cooperation with teachers, priests and IT-professionals. Thus augmented reality needs their methodologically correct, gradual, controlled programmatic implementation in different religious fields. The phenomenon of dissemination of the latest technologies in the education and daily life of religious communities requires further scientific reflection.

Keywords: augmented reality, religious communication, religious practice, pilgrimage, religious education, missionary work.

The problem statement. Religious institutions of the world are looking forward to find new forms of spiritual education and interaction with the congregation. Some churches are actively using additional means to communicate ideas and images (such as video clips, PowerPoint presentations, light music, etc.) when conducting sermons and theological lessons. The purpose of different visualization methods of verbal material is to adapt to the believers lifestyles and interests, especially children and young people.

The latest trend in religious education of modern churches is the use of augmented (other definitions: mixed, enriched) reality (AR). The principle of this technology is an interactive perception of the environment where objects are enhanced by computer-generated content. In other words, information in the form of text, graphics, audio or similar virtual objects is overlaid by real objects in real time. As a result, understanding of the outside world is amplified by multiple sensory factors, including visual, auditory, tactile, olfactory and other sensations.

As this technology is embedded in the daily experience of numerous users of tablets, smartphones, action cameras, ebooks and other gadgets, church leaders, teachers and preachers are increasingly using augmented reality in the process of learning and communicating information.

Analysis of recent studies and publications. Innovations in the field of application of AR in church educationtis a matter that only falls within the objective area of scientific inquiry. Using predominantly descriptive and phenomenological methods, the authors of publications focus on particular facts that illustrate the integration of this technology in the religious education of children and the daily life of believers. Here are some of these articles. W. Khairuldin and colleagues described the use of AR for teaching and assisting in Muslim prayer practices [Khairuldin, Embong, Anas, Ismail & Mokhtar, 2019]. P. Karamouzis and M. Keffalas studied the use of augmented reality (Aurasma program) in the teaching of main world religions and spiritual music [Karamouzis & Keffalas, 2016]. I. Nord and J. Palkowitsch-Kühl researched the

This is an open-access article distributed under the terms of the Creative Commons Attribution License 4.0.

[©] Mylenka H., Anhelova A., 2021.

development, testing and evaluation of learning scenarios in religious education, including the physical church space, augmented by virtual overlays (AR). Under the slogan "Faith Becomes Visible!", the researchers gathered information about already existing materials on church excursions in Würzburg [Nord & Palkowitsch-Kühl, 2017].

Some studies are devoted to the use of augmented reality in the field of pilgrim education. For example, B. Ramic-Brkic and colleagues created and described augmented real-time virtual environment of the Cathedral of the Holy Trinity in Mostar (Herzegovina) [Ramic-Brkic, Karkin, Sadžak, Selimovic & Rizvić]. L. Greci explored the use of AR as a virtual guide for religious museums [Greci, 2016]. F. D'Agnano and colleagues focused on a thematic research of augmented reality for the distribution of information about cultural and religious heritage [D'Agnano, Balletti, Guerra & Vernier, 2015]. C. Ramos, C. Henriques and R. Lanquar further explored in more details the development of smart religious pilgrimage using the technology of augmented reality [Ramos, Henriques & Lanquar, 2016]. L. Jongwook and colleagues described the difficulties of applying augmented reality to the architectural heritage, including in sacred shrines [Jongwook, Junki, Jaehong & Woontack, 2019].

For the most part this issue is covered in the blogosphere or in articles by some journalists and has not been the subject of a systematic scientific study. This state of investigations of the presence of augmented reality in religious education and practice determines the relevance of this publication.

Purpose. The purpose of the study is to determine the scope of use of augmented reality in modern church's education and practice.

Originality. The authors made the first systematic study of the main directions, functions, risks and perspectives of applying augmented reality in the daily life of believers.

The methodology of the research. Methodology is based on interdisciplinary paradigm when the borders of separate human researches (sociological, pedagogical and religious studies) are erased. Holistic method (researching the subject as complex systems) was used to reconstruct the full picture of the introduction of augmented reality technology in the education and everyday practice of believers. The structural and classification methods were used to organize dissimilar material. At the same time, the author used a phenomenological approach, without discussing the truth of religious phenomena, which are represented by AR-technology.

Discussion. The need for visualization of sacred symbolism arises during the period of the first religious beliefs. It changes over time and transforms with the development of the technical means of depicting the objective reality. Modernity motivates to diversify the ways of visualization of religious ideas and doctrines. At the same time, new technologies, based on the Comenius didactic principle of clarity, are turning into powerful means of communication of religious information and assimilation of new spiritual knowledge. Today it is possible to observe the rapid development of different directions of application of AR technology in the religious education and church life.

AR is foremost a new, accessible and user-friendly form of presenting information. Therefore, enriched reality technology is widely used in the field of religious education of children and youth. How pedagogical practice demonstrates, the use of AR increases the cognitive activity, student motivation, content understanding, learning spatial structure and function, retention in long-term memory, learning of language associations, improves the knowledge of younger people who are already accustomed to the electronic form of informational submission [Duh & Klopfer, 2013]. According to M. Huotari and E. Ikonen the use of the AR-technology in education has shown promising results: "Augmented reality turned out to be a versatile tool for learning about church, biblical texts and doctrinal contents" [Huotari & Ikonen, 2017, p. 32]. Recognizing the potential advantages of AR learning, the researchers conducted an experiment with Finnish primary school pupils (age 11-12). Augmented reality was used to create a holistic learning environment in a Lutheran church. Schoolchildren learnt biblical stories while attending a temple. They answered the questions, hidden inside a church, with the help of AR technology. The participants used tablets and the special AR application 'Aurasma' to

view a digital quiz. In order to pass the quest, the participants had to solve riddles about Christianity, find hints, new information and co-operate with their team [Huotari & Ikonen, 2017].

The use of AR-technology for children self-education deserves special attention. For example, "My Healthy Church" company has proposed to animate major Christian characters and heroes of biblical stories. In the Bible for children and youth project, through a special app, young readers see cartoon images above the pages of the Scripture. The stories that have just been heard or read by children are presented in animated form. As practice has shown, such personalization of abstract religious characters is impressed and is easier to remember. The purpose of My Healthy Church is to promote Fire Bible for Kids as a home textbook [My Healthy Church, official site].

AR-publications are effective in educating illiterate people in the suburbs. For example, the Missionary Bible, introduced in 2018 by the South American Division (SAD), is designed for Hispanic students. By downloading the Apocalipse RA app, users can see key images from the Revelation book on their smartphone screen. Not only reading, but also listening to stories and seeing voluminous illustrations of them, makes it easier to perceive the biblical text [Apocalipse Curso Biblico, official site].

Augmented reality will be useful not only for young people but also for experienced Bible scholars. Organizing the Old and New Testaments as hypertext usually causes difficulties in systematic assimilation of information [Yermeychuk, 2016]. Therefore, the ability to see footnotes, references to other biblical stories, quotes and clues through AR make the study of the Scripture more dynamic and effective. Everon Donato, the director of SAD Personal Ministries, explained: "In this Bible, one passage is topically connected to another one, and each link includes a footnote comment. So you don't need multiple resources. Everything you need for an effective Bible study is included" [Paradello, 2018].

The use of AR helps memorize difficult-to-learn texts that are full of outdated vocabulary and far-reaching historical details. For example, Islamic prayer practice involves knowledge of a large array of texts that need to be spoken at established times in different locations. With the help of a special program offered, a Muslim has the opportunity to see the text of a prayer on the smartphone or to hear its audio recording depending on the situation and location: at home, in the transport, in the dining room, etc. Special markers determine the location of a Muslim and download relevant content. The authors of this concept believe that the new technology will be useful to all members of the ummah, regardless of their age and previous experience [Khairuldin, Embong, Anas, Ismail & Mokhtar, 2019].

It is also trending to read the Bible using virtual reality headsets, such as Oculus Go. Proponents of this way of studying Scripture are convinced that virtual reality allows us to focus more deeply on the content of biblical stories, to visualize them as transcendental text [Hooper, 2019]. In addition, the ImmersionVR reader app lets you flip through pages by simply moving your head and adjust calm background music while reading.

An important direction of application of AR-technology is the religious education of pilgrims. Enriched reality as an additional informational source appears in objects of sacral architecture. This not only encourages local believers but also attracts pilgrims and tourists to install the mobile application. For example, The Turku Cathedral in Finland invites parishioners to install a special mobile application. When visiting the cathedral, users can point their smartphone camera to some parts of the temple interior and witness the events of the 16th Century Reformation [University of Turku, 2016].

Such visualizations are especially useful for those who do not know the local languages. To simplify the pilgrimage process, mobile app developers offer guided tours of temples and historic sites in AR format. Church History Augmented Reality App is a program that allows to view what the sacred buildings looked like in the past. Through a mobile phone or a tablet, user can see the reconstruction of destroyed temples, squares and other architectural sites, recreated from old photographs or archaeological sources. Visitors, regardless of their training and

mentality, can receive information without guides in an intuitive way in any language. With ARtechnology, pilgrims can see a reference about a statue or an icon, read or listen to the quotes from famous theologians, learn about the biography of a saint, and more. Moreover, the application installed on the user's device will allow to view the excursions that have attracted the most interest [Greci, 2016].

For example, specialists from Sarajevo School of Science and Technology reconstructed sacral architectural objects, which were damaged or completely destroyed during the war (1992-1995). Using computer graphics techniques and 3D technologies they recreated such temples virtually. According to authors of this project digital storytelling significantly improves the immersion of the users into the virtual environments. Therefore, they created an AR-guide that looked as a real priest. Thus viewers can see interactive 3D models of the Church of the Holy Trinity in Mostar [Ramic-Brkic, Karkin, Sadžak, Selimovic & Rizvić].

The use of advanced technology facilitates the promotion of little-known sacral structures and religious historical facts. For example, the temple in the village Gagino, where the famous singer Fyodor Chaliapin got married, was restored. As a result, the church on the periphery was transformed into a pilgrimage and a cultural center [Lyutykh, 2018].

Particularly noteworthy is the prospect of application of the AR technology to enhance the pilgrimage opportunities for people with disabilities. For example, Italian startup Tooteko lets its users to get audio information through contact with any 3D surface. In this way, traditional works of art are made available to blind visitors. The first tactile surface was modeled on the facade of the church of San Michele in Isola [D'Agnano, Balletti, Guerra & Vernier, 2015].

In the long run, all historical sites associated with the Bible will have augmented reality markers to tell pilgrims about sacred events. This is the wishful future of Paul Amlin, director of youth ministry for the Evangelical Lutheran Church in America: "...can you imagine augmented reality that overlays the buildings, streets and people that Paul encounters on his journey? Or what about Jesus grilling fish for his disciples on the shore? What would it be like to sit by that fire on the beach with Jesus?" [Amlin, 2016]. Moreover, according to Paul Amlin the use of mixed-reality technology in church services is extremely promising, as some congregations have long used screen projectors. In his opinion, supplementing sermons with visual images, scents and even physical objects will allow the parishioners to be more deeply immersed in sacraments stories [Amlin, 2016].

Augmented reality is also convenient for the spreading of missionary publications. Therefore, daily editions, thematic brochures, flyers with invitations, for example, to Christmas or Easter worships sometimes have AR markers. This enhances the impression and encourages parishioners, especially children and young people, to attend prayer meetings.

The use of augmented reality is rapidly evolving as an element of didactic-religious games, though the popularity, for example, of Pokémon Go has caused ambiguous attitude to this game among the clergy of different religions. Many so called PokeStops or PokeGyms are situated in religious places of worship, because the churches can be accessed by the wide public. According to the research of Sonja Gabriel, some churches hoped to attract gamers to religion. The Vatican as well as the Church of England approved Pokémon Go, some priests even advised how each church can benefit from the game. The Church of England recommended to place welcoming signs outside the church, enable players to use the church's Wi-Fi, speak to players about the game or even organize Poke-parties especially for young people as an important target group. The Poke-party was visited by people who had never been inside a church or at least had not been there for years. In the USA some churches tried to attract church-goes by funny messages, internet memes, images referring to Pokémon [Gabriel, 2017].

All these examples show that churches used the augmented reality mobile games as a kind of advertising for the religion. Moreover, during the peak popularity of Pokémon Go game the Fundación Ramón Pané, a Catholic evangelical group, ordered a new AR-style game called "Follow JC Go". Many designers, theologians, Bible experts, and Church historians worked on the app since August 2016. The project was financed with \$500,000 by sponsors and private

donations. Developers proposed believers to walk in local parks, yards, squares and streets in search of digitized Catholic saints who are hiding behind trees, park benches and even in private houses. "Follow JC Go!" also lets players "catch" Bible characters, instead of the little Japanese monsters or dinosaurs of Jurassic World Alive. The game is interactive and didactic: when players meet saints they answer religious quiz questions (for example, quotes from the Bible or hagiographical facts). Players can also collect virtual food, water and "spirituality" which symbolize their in-game health. The game Follow JC Go encourages users to worship by prompting them to stop and pray if they are passing a real churches or hospitals. Gamers can say a prayer whose text is visible on the screen. Players can also donate to charity through the special mobile app. The Supreme Pontiff blessed Follow JC Go. Pope Francis, who is alleged to be a fan, understood and approved the game idea: to combine technology and evangelization. For the church, the game "Follow JC Go" is an opportunity to use AR technology to attract and teach younger generation [Follow JC Go, app store].

The "satellite" church project looks like the most daring idea to use of augmented reality in the religious practice. Instead of watching live worship services through television and the Internet, parishioners will be able to use of augmented or virtual reality headsets. It should create the effect of being inside the temple and actually communicating with other members of the religious community. Special applications can transport a personal avatar to virtual gatherings and events, such as the VR Church Prayer Room or the International House of Prayer. It can also reflect the process of worship in real time. In this way, believers from anywhere in the world will be able to find themselves at a church ceremony in other cities. This will allow people who, for various reasons, cannot attend the church service (sick, quarantined and isolated people, young mothers, part-time or vacation workers, persons with disabilities, etc.) to remotely attend a worship service, as well as to communicate with the pastor and the congregation. At the same time, congregants who are physically in the temple must see the virtually present believers through augmented reality technology.

Satellite churches with their didactic and communicated potential are a worthy alternative to the so-called internet churches and cyber religions. Examples of the latter are the worldwide online church "St Pixels" or the online church "Edem". A significant disadvantage of such formations is their simulativity: these "churches" act solely as virtual organizations, without real implementation. However, online churches have many adherents. "We create worlds to experience God and the Bible. Be fully-immersed in a new expression of church", says the website of a VR-church established in Los Angeles. As for the creator of this project the mission of a VR-church is to communicate with God through virtual reality, augmented reality and next generation technologies. All this is able to significantly improve the unity of the congregation of those who go to God: "Connect with a global church family in an environment where everyone is welcome" [Virtual Reality Church, official site]. Supporters of the use of such technologies in the religious education and spiritual practice are coming up with different ideas for the development of various forms of virtual worship. According to Milton Hooper, alternative reality should offer believers the interiors of various world temples, sacred music performances, recorded in 360 degree video, sermons by famous preachers and more. "Virtual church can't replace going to a real church, but I think it's a novel idea" - Milton Hooper states [Hooper, 2019].

According to Pastor Christopher Benek, modern churches must seriously explore these rapidly advancing technologies in the field of missionary and educational work. This will help the return of the general population to the fold of the church, after all "millions of people who have been disenfranchised from the church because of physical constraints will now be empowered to fully participate in worship and fellowship via the Internet" [Benek, 2015]. Similar conceptual positions are held by the Lutheran priest Paul Amlin: "As we move closer and closer to the era of immersive technology and augmented reality, the church has an opportunity. We can... embrace the new and take a chance that more people will be reached with the good news..." [Amlin,

2016]. Thus, it can be stated that such innovations in religious ritualism and education have their ardent adherents.

However, the use of augmented reality technology in church education and wide practice raises serious objections from conservatives. There are some important discussion points:

- 1. Augmented reality, among other technological innovations, is irrelevant in religious practice, it distracts believers from the main existential issues, and acts as a simulation of a true conversation with God.
- 2. Augmented reality adds profanity to the depiction of religious symbols because it reflects the aesthetics of computer games and the ideology of the correspondent subculture. This causes specific associations and connotations, which obstruct visitors of temples, religious schools and museums from feeling the spirit of holiness. For example, Pokémon Go gamers declared an invention of new religion, due to number references to real religious topics and creatures [Gabriel, 2017: 25].
- 3. The use of augmented reality in religious education has some negative consequences: attention tunneling, usability difficulties, ineffective integration in classroom and so on. In addition, the playful and entertaining forms of providing sacred information to students make serious theological and spiritual problems too primitive, focusing students' minds on the process of play. For this reason, the vast majority of orthodox Muslims are extremely negative about the use of augmented reality. So in summer 2016 the clergy of Saudi Arabia renewed the fatwa against the AR smartphone game. The religious edict warns Muslims against playing because this kind of amusement violating Islamic prohibitions against gambling which is the fourteenth capital sin according to Allah [Gabriel, 2017: 24].
- 3. Augmented reality technology is vulnerable to hacking by atheists and critics of certain confessions. An example of such actions is the visual image of a pink unicorn, which can be seen on the iPhone screen above Peter's Square in Rome. The Invisible Pink Unicorn (IPU) is a deity of parody religion created under the rules and laws of traditional cults [Jefferies, 2019]. The emergence of this virtual creature in the Vatican is an effective method of ironically promoting atheism and skepticism. Another example is the undeliberate desacralization of temples, when during the peak of popularity of the Pokemon Go game, believers could see unrealistic little creatures inside the Baptist Assembly building, Hindu and Islamic temples or Orthodox Churches. In the latter case, the blogger from Yekaterinburg received a suspended sentence for the offend of the feelings of believers because he endowed Jesus Christ "with the qualities of a Pokémon", not only a computer game and a cartoon, but "also a bestiary" [The New York Times Europe, 2017].

Thus, the application of augmented reality carries the risk of converting religious practices (temple visits and pilgrimages) into a spectacular theatrical performance. According to Robert Seddon, this can cause cultural conflicts and religious strives: "Mass adoption of technology brings mass culture with it and grassroots cultural transformations emerge" [Seddon, 2017].

Conclusions. The development of world church institutions does not stay still. In the context of global secularization, representatives of different religions are adapting to alterations, traditional confessions are evolving, master information and educational space, expanding the forms and methods of their interaction with the congregation. Modern technologies are changing the traditional structure of the cult. In particular, the Internet is not only becoming a space for missionary and educational work, but also a content supplement to the religious life of millions of people, especially for persons in social isolation for various reasons. Virtual and augmented realities are turning into another perception channel of religious ideas and symbols.

Augmented reality is a convenient interactive method of forming parishioner's knowledge, beliefs and, ultimately, a steadfast belief in the importance of regular religious practice. Millennials (children and young people, who no longer imagine living without gadgets and the Internet) are the main target audiences of the implementation of these new technologies. Furthermore, augmented reality is useful for interacting with people with disabilities (such as the blind and the deaf) and the elderly. It is also important that these technologies make it possible to

establish remote contact with the congregation. Protestant churches are the most open to the use of augmented reality in ritual education practice. Representatives of the conservative religious outlook (Orthodoxy, fundamentalist movements of Islam, etc.) are in opposite positions, categorically denying the application of the innovations on the path to God.

Although there is ongoing debate around the issue of the introduction of new technologies into the life of church, augmented reality is increasingly used in various religious fields, not only in education: for Christian ministering, attracting new adherents, enlightenment, news coverage, administrative work, counseling, communication and more. In any case, the phenomenon of dissemination of the latest technologies in the education, daily life of religious communities and spiritual practice of persons in social isolation requires further scientific reflection and detailed forecasting.

REFERENCES

- Alba, A. (2017). Augmented Reality Is Entering The House Of God. *Vocativ*. Retrieved from https://www.vocativ.com/402723/augmented-reality-churches/index.html
- Amlin, P. (2016). Augmented reality and the church. *Living Lutheran*. Retrieved from https://www.livinglutheran.org/2016/07/augmented-reality-church/
- Anugrah, K. (2018). Are Virtual Reality Churches the Wave of the Future? *The Christian Post.*Retrieved from https://www.christianpost.com/news/virtual-reality-churches-future.html
- Apocalipse Curso Bíblico (undated). Official site. Retrieved from https://apocalipse.com/app/index-d.html
- Benek, C. (2015) Virtual Reality Will Enable the Next Large Revival in the Global Church. *The Christian Post.* Retrieved from https://www.christianpost.com/news/virtual-reality-will-enable-the-next-large-revival-in-the-global-church-141393/
- D'Agnano, F., Balletti, C., Guerra, F., Vernier, P. (2015). A case study of augmented reality for an accessible cultural heritage. Digitization, 3D printing and sensors for an audio-tactile experience. ISPRS International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, XL-5/W4, 207-213. doi:10.5194/isprsarchives-XL-5-W4-207-2015
- Duh, H. & Klopfer, E. (2013). Augmented reality learning: New learning paradigm in co-space. *Computers and Education, 68, (1).* 534-535. doi:10.1016/j.compedu.2013.07.030
- Follow JC Go App Store Preview. Retrieved from https://apps.apple.com/us/app/follow-jc-go/id1435610234
- Gabriel, S. (2017). Pokémon Go. How Religious Can an Augmented Reality Hunt Be? *Heidelberg Journal of Religions on the Internet. 12.* 18-31. Retrieved from http://online.uni-hd.de
- Greci, L. (2016) An Augmented Reality Guide for Religious Museum. In: De Paolis L., Mongelli A. (eds) *Augmented Reality, Virtual Reality, and Computer Graphics*. AVR 2016. Lecture Notes in Computer Science, 9769. Springer, Cham. doi: 10.1007/978-3-319-40651-0_23
- Hernandez, P. (2016). Pokémon Go fan trolls Westboro Baptist Church, Church Fires Back. *Kotaku: Gaming Reviews, News, Tips and More.* Retrieved from https://kotaku.com/pokemon-go-fan-trolls-westboro-baptist-church-church-f-1783449276
- Hooper, M. (2019). Worship in Virtual Reality. Retrieved from https://miltonhooper.com/2019/01/27/worship-in-virtual-reality/
- Huotari, M. & Ikonen, E. (2017). Learning with tablets in a church Experiences of augmented reality in religious education. *Heidelberg Journal of Religions on the Internet*. 12. 32-41.
- Jefferies, L. (2018). The New Spectacle: How effective is mobile Augmented Reality as tool for the manifestation of dissent? *Electronic Visualisation and the Arts (EVA)*. 122-123. doi: 10.14236/ewic/EVA2018.24
- Jongwook, L., Junki, K., Jaehong, A., Woontack, W. (2019) Context-aware risk management for architectural heritage using historic building information modeling and virtual reality. *Journal of Cultural Heritage, 38,* 242-252. doi.org/10.1016/j.culher.2018.12.010

- Karamouzis, P. & Keffalas, M. (2016). The Design of Educational Materials for Teaching the Most Common Religions to Students in their Final Year of Primary School A Cross-Curricular Approach of Religious Studies and Music, Through the Use of Augmented Reality. *Heidelberg Journal of Religions on the Internet*, 11. 93-115.
- Khairuldin, W. M. K. F. W., Embong, A. H., Anas, W. N. I. W. N., Ismail, D., & Mokhtar, W. K. A. W. (2019). An Augmented Reality (AR) Approach in Educational Integration of Du'a in Islam. *International Journal of Academic Research in Progressive Education and Development*, 8(1), 32–39.
- Lyutykh, S. (2018). Dopolnennaya realnost v khrame eto smelo. *Lenta.ru*. Retrieved from https://lenta.ru/articles/2018/04/11/gagino/
- My Healthy Church: Equipping Spirit-Empowered People / Fire Bible for Kids Companion App. (undated). Retrieved from: https://myhealthychurch.com/store/startcat.cfm?cat=iFBFK
- Nord, I. & Palkowitsch-Kühl, J. (2017). RELab digital. A Project on Religious Education in a Mediatized World. *Heidelberg Journal of Religions on the Internet.* 12. 93-124.
- Paradello, J. (2018). Bible Uses Augmented Reality to Visualize Prophetic Images. Seventh-day Adventist Church. Inter-American Division. Retrieved from https://www.interamerica.org/2018/11/bible-uses-augmented-reality-to-visualize-prophetic-images/
- Ramic-Brkic, B., Karkin, Z., Sadžak, A., Selimovic, D. & Rizvić, S. (2009). Augmented Real-Time Virtual Environment of the Church of the Holy Trinity in Mostar. *The 10th International Symposium on Virtual Reality, Archaeology and Cultural Heritage VAST.* 141-148.
- Ramos C., Henriques C. & Lanquar R. (2016). Augmented Reality for Smart Tourism in Religious Heritage Itineraries: Tourism Experiences in the Technological Age. *Handbook of Research on Human-Computer Interfaces, Developments, and Applications.* 245-272. doi: 10.4018/978-1-5225-0435-1.ch010
- Russian who played Pokémon Go in church is convicted of inciting hatred (2017). *The New York Times Europe.* Retrieved from https://www.nytimes.com/2017/05/11/world/europe/pokemon-go-ruslan-sokolovsky-russia.html
- Seddon, R. (2017). Why augmented reality is triggering cultural conflict and religious controversy. *The Conversation*. Retrieved from http://theconversation.com/why-augmented-reality-is-triggering-cultural-conflict-and-religious-controversy-77976
- Smith, N. (2016) Mixed reality & the power of augmented reality for the church: Podcast 181. Leadership Network. Retrieved from https://leadnet.org/mixed-reality-the-power-of-augmented-reality-for-the-church-podcast-181/
- University of Turku. News: Augmented-reality App Wordsmith Brings Sixteenth Century to Life (2016). Retrieved from https://www.utu.fi/en/news/news/augmented-reality-appwordsmith-brings-sixteenth-century-to-life
- Virtual Reality Church (undated). Official site. Retrieved from https://www.vrchurch.org/
- Yermeychuk, N. A. (2016) Gipertekstualnaya organizatsiya Biblii. *Uspekhi sovremennoy nauki.* 10. 40-45.

Halyna Mylenka

Doctor of Sciences in Art Study, professor

Department of Theatre Studies Kyiv National I. K. Karpenko-Kary Theatre, Cinema and Television University

40, Yaroslaviv Val str., 01054, Kyiv, Ukraine

E-mail: milgal@ukr.net

ORCID: https://orcid.org/0000-0003-1359-535X

Anhelina Anhelova

Doctor of Philosophical Sciences, assistant professor

Department of Theatre Studies Kyiv Karpenko-Kary National University of Theatre, Cinema and Television

40, Yaroslaviv Val, 01054, Kyiv, Ukraine

E-mail: tira-sun@ukr.net

ORCID: https://orcid.org/0000-0001-7909-6292

Article arrived: 10.04.2021 Accepted: 27.05.2021

ДОПОВНЕНА РЕАЛЬНІСТЬ У СУЧАСНІЙ РЕЛІГІЙНІЙ ПРАКТИЦІ

Миленька Галина Дмитрівна

доктор мистецтвознавства, професор

Київський національний університет театру, кіно і телебачення ім. І. К. Карпенка-Карого вул. Ярославів Вал, 40, Київ, 01054, Україна

E-mail: milgal@ukr.net

ORCID: 0000-0003-1359-535X

Ангелова Ангеліна Олегівна

доктор філософських наук, доцент

Київський національний університет театру, кіно і телебачення ім. І. К. Карпенка-Карого вул. Ярославів Вал, 40, Київ, 01054, Україна

E-mail: tira-sun@ukr.net ORCID 0000-0001-7909-6292

КІЦАТОНА

Використання доповненої реальності зростає у різних релігійних сферах. Віртуальні візуалізації замінюють ті театральні елементи, які використовували церковні установи в минулому. Найновіші медіа-технології викликають у віруючих специфічне сприйняття релігійних ідей та символів. Тому доповнена реальність — це спосіб ефектної візуалізації релігійних тем, а нові технології ефективно впливають на свідомість сучасних релігійних адептів. Отже, мета дослідження (визначення основних напрямків, функцій, ризиків та перспектив застосування розпиреної реальності у релігійному вихованні та практиці віруючих) є дуже актуальною.

Розпирена реальність — це зручний інтерактивний метод формування знань, віросповідання парафіян і, зрештою, твердої віри у важливості регулярної релігійної практики. Основну цільову аудиторію впровадження таких нових технологій складають діти, молодь, паломники та люди з обмеженими можливостями. Незважаючи на серйозні заперечення противників, застосування доповненої реальності у релігійній освіті та щоденній практиці має великий потенціал. Тож використання АR-технологій у різних напрямках (навчальна гра, інтерактивні вікторини, анімовані гіди-провідники у музеях і храмах, візуалізація біблійних та агіографічних історій, молитовні підказки тощо) є актуальним феноменом релігійного просвітництва. Ця методологія може бути вдосконалена тільки в результаті тісної співпраці з викладачами, священиками та ІТ-професіоналами. Таким чином, доповнена реальність потребує методологічно правильної, поступової, контрольованої цифрової реалізації в різних релігійних сферах. Феномен поширення новітніх технологій в освіті та повсякденному житті релігійних громад потребує подальшого наукового осмислення.

Ключові слова: розширена реальність, релігійна освіта, релігійна практика, паломництво, місіонерська робота.

Стаття надійшла до редакції: 10.04.2021 Схвалено до друку: 27.05.2021